

National Electricity Rules Version 112

Historical Information

This version of the National Electricity Rules was current from 18 September 2018 to 4 October 2018.

National Electricity Rules

Version 112

Status Information

This is the latest electronically available version of the National Electricity Rules as at 18 September 2018.

This consolidated version of the National Electricity Rules was last updated on 18 September 2018 as a result of the commencement of the following amendments:

Schedule 4 of the National Electricity Amendment (Register of distributed energy resources) Rule 2018 No. 9

This consolidated version of the Rules reflects the initial Rules made by the SA Minister under section 90 of the National Electricity Law (**NEL**) as amended by:

Rules made by the South Australian Minister under sections 90A to 90E of the NEL;
and

Rules made by the Australian Energy Market Commission under Part 7 Division 3 of the NEL.

Application of the National Energy Customer Framework related Rule

On 27 June 2012, the South Australian Minister made Rules relating to the implementation of the National Energy Customer Framework (**NECF**), including amendments to the National Electricity Rules under section 90D of the NEL in relation to small customer connections (Chapter 5A), Retail Markets including billing and credit support (Chapter 6B) and related provisions (**NECF related rule**).

The NECF related Rule commenced operation as a law of Tasmania, the Australian Capital Territory and the Commonwealth on 1 July 2012; South Australia on 1 February 2013, New South Wales on 1 July 2013 and Queensland on 1 July 2015.

On 1 July 2016, Victoria adopted the provisions of the NECF related rule that relate to small customer connections (Chapter 5A and related provisions). Victoria has not adopted the Retail Market provisions in Chapter 6B of the Rules.

The NECF related Rule does not apply in Western Australia or the Northern Territory until the National Energy Retail Law set out in the Schedule to the National Energy Retail Law (South Australia) Act 2011 is implemented as a law in that jurisdiction (clause 24, Part 11, Schedule 3 NEL).

The NECF related Rule can be found on the Australian Energy Market Commission's website under the 'National Electricity Rules', 'Rules made by the SA Ministers' tabs.

Provisions in force

All provisions displayed in this consolidated version of the Rules have commenced. As at the date of this consolidation the Australian Energy Market Commission has made the following Rules under Part 7 Division 3 of the NEL that have not yet commenced:

Schedules 1 to 3 of the National Electricity Amendment (Register of distributed energy resources) Rule 2018 No. 9 will commence operation on 1 December 2019.

Schedules 1 to 6 of the National Electricity Amendment (Five minute settlement) Rule 2017 No. 15 will commence operation on 1 July 2021.

TABLE OF CONTENTS

1.	Introduction.....	3
1.1	Preliminary.....	3
1.1.1	References to the Rules.....	3
1.1.2	Italicised expressions	3
1.1.3	[Deleted]	3
1.2	Background	3
1.3	Nomenclature of and references to provisions of a Chapter.....	3
1.3.1	Introduction.....	3
1.3.2	Parts, Divisions and Subdivisions.....	3
1.3.3	Rules, clauses, paragraphs, subparagraphs and other items.....	4
1.4	Effect of renumbering of provisions of the Rules	5
1.5	[Deleted]	5
1.6	[Deleted]	5
1.7	Interpretation	5
1.7.1	General.....	5
1.8	Notices	6
1.8.1	Service of notices under the Rules.....	6
1.8.2	Time of service	7
1.8.3	Counting of days	7
1.8.4	Reference to addressee.....	7
1.9	Retention of Records and Documents	8
1.10	[Deleted]	8
1.11	AEMO Rule Funds	8
2.	Registered Participants and Registration.....	13
2.1	Registered Participants	13
2.1.1	Purpose.....	13
2.1.2	General.....	13
2.2	Generator	13
2.2.1	Registration as a Generator	13
2.2.2	Scheduled Generator	14
2.2.3	Non-Scheduled Generator.....	15
2.2.4	Market Generator	16
2.2.5	Non-Market Generator	17
2.2.6	Ancillary services generating unit	17
2.2.7	Semi-Scheduled Generator	19
2.3	Customer.....	21
2.3.1	Registration as a Customer	21
2.3.2	First-Tier Customer.....	21
2.3.3	Second-Tier Customer	22

2.3.4	Market Customer	22
2.3.5	Ancillary services load.....	23
2.3A	Small Generation Aggregator	26
2.3A.1	Registration	26
2.3AA	Market Ancillary Service Provider	27
2.3AA.1	Registration	27
2.4	Market Participant	27
2.4.1	Registration as a category of Market Participant	27
2.4.2	Eligibility	28
2.4A	Metering Coordinator	28
2.4A.1	Registration as a Metering Coordinator	28
2.4A.2	Eligibility	29
2.5	Network Service Provider	30
2.5.1	Registration as a Network Service Provider	30
2.5.1A	Dedicated Connection Asset Service Provider	31
2.5.2	Market Network Service	32
2.5.3	Scheduled Network Service	33
2.5A	Trader	34
2.5B	Reallocator	35
2.6	Special Participant	36
2.7	Intention to Commence Activities or Functions.....	36
2.8	Registered Participant Rights and Obligations.....	37
2.8.1	Rights and obligations.....	37
2.9	Application to be Registered as a Registered Participant.....	37
2.9.1	Applications for Registration	37
2.9.2	Registration as a Registered Participant	37
2.9.3	Registration as an Intermediary	38
2.9A	Transfer of Registration	39
2.9A.1	Definitions.....	39
2.9A.2	Applications for Transfer of Registration	40
2.9A.3	Approval for Transfer of Registration	40
2.10	Ceasing to be a Registered Participant	41
2.10.1	Notification of intention.....	41
2.10.2	Ceasing Participation	43
2.10.3	Liability after cessation.....	43
2.11	Participant Fees.....	43
2.11.1A	Application.....	43
2.11.1	Development of Participant fee structure	43
2.11.2	Payment of Participant fees	46
2.11.3	Budgeted revenue requirements.....	46
2.12	Interpretation of References to Various Registered Participants	48
2A.	Regional Structure	53

Part A	Region change applications and region determinations by AEMC	53
2A.1	Introduction to Chapter 2A	53
2A.1.1	Definitions.....	53
2A.1.2	AEMC determination of regions.....	53
2A.1.3	Publication of regions by AEMO	53
2A.2	Region change applications	53
2A.2.1	A complete region change application.....	53
2A.2.2	Identifying a congestion problem	54
2A.2.3	Explanation of economic efficiency of proposed region solution	54
2A.2.4	Region change application must be technically competent	55
2A.2.5	Alternative congestion management options	55
2A.2.6	Previous application relating to congestion problem.....	56
2A.2.7	AEMO to provide information to intending applicants	56
2A.2.8	AEMC may refuse to accept incomplete applications.....	57
2A.3	Acceptance of region change application by AEMC	57
2A.3.1	Acceptance of a region change application by AEMC.....	57
2A.3.2	Preliminary consultation prior to acceptance of a region change application.....	58
2A.4	First round consultation on region change application.....	59
2A.4.1	Notice of first round consultation	59
2A.4.2	Right to make written submissions during first round consultation period	59
2A.4.3	Alternative region solution put forward by third parties	59
2A.4.4	Acceptance as a formal alternative region solution by AEMC.....	60
2A.5	Provision of supplementary economic analysis.....	61
2A.5.1	AEMC may direct provision of supplementary analysis	61
2A.5.2	AEMC may direct AEMO to provide information	61
2A.6	Region determinations.....	62
2A.6.1	AEMC powers to make a region determination	62
2A.6.2	Matters for consideration in making region determination.....	62
2A.7	Draft region determination and second round consultation.....	63
2A.7.1	Publishing of draft region determination	63
2A.7.2	Second round consultation.....	63
2A.7.3	Right to make written submissions during second round consultation.....	64
2A.8	Final region determination.....	64
2A.8.1	Final determination for region change	64
2A.8.2	Formal publication of region determination	64
2A.9	Miscellaneous matters for region change process.....	64
2A.9.1	AEMC may extend periods of time specified in Chapter 2A	64
2A.9.2	Consultation meeting in relation to region change application	65
Part B	Implementation of region determination.....	65
2A.10	Purpose and application of Part B	65
2A.10.1	Purpose of Part B	65

2A.10.2	Application of Part B	66
2A.11	Region Change Implementation Procedure	66
2A.11.1	Submission of draft Region Change Implementation Procedure	66
2A.11.2	Approved Region Change Implementation Procedure	66
2A.12	AEMO region change implementation functions.....	67
2A.12.1	General implementation functions.....	67
2A.12.2	Implementation functions referable to published implementation procedure.....	67
2A.12.3	Amendment of current or subsequent Regions and Loss Factors Publication	67
2A.13	Continuity of regions	67
Schedule 2A.1	Glossary for Chapter 2A	68
3.	Market Rules	73
3.1	Introduction to Market Rules	73
3.1.1	Purpose.....	73
3.1.1A	Definitions.....	73
3.1.2	[Deleted]	74
3.1.3	[Deleted]	74
3.1.4	Market design principles.....	74
3.1.5	Time for undertaking action.....	75
3.2	AEMO's Market Responsibilities	75
3.2.1	Market functions of AEMO	75
3.2.2	Spot market	76
3.2.3	Power system operations.....	76
3.2.4	Non-market ancillary services function	76
3.2.5	[Deleted]	77
3.2.6	Settlements.....	77
3.3	Prudential Requirements	77
3.3.1	Market Participant criteria	77
3.3.2	Credit support.....	77
3.3.3	Acceptable credit criteria	78
3.3.4	Acceptable credit rating	79
3.3.4A	Prudential standard.....	79
3.3.5	Amount of credit support	79
3.3.6	Changes to credit support.....	79
3.3.7	Drawings on credit support.....	80
3.3.8	Credit limit procedures and prudential settings	81
3.3.8A	Security Deposits	83
3.3.9	Outstandings	83
3.3.10	Trading limit	83
3.3.11	Call notices.....	84
3.3.12	Typical accrual.....	85
3.3.13	Response to Call Notices	85
3.3.13A	Application of monies in the security deposit fund	86
3.3.14	Potential value of a transaction	87
3.3.15	Trading margin.....	88

3.3.16	Limitation on entry of transactions	88
3.3.17	Scheduled prices	88
3.3.18	Additional credit support	89
3.3.19	Consideration of other Market Participant transactions.....	89
3.4	Spot Market.....	89
3.4.1	Establishment of spot market.....	89
3.4.2	Trading day and trading interval.....	90
3.4.3	Spot market operations timetable.....	90
3.5	Regions	91
3.5.1	[Deleted]	91
3.5.2	[Deleted]	91
3.5.3	[Deleted]	91
3.5.4	[Deleted]	91
3.5.5	[Deleted]	91
3.5.6	[Deleted]	91
3.6	Network Losses and Constraints	91
3.6.1	Inter-regional losses	91
3.6.2	Intra-regional losses	93
3.6.2A	Load and generation data used to determine inter-regional loss factor equations and intra-regional loss factors	96
3.6.3	Distribution losses.....	98
3.6.4	Network constraints	102
3.6.5	Settlements residue due to network losses and constraints.....	103
3.7	Projected Assessment of System Adequacy	105
3.7.1	Administration of PASA.....	105
3.7.2	Medium term PASA	106
3.7.3	Short term PASA	108
3.7A	Congestion information resource	111
3.7B	Unconstrained intermittent generation forecast	114
3.7C	Energy Adequacy Assessment Projection.....	115
3.7D	Demand side participation information.....	119
3.8	Central Dispatch and Spot Market Operation.....	121
3.8.1	Central Dispatch.....	121
3.8.2	Participation in central dispatch.....	123
3.8.3	Bid and offer aggregation guidelines	124
3.8.3A	Ramp rates	126
3.8.4	Notification of scheduled capacity.....	128
3.8.5	Submission timing	130
3.8.6	Generating unit offers for dispatch	130
3.8.6A	Scheduled network service offers for dispatch	132
3.8.7	Bids for scheduled load.....	134
3.8.7A	Market ancillary services offers.....	136
3.8.8	Validation of dispatch bids and offers	137
3.8.9	Default offers and bids.....	138
3.8.10	Network constraints	138
3.8.11	Ancillary services constraints	140

3.8.12	System scheduled reserve constraints	140
3.8.13	Notification of constraints.....	141
3.8.14	Dispatch under conditions of supply scarcity	141
3.8.15	[Deleted]	141
3.8.16	Equal priced dispatch bids and dispatch offers.....	141
3.8.17	Self-commitment.....	142
3.8.18	Self-decommitment.....	142
3.8.19	Dispatch inflexibilities	143
3.8.20	Pre-dispatch schedule.....	146
3.8.21	On-line dispatch process	148
3.8.22	Rebidding.....	149
3.8.22A	Offers, bids and rebids must not be false or misleading.....	151
3.8.23	Failure to conform to dispatch instructions	153
3.8.24	Scheduling errors	155
3.9	Price Determination.....	155
3.9.1	Principles applicable to spot price determination	155
3.9.2	Determination of spot prices.....	157
3.9.2A	Determination of ancillary services prices.....	158
3.9.2B	Pricing where AEMO determines a manifestly incorrect input.....	159
3.9.3	Pricing in the event of intervention by AEMO.....	161
3.9.3A	Reliability standard and settings review	162
3.9.3B	Reliability standard and settings review report.....	163
3.9.3C	Reliability standard	164
3.9.3D	Implementation of the reliability standard.....	165
3.9.4	Market Price Cap	165
3.9.5	Application of the Market Price Cap	166
3.9.6	Market Floor Price	167
3.9.6A	Application of the Market Floor Price	167
3.9.7	Pricing for constrained-on scheduled generating units.....	168
3.10	[Deleted]	168
3.11	Ancillary Services.....	168
3.11.1	Introduction.....	168
3.11.2	Market ancillary services	169
3.11.3	Acquisition of Network Support and Control Ancillary Service.....	171
3.11.4	Guidelines and objectives for acquisition of network support and control ancillary services	171
3.11.5	Tender process for network support and control ancillary services	172
3.11.6	Dispatch of network support and control ancillary services by AEMO.....	174
3.11.7	Guidelines and objectives for acquisition of system restart ancillary services by AEMO.....	175
3.11.8	Determination of electrical sub-network boundaries.....	176
3.11.9	Acquisition of system restart ancillary services by AEMO.....	176
3.11.10	Reporting.....	178
3.12	Market Intervention by AEMO.....	178
3.12.1	Intervention settlement timetable.....	178
3.12.2	Affected Participants and Market Customers entitlements to compensation in relation to AEMO intervention.....	179

3.12.3	Role of the Independent Expert in calculating payments in relation to intervention by AEMO	183
3.12A	Mandatory restrictions	186
3.12A.1	Restriction offers.....	186
3.12A.2	Mandatory restrictions schedule	188
3.12A.3	Acquisition of capacity	188
3.12A.4	Rebid of capacity under restriction offers.....	189
3.12A.5	Dispatch of restriction offers	189
3.12A.6	Pricing during a restriction price trading interval	189
3.12A.7	Determination of funding restriction shortfalls.....	190
3.12A.8	Cancellation of a mandatory restriction period.....	195
3.12A.9	Review by AEMC.....	195
3.13	Market Information.....	196
3.13.1	Provision of information	196
3.13.2	Systems and procedures	196
3.13.3	Standing data.....	198
3.13.4	Spot market	205
3.13.4A	Market ancillary services	209
3.13.5	Ancillary services contracting by AEMO.....	210
3.13.5A	Settlements residue auctions	210
3.13.6	[Deleted]	210
3.13.6A	Report by AEMO.....	210
3.13.7	Monitoring of significant variation between forecast and actual prices by AER.....	211
3.13.8	Public information	213
3.13.9	[Deleted]	213
3.13.10	Market auditor.....	213
3.13.11	[Deleted]	214
3.13.12	NMI Standing Data	214
3.13.12A	NMI Standing Data Schedule	218
3.13.13	Inter-network tests	219
3.13.14	Carbon Dioxide Equivalent Intensity Index	219
3.14	Administered Price Cap and Market Suspension.....	222
3.14.1	Cumulative Price Threshold and Administered Price Cap	222
3.14.2	Application of Administered Price Cap	224
3.14.3	Conditions for suspension of the spot market.....	225
3.14.4	Declaration of market suspension.....	226
3.14.5	Pricing during market suspension.....	227
3.14.6	Compensation due to the application of an administered price cap or administered floor price.....	229
3.15	Settlements.....	234
3.15.1	Settlements management by AEMO.....	234
3.15.2	Electronic funds transfer	234
3.15.3	Connection point and virtual transmission node responsibility	234
3.15.4	Adjusted energy amounts connection points	235
3.15.5	Adjusted energy - transmission network connection points	235
3.15.5A	Adjusted energy - virtual transmission nodes.....	236
3.15.6	Spot market transactions	236
3.15.6A	Ancillary service transactions	237

3.15.7	Payment to Directed Participants.....	250
3.15.7A	Payment to Directed Participants for services other than energy and market ancillary services.....	251
3.15.7B	Claim for additional compensation by Directed Participants	254
3.15.8	Funding of Compensation for directions	257
3.15.9	Reserve settlements.....	261
3.15.10	Administered price cap or administered floor price compensation payments	263
3.15.10A	Goods and services tax.....	264
3.15.10B	Restriction contract amounts.....	265
3.15.10C	Intervention Settlements	266
3.15.11	Reallocation transactions	270
3.15.11A	Reallocation procedures.....	271
3.15.12	Settlement amount	272
3.15.13	Payment of settlement amount.....	273
3.15.14	Preliminary statements.....	273
3.15.15	Final statements	273
3.15.15A	Use of estimated settlement amounts by AEMO	273
3.15.16	Payment by market participants.....	274
3.15.17	Payment to market participants.....	274
3.15.18	Disputes.....	274
3.15.19	Revised Statements and Adjustments	275
3.15.20	Payment of adjustments	277
3.15.21	Default procedure.....	277
3.15.22	Maximum total payment in respect of a billing period.....	282
3.15.23	Maximum total payment in respect of a financial year.....	283
3.15.24	Compensation for reductions under clause 3.15.23	284
3.15.25	Interest on overdue amounts	285
3.16	Participant compensation fund.....	285
3.16.1	Establishment of Participant compensation fund.....	285
3.16.2	Dispute resolution panel to determine compensation	286
3.17	[Deleted]	288
3.18	Settlements Residue Auctions	288
3.18.1	Settlements residue concepts	288
3.18.2	Auctions and eligible persons	289
3.18.3	Auction rules	290
3.18.3A	Secondary trading of SRD units	292
3.18.4	Proceeds and fees	292
3.18.4A	Secondary trading proceeds and margin	293
3.18.5	Settlement residue committee	294
3.19	Market Management Systems Access Procedures.....	295
3.20	Reliability and Emergency Reserve Trader	296
3.20.1	[Deleted]	296
3.20.2	Reliability and emergency reserve trader	296
3.20.3	Reserve contracts	297
3.20.4	Dispatch pricing methodology for unscheduled reserve contracts	298
3.20.5	AEMO's risk management and accounts relating to the reliability safety net	298

3.20.6	Reporting on RERT by AEMO.....	299
3.20.7	AEMO’s exercise of the RERT	300
3.20.8	RERT Guidelines	301
3.20.9	[Deleted]	302
Schedule 3.1	Bid and Offer Validation Data.....	302
Schedule 3.2	[Deleted]	306
Schedule 3.3	[Deleted]	306
4.	Power System Security	309
4.1	Introduction.....	309
4.1.1	Purpose.....	309
4.2	Definitions and Principles	309
4.2.1	[Deleted]	310
4.2.2	Satisfactory Operating State	310
4.2.3	Credible and non-credible contingency events and protected events	310
4.2.3A	Re-classifying contingency events.....	311
4.2.3B	Criteria for re-classifying contingency events	313
4.2.4	Secure operating state and power system security.....	313
4.2.5	Technical envelope	314
4.2.6	General principles for maintaining power system security.....	315
4.2.7	Reliable Operating State	315
4.2.8	Time for undertaking action.....	316
4.3	Power System Security Responsibilities and Obligations	316
4.3.1	Responsibility of AEMO for power system security	316
4.3.2	System security	318
4.3.3	The role of System Operators	322
4.3.4	Network Service Providers	323
4.3.5	Market Customer obligations.....	328
4.4	Power System Frequency Control.....	329
4.4.1	Power system frequency control responsibilities.....	329
4.4.2	Operational frequency control requirements	329
4.4.3	Generator protection requirements	330
4.4.4	Instructions to enable inertia network services	330
4.4.5	Instructions to enable system strength services	331
4.5	Control of Power System Voltage.....	333
4.5.1	Power system voltage control	333
4.5.2	Reactive power reserve requirements	334
4.5.3	Audit and testing.....	334
4.6	Protection of Power System Equipment	334
4.6.1	Power system fault levels.....	334
4.6.2	Power system protection co-ordination	335
4.6.3	Audit and testing.....	335
4.6.4	Short-term thermal ratings of power system.....	335
4.6.5	Partial outage of power protection systems	335
4.6.6	System strength impact assessment guidelines.....	336

4.7	Power System Stability Co-ordination.....	337
4.7.1	Stability analysis co-ordination.....	337
4.7.2	Audit and testing.....	338
4.8	Power System Security Operations	338
4.8.1	Registered Participants' advice	338
4.8.2	Protection or control system abnormality	338
4.8.3	AEMO's advice on power system emergency conditions	339
4.8.4	Declaration of conditions	339
4.8.4A	Reserve level declaration guidelines.....	339
4.8.4B	Lack of reserve framework reporting	340
4.8.5	Managing declarations of conditions	341
4.8.5A	Determination of the latest time for AEMO intervention.....	342
4.8.5B	Notifications of last time of AEMO intervention	343
4.8.6	[Deleted]	343
4.8.7	Managing a power system contingency event	343
4.8.8	[Deleted]	343
4.8.9	Power to issue directions and clause 4.8.9 instructions	343
4.8.9A	System security directions	346
4.8.10	Disconnection of generating units and market network services.....	346
4.8.11	[Deleted]	346
4.8.12	System restart plan and local black system procedures	346
4.8.13	[Deleted]	348
4.8.14	Power system restoration	348
4.8.15	Review of operating incidents	349
4.9	Power System Security Related Market Operations	351
4.9.1	Load forecasting.....	351
4.9.2	Instructions to Scheduled Generators and Semi-Scheduled Generators	352
4.9.2A	Dispatch Instructions to Scheduled Network Service Providers	353
4.9.3	Instructions to Registered Participants.....	353
4.9.3A	Ancillary services instructions	354
4.9.3B	Compliance with dispatch instructions	355
4.9.4	Dispatch related limitations on Scheduled Generators and Semi-Scheduled Generators.....	355
4.9.4A	Dispatch related limitations on Scheduled Network Service Providers	356
4.9.5	Form of dispatch instructions.....	357
4.9.6	Commitment of scheduled generating units	358
4.9.7	De-commitment, or output reduction, by Scheduled Generators	359
4.9.8	General responsibilities of Registered Participants	360
4.9.9	Scheduled Generator plant changes	361
4.9.9A	Scheduled Network Service Provider plant changes	361
4.9.9B	Ancillary service plant changes	362
4.9.9C	Inertia network service availability changes.....	362
4.9.9D	System strength service availability changes.....	362
4.10	Power System Operating Procedures.....	362
4.10.1	Power system operating procedures.....	362
4.10.2	Transmission network operations	363
4.10.3	Operating interaction with distribution networks	364

4.10.4	Switching of a Distributor's high voltage networks	364
4.10.5	Switching of reactive power facilities.....	365
4.10.6	Automatic reclose	365
4.10.7	Inspection of facilities by AEMO	365
4.11	Power System Security Support	365
4.11.1	Remote control and monitoring devices	365
4.11.2	Operational control and indication communication facilities.....	367
4.11.3	Power system voice/data operational communication facilities	368
4.11.4	Records of power system operational communication	369
4.11.5	Agent communications	370
4.12	Nomenclature Standards.....	371
4.13	[Deleted]	372
4.14	Acceptance of Performance Standards.....	372
4.15	Compliance with Performance Standards.....	373
4.16	Transitioning arrangements for establishment of performance standards.....	377
4.16.1	Definitions.....	377
4.16.2	Exclusions	379
4.16.3	Notification and acceptance of performance standards	380
4.16.4	Actual capability	385
4.16.5	Criteria for, and negotiation of, performance standards	386
4.16.6	Consultation with and assistance by Network Service Providers.....	388
4.16.7	Referral to expert determination	389
4.16.8	Prior actions	390
4.16.9	Deemed performance standards.....	390
4.16.10	Modification of connection agreements.....	390
4.17	Expert determination.....	391
4.17.1	Performance standards committee and appointment of performance standards experts	391
4.17.2	Referral to performance standards expert	392
4.17.3	Determinations of performance standards experts.....	393
4.17.4	Other matters.....	394
5.	Network Connection Access, Planning and Expansion.....	397
Part A	Introduction.....	397
5.1	Introduction to Chapter 5	397
5.1.1	Structure of this Chapter	397
5.1.2	Overview of Part B and connection and access under the Rules	397
Part B	Network Connection and Access	400
5.1A	Introduction to Part B	400
5.1A.1	Purpose and Application	400
5.1A.2	Principles.....	403
5.2	Obligations.....	404
5.2.1	Obligations of Registered Participants.....	404
5.2.2	Connection agreements	404

5.2.3	Obligations of network service providers	405
5.2.3A	Obligations of Market Network Service Providers.....	410
5.2.4	Obligations of customers	411
5.2.5	Obligations of Generators	413
5.2.6	Obligations of AEMO	414
5.2.7	Obligations of Dedicated Connection Asset Service Providers.....	415
5.2A	Transmission network connection and access	416
5.2A.1	Application.....	416
5.2A.2	Relevant assets	416
5.2A.3	Connection and access to transmission services	417
5.2A.4	Transmission services related to connection.....	418
5.2A.5	Publication and provision of information	421
5.2A.6	Negotiating principles	422
5.2A.7	Third party IUSAs.....	423
5.2A.8	Access framework for large dedicated connection assets.....	424
5.3	Establishing or Modifying Connection	426
5.3.1	Process and procedures	426
5.3.1A	Application of rule to connection of embedded generating units	427
5.3.2	Connection enquiry	427
5.3.3	Response to connection enquiry	429
5.3.4	Application for connection	433
5.3.4A	Negotiated access standards.....	434
5.3.4B	System strength remediation for new connections	437
5.3.5	Preparation of offer to connect	440
5.3.6	Offer to connect	441
5.3.7	Finalisation of connection agreements and network operating agreements	445
5.3.8	Provision and use of information.....	446
5.3.9	Procedure to be followed by a Generator proposing to alter a generating system.....	448
5.3.10	Acceptance of performance standards for generating plant that is altered.....	450
5.3.11	Notification of request to change normal voltage.....	451
5.3A	Establishing or modifying connection - embedded generation.....	451
5.3A.1	Application of rule 5.3A	451
5.3A.2	Definitions and miscellaneous	452
5.3A.3	Publication of Information.....	453
5.3A.4	Fees	455
5.3A.5	Enquiry.....	455
5.3A.6	Response to Enquiry	456
5.3A.7	Preliminary Response to Enquiry	457
5.3A.8	Detailed Response to Enquiry.....	457
5.3A.9	Application for connection	459
5.3A.10	Preparation of offer to connect	460
5.3A.11	Technical Dispute	461
5.3A.12	Network support payments and functions.....	461
5.3AA	Access arrangements relating to Distribution Networks	461
5.3B	Application for connection to declared shared network	465

5.4	Independent Engineer	466
5.4.1	Application.....	466
5.4.2	Establishment of a pool.....	466
5.4.3	Initiating the Independent Engineer process.....	467
5.4.4	Referral to the Adviser.....	467
5.4.5	Proceedings and decisions of the Independent Engineer	468
5.4.6	Costs of the Independent Engineer	469
5.4A	[Deleted]	469
5.4AA	[Deleted]	470
5.5	Commercial arbitration for prescribed and negotiated transmission services and large DCA services	470
5.5.1	Application.....	470
5.5.2	Notification of dispute	470
5.5.3	Appointment of commercial arbitrator	471
5.5.4	Procedures of commercial arbitrator.....	472
5.5.5	Powers of commercial arbitrator in determining disputes	472
5.5.6	Determination of disputes	474
5.5.7	Costs of dispute.....	475
5.5.8	Enforcement of agreement or determination and requirement for reasons.....	475
5.5.9	Miscellaneous	475
5.5A	[Deleted]	476
Part C	Post-Connection Agreement matters	476
5.6	Design of Connected Equipment	476
5.6.1	Application.....	476
5.6.2	Advice of inconsistencies	476
5.6.3	Additional information.....	477
5.6.4	Advice on possible non-compliance	477
5.6A	[Deleted]	477
5.7	Inspection and Testing.....	477
5.7.1	Right of entry and inspection.....	477
5.7.2	Right of testing.....	479
5.7.3	Tests to demonstrate compliance with connection requirements for generators.....	481
5.7.3A	Tests to demonstrate compliance with system strength remediation schemes	483
5.7.4	Routine testing of protection equipment.....	484
5.7.5	Testing by Registered Participants of their own plant requiring changes to normal operation	486
5.7.6	Tests of generating units requiring changes to normal operation	488
5.7.7	Inter-network power system tests	489
5.7.8	Contestable IUSA components	496
5.8	Commissioning	496
5.8.1	Requirement to inspect and test equipment	496
5.8.2	Co-ordination during commissioning	497
5.8.3	Control and protection settings for equipment.....	497

5.8.4	Commissioning program.....	498
5.8.5	Commissioning tests	498
5.9	Disconnection and Reconnection	499
5.9.1	Voluntary disconnection	499
5.9.2	Decommissioning procedures.....	500
5.9.3	Involuntary disconnection.....	500
5.9.4	Direction to disconnect	501
5.9.4A	Notification of disconnection.....	502
5.9.5	Disconnection during an emergency.....	502
5.9.6	Obligation to reconnect.....	502
Part D	Network Planning and Expansion.....	504
5.10	Network development generally	504
5.10.1	Content of Part D	504
5.10.2	Definitions.....	505
5.10.3	Interpretation.....	509
5.11	Forecasts of connection to transmission network and identification of system limitations.....	509
5.11.1	Forecasts for connection to transmission network.....	509
5.11.2	Identification of network limitations	510
5.12	Transmission annual planning process.....	510
5.12.1	Transmission annual planning review	510
5.12.2	Transmission Annual Planning Report	511
5.13	Distribution annual planning process	516
5.13.1	Distribution annual planning review.....	516
5.13.2	Distribution Annual Planning Report	518
5.13.3	Distribution system limitation template.....	518
5.13A	Distribution zone substation information	519
5.14	Joint planning.....	522
5.14.1	Joint planning obligations of Transmission Network Service Providers and Distribution Network Service Providers.....	522
5.14.2	Joint planning obligations of Distribution Network Service Providers and Distribution Network Service Providers.....	523
5.14.3	Joint planning obligations of Transmission Network Service Providers	524
5.14A	Joint planning in relation to retirement or de-ratings of network assets forming part of the Declared Shared Network	524
5.14B	TAPR Guidelines	524
5.14B.1	Development of TAPR Guidelines	524
5.15	Regulatory investment tests generally	525
5.15.1	Interested parties	525
5.15.2	Identification of a credible option.....	525
5.15.3	Review of costs thresholds.....	526
5.15.4	Costs determinations.....	528
5.16	Regulatory investment test for transmission.....	529
5.16.1	Principles.....	529

5.16.2	Regulatory investment test for transmission application guidelines.....	532
5.16.3	Investments subject to the regulatory investment test for transmission	533
5.16.4	Regulatory investment test for transmission procedures	536
5.16.5	Disputes in relation to application of regulatory investment test for transmission	543
5.16.6	Determination that preferred option satisfies the regulatory investment test for transmission.....	545
5.17	Regulatory investment test for distribution	546
5.17.1	Principles.....	546
5.17.2	Regulatory investment test for distribution application guidelines	548
5.17.3	Projects subject to the regulatory investment test for distribution.....	550
5.17.4	Regulatory investment test for distribution procedures	551
5.17.5	Disputes in relation to application of regulatory investment test for distribution	557
5.18	Construction of funded augmentations.....	559
5.18A	Large generator connections.....	559
5.18A.1	Definitions.....	559
5.18A.2	Register of large generator connections.....	560
5.18A.3	Impact assessment of large generator connections	561
5.18B	Completed embedded generation projects	562
5.18B.1	Definitions.....	562
5.18B.2	Register of completed embedded generation projects	562
5.19	SENE Design and Costing Study	563
5.19.1	Definitions.....	563
5.19.2	Interpretation.....	564
5.19.3	Request for SENE Design and Costing Study	564
5.19.4	Content of SENE Design and Costing Study.....	565
5.19.5	Co-operation of other Network Service Providers.....	566
5.19.6	Publication of SENE Design and Costing Study report.....	567
5.19.7	Provision and use of information	567
5.20	National transmission planning.....	568
5.20.1	Preliminary consultation	568
5.20.2	Publication of NTNDP	569
5.20.3	Development strategies for national transmission flow paths	571
5.20.4	NTNDP database	572
5.20.5	Jurisdictional planning bodies and jurisdictional planning representatives.....	573
5.20.6	NTP Functions	573
5.20.7	Inertia and system strength requirements methodologies	573
5.20A	Frequency management planning	575
5.20A.1	Power system frequency risk review	575
5.20A.2	Power system frequency risk review process	576
5.20A.3	Power system frequency risk review report.....	576
5.20A.4	Request for protected event declaration.....	577
5.20A.5	Request to revoke a protected event declaration.....	578
5.20B	Inertia sub-networks and requirements	578

5.20B.1	Boundaries of inertia sub-networks	578
5.20B.2	Inertia requirements	579
5.20B.3	Inertia shortfalls	579
5.20B.4	Inertia Service Provider to make available inertia services	580
5.20B.5	Inertia support activities.....	583
5.20B.6	Inertia network services information and approvals.....	584
5.20C	System strength requirements	586
5.20C.1	System strength requirements	586
5.20C.2	Fault level shortfalls.....	587
5.20C.3	System Strength Service Provider to make available system strength services.....	588
5.20C.4	System strength services information and approvals.....	590
5.21	AEMO's obligation to publish information and guidelines and provide advice.....	592
5.22	Last resort planning power	594
Schedule 5.1a	System standards	597
S5.1a.1	Purpose.....	597
S5.1a.2	Frequency.....	597
S5.1a.3	System stability	597
S5.1a.4	Power frequency voltage.....	598
S5.1a.5	Voltage fluctuations	599
S5.1a.6	Voltage waveform distortion	599
S5.1a.7	Voltage unbalance.....	599
S5.1a.8	Fault clearance times.....	600
Schedule 5.1	Network Performance Requirements to be Provided or Co-ordinated by Network Service Providers	602
S5.1.1	Introduction.....	602
S5.1.2	Network reliability	603
S5.1.2.1	Credible contingency events	603
S5.1.2.2	Network service within a region	604
S5.1.2.3	Network service between regions	605
S5.1.3	Frequency variations	605
S5.1.4	Magnitude of power frequency voltage	605
S5.1.5	Voltage fluctuations	607
S5.1.6	Voltage harmonic or voltage notching distortion	608
S5.1.7	Voltage unbalance.....	609
S5.1.8	Stability	610
S5.1.9	Protection systems and fault clearance times.....	611
S5.1.10	Load, generation and network control facilities	614
S5.1.10.1	General.....	614
S5.1.10.1a	Emergency frequency control schemes	615
S5.1.10.2	Distribution Network Service Providers.....	616
S5.1.10.3	Transmission Network Service Providers.....	616
S5.1.11	Automatic reclosure of transmission or distribution lines	617
S5.1.12	Rating of transmission lines and equipment	617
S5.1.13	Information to be provided	618
Schedule 5.2	Conditions for Connection of Generators.....	618
S5.2.1	Outline of requirements	618

S5.2.2	Application of Settings	619
S5.2.3	Technical matters to be coordinated	620
S5.2.4	Provision of information	621
S5.2.5	Technical requirements	624
S5.2.5.1	Reactive power capability	624
S5.2.5.2	Quality of electricity generated	625
S5.2.5.3	Generating unit response to frequency disturbances	626
S5.2.5.4	Generating system response to voltage disturbances	629
S5.2.5.5	Generating system response to disturbances following contingency events	631
S5.2.5.6	Quality of electricity generated and continuous uninterrupted operation	634
S5.2.5.7	Partial load rejection	634
S5.2.5.8	Protection of generating systems from power system disturbances	635
S5.2.5.9	Protection systems that impact on power system security	637
S5.2.5.10	Protection to trip plant for unstable operation	638
S5.2.5.11	Frequency control	639
S5.2.5.12	Impact on network capability	642
S5.2.5.13	Voltage and reactive power control	643
S5.2.5.14	Active power control	649
S5.2.6	Monitoring and control requirements	651
S5.2.6.1	Remote Monitoring	651
S5.2.6.2	Communications equipment	653
S5.2.7	Power station auxiliary supplies	654
S5.2.8	Fault current	654
Schedule 5.3	Conditions for Connection of Customers	656
S5.3.1a	Introduction to the schedule	656
S5.3.1	Information	657
S5.3.2	Design standards	659
S5.3.3	Protection systems and settings	659
S5.3.4	Settings of protection and control systems	660
S5.3.5	Power factor requirements	661
S5.3.6	Balancing of load currents	662
S5.3.7	Voltage fluctuations	663
S5.3.8	Harmonics and voltage notching	663
S5.3.9	Design requirements for Network Users' substations	663
S5.3.10	Load shedding facilities	664
Schedule 5.3a	Conditions for connection of Market Network Services	664
S5.3a.1a	Introduction to the schedule	664
S5.3a.1	Provision of Information	666
S5.3a.2	Application of settings	668
S5.3a.3	Technical matters to be co-ordinated	669
S5.3a.4	Monitoring and control requirements	669
S5.3a.4.1	Remote Monitoring	669
S5.3a.4.2	[Deleted]	670
S5.3a.4.3	Communications equipment	670
S5.3a.5	Design standards	671
S5.3a.6	Protection systems and settings	671
S5.3a.7	[Deleted]	672

S5.3a.8	Reactive power capability	672
S5.3a.9	Balancing of load currents	673
S5.3a.10	Voltage fluctuations	673
S5.3a.11	Harmonics and voltage notching	674
S5.3a.12	Design requirements for Market Network Service Providers' substations.....	674
S5.3a.13	Market network service response to disturbances in the power system	675
S5.3a.14	Protection of market network services from power system disturbances.....	675
Schedule 5.4	Information to be Provided with Preliminary Enquiry	676
Schedule 5.4A	Preliminary Response	677
Schedule 5.4B	Detailed Response to Enquiry.....	680
Schedule 5.5	Technical Details to Support Application for Connection and Connection Agreement	682
S5.5.1	Introduction to the schedule.....	682
S5.5.2	Categories of data	682
S5.5.3	Review, change and supply of data.....	683
S5.5.4	Data Requirements.....	684
S5.5.5	Asynchronous generating unit data.....	684
S5.5.6	Generating units smaller than 30MW data	684
S5.5.7	Power System Design Data Sheet, Power System Setting Data Sheet and Power System Model Guidelines	685
Schedule 5.5.1	[Deleted]	688
Schedule 5.5.2	[Deleted]	688
Schedule 5.5.3	Network and plant technical data of equipment at or near connection point.....	688
Schedule 5.5.4	Network Plant and Apparatus Setting Data	691
Schedule 5.5.5	Load Characteristics at Connection Point.....	693
Schedule 5.6	Terms and Conditions of Connection agreements and network operating agreements.....	694
Part A	Connection agreements	694
Part B	Network Operating Agreements	695
Schedule 5.7	Annual Forecast Information for Planning Purposes	696
Schedule 5.8	Distribution Annual Planning Report.....	698
Schedule 5.9	Demand side engagement document (clause 5.13.1(h))	705
Schedule 5.10	Information requirements for Primary Transmission Network Service Providers (clause 5.2A.5)	706
Schedule 5.11	Negotiating principles for negotiated transmission services (clause 5.2A.6).....	709
Schedule 5.12	Negotiating principles for large DCA services	711
Chapter 5A	Electricity connection for retail customers.....	715
Part A	Preliminary	715

5A.A.1	Definitions.....	715
5A.A.2	Application of this Chapter.....	718
5A.A.3	Small Generation Aggregator deemed to be agent of a retail customer.....	719
Part B	Standardised offers to provide basic and standard connection services	719
Division 1	Basic connection services.....	719
5A.B.1	Obligation to have model standing offer to provide basic connection services	719
5A.B.2	Proposed model standing offer for basic connection services	720
5A.B.3	Approval of terms and conditions of model standing offer to provide basic connection services.....	721
Division 2	Standard connection services.....	722
5A.B.4	Standard connection services	722
5A.B.5	Approval of model standing offer to provide standard connection services.....	723
Division 3	Miscellaneous.....	723
5A.B.6	Amendment etc of model standing offer	723
5A.B.7	Publication of model standing offers	724
Part C	Negotiated connection.....	724
5A.C.1	Negotiation of connection	724
5A.C.2	Process of negotiation	725
5A.C.3	Negotiation framework.....	725
5A.C.4	Fee to cover cost of negotiation.....	727
Part D	Application for connection service	728
Division 1	Information.....	728
5A.D.1	Publication of information	728
5A.D.1A	Register of completed embedded generation projects	728
Division 2	Preliminary enquiry.....	730
5A.D.2	Preliminary enquiry	730
Division 3	Applications	731
5A.D.3	Application process.....	731
5A.D.4	Site inspection.....	732
Part E	Connection charges.....	732
5A.E.1	Connection charge principles.....	732
5A.E.2	Itemised statement of connection charges	734
5A.E.3	Connection charge guidelines	734
5A.E.4	Payment of connection charges.....	736
Part F	Formation and integration of connection contracts	737
Division 1	Offer and acceptance – basic and standard connection services.....	737
5A.F.1	Distribution Network Service Provider’s response to application.....	737

5A.F.2	Acceptance of connection offer	737
5A.F.3	Offer and acceptance—application for expedited connection	737
Division 2	Offer and acceptance – negotiated connection	738
5A.F.4	Negotiated connection offer	738
Division 3	Formation of contract	739
5A.F.5	Acceptance of connection offer	739
Division 4	Contractual performance	739
5A.F.6	Carrying out connection work	739
5A.F.7	Retailer required for energisation where new connection	740
Part G	Dispute resolution between Distribution Network Service Providers and customers	740
5A.G.1	Relevant disputes	740
5A.G.2	Determination of dispute	740
5A.G.3	Termination of proceedings	741
SCHEDULE 5A.1 – Minimum content requirements for connection contract		741
Part A	Connection offer not involving embedded generation	741
Part B	Connection offer involving embedded generation	742
6.	Economic Regulation of Distribution Services	747
Part A	Introduction	747
6.1	Introduction to Chapter 6	747
6.1.1	AER's regulatory responsibility	747
6.1.1A	[Deleted]	747
6.1.2	Structure of this Chapter	747
6.1.3	Access to direct control services and negotiated distribution services	748
6.1.4	Prohibition of DUOS charges for the export of energy	748
Part B	Classification of Distribution Services and Distribution Determinations	749
6.2	Classification	749
6.2.1	Classification of distribution services	749
6.2.2	Classification of direct control services as standard control services or alternative control services	749
6.2.3	Term for which classification operates	750
6.2.3A	Distribution Service Classification Guidelines	751
6.2.4	Duty of AER to make distribution determinations	751
6.2.5	Control mechanisms for direct control services	752
6.2.6	Basis of control mechanisms for direct control services	753
6.2.7	Negotiated distribution services	753
6.2.8	Guidelines	753
Part C	Building Block Determinations for standard control services	754
6.3	Building block determinations	754
6.3.1	Introduction	754
6.3.2	Contents of building block determination	755

6.4	Post-tax revenue model.....	755
6.4.1	Preparation, publication and amendment of post-tax revenue model.....	755
6.4.2	Contents of post-tax revenue model	755
6.4.3	Building block approach	756
6.4.4	Shared assets	757
6.4.5	Expenditure Forecast Assessment Guidelines	758
6.4A	Capital expenditure incentive mechanisms	759
6.4B	Asset exemptions	760
6.4B.1	Asset exemption decisions and Asset Exemption Guidelines	760
6.4B.2	Exemption applications.....	761
6.5	Matters relevant to the making of building block determinations.....	761
6.5.1	Regulatory asset base	761
6.5.2	Return on capital	762
6.5.3	Estimated cost of corporate income tax	765
6.5.4	[Deleted]	766
6.5.5	Depreciation.....	766
6.5.6	Forecast operating expenditure	766
6.5.7	Forecast capital expenditure	769
6.5.8	Efficiency benefit sharing scheme	774
6.5.8A	Capital expenditure sharing scheme	775
6.5.9	The X factor	776
6.5.10	Pass through events.....	777
6.6	Adjustments after making of building block determination.	777
6.6.1	Cost pass through.....	777
6.6.1A	Reporting on jurisdictional schemes.....	784
6.6.2	Service target performance incentive scheme.....	786
6.6.3	Demand management incentive scheme	787
6.6.3A	Demand management innovation allowance mechanism	788
6.6.4	Small-scale incentive scheme	789
6.6.5	Reopening of distribution determination for capital expenditure	790
6.6A	Contingent Projects	794
6.6A.1	Acceptance of a contingent project in a distribution determination	794
6.6A.2	Amendment of distribution determination for contingent project	796
Part D	Negotiated distribution services.....	801
6.7	Negotiated distribution services.....	801
6.7.1	Principles relating to access to negotiated distribution services.....	801
6.7.2	Determination of terms and conditions of access for negotiated distribution services	803
6.7.3	Negotiating framework determination	804
6.7.4	Negotiated Distribution Service Criteria determination	804
6.7.5	Preparation of and requirements for negotiating framework for negotiated distribution services.....	804
6.7.6	Confidential information.....	807
Part DA	Connection policies	807
6.7A	Connection policy requirements.....	807

6.7A.1	Preparation of, and requirements for, connection policy	807
Part E	Regulatory proposal and proposed tariff structure statement	808
6.8	Regulatory proposal and proposed tariff structure statement	808
6.8.1	AER's framework and approach paper	808
6.8.1A	Notification of approach to forecasting expenditure	811
6.8.2	Submission of regulatory proposal, tariff structure statement and exemption application	811
6.9	Preliminary examination and consultation	813
6.9.1	Preliminary examination	813
6.9.2	Resubmission of proposal	814
6.9.2A	Confidential information.....	814
6.9.3	Consultation	815
6.10	Draft distribution determination and further consultation	816
6.10.1	Making of draft distribution determination.....	816
6.10.2	Publication of draft determination and consultation.....	816
6.10.3	Submission of revised proposal	817
6.10.4	Submissions on specified matters	817
6.11	Distribution determination	818
6.11.1	Making of distribution determination	818
6.11.1A	Out of scope revised regulatory proposal or late submissions.....	818
6.11.2	Notice of distribution determination.....	819
6.11.3	Commencement of distribution determination	819
6.12	Requirements relating to draft and final distribution determinations.....	820
6.12.1	Constituent decisions	820
6.12.2	Reasons for decisions.....	823
6.12.3	Extent of AER's discretion in making distribution determinations	824
6.13	Revocation and substitution of distribution determination for wrong information or error	826
6.14	Miscellaneous.....	826
6.14A	Distribution Confidentiality Guidelines.....	827
Part F	Cost Allocation	827
6.15	Cost allocation	827
6.15.1	Duty to comply with Cost Allocation Method.....	827
6.15.2	Cost Allocation Principles	827
6.15.3	Cost Allocation Guidelines	828
6.15.4	Cost Allocation Method.....	829
Part G	Distribution consultation procedures.....	830
6.16	Distribution consultation procedures.....	830
Part H	Ring-Fencing Arrangements for Distribution Network Service Providers.....	832
6.17	Distribution Ring-Fencing Guidelines	832
6.17.1	Compliance with Distribution Ring-Fencing Guidelines	832
6.17.2	Development of Distribution Ring-Fencing Guidelines	832

Part I	Distribution Pricing Rules.....	833
6.18	Distribution Pricing Rules.....	833
6.18.1	Application of this Part	833
6.18.1A	Tariff structure statement	833
6.18.1B	Amending a tariff structure statement with the AER's approval	834
6.18.1C	Sub-threshold tariffs.....	836
6.18.2	Pricing proposals.....	836
6.18.3	Tariff classes	838
6.18.4	Principles governing assignment or re-assignment of retail customers to tariff classes and assessment and review of basis of charging.....	838
6.18.5	Pricing principles	839
6.18.6	Side constraints on tariffs for standard control services	841
6.18.7	Recovery of designated pricing proposal charges	842
6.18.7A	Recovery of jurisdictional scheme amounts	843
6.18.8	Approval of pricing proposal	847
6.18.9	Publication of information about tariffs and tariff classes.....	848
6.19.	Data Required for Distribution Service Pricing	849
6.19.1	Forecast use of networks by Distribution Customers and Embedded Generators	849
6.19.2	Confidentiality of distribution network pricing information	849
Part J	Billing and Settlements	849
6.20	Billing and Settlements Process	849
6.20.1	Billing for distribution services	849
6.20.2	Minimum information to be provided in distribution network service bills	851
6.20.3	Settlement between Distribution Network Service Providers	852
6.20.4	Obligation to pay.....	852
Part K	Prudential requirements, capital contributions and prepayments	852
6.21	Distribution Network Service Provider Prudential Requirements.....	852
6.21.1	Prudential requirements for distribution network service.....	852
6.21.2	Capital contributions, prepayments and financial guarantees.....	853
6.21.3	Treatment of past prepayments and capital contributions	853
Part L	Dispute resolution	854
6.22	Dispute Resolution	854
6.22.1	Dispute Resolution by the AER.....	854
6.22.2	Determination of dispute.....	854
6.22.3	Termination of access dispute without access determination	856
Part M	Separate disclosure of transmission and distribution charges	856
6.23	Separate disclosure of transmission and distribution charges	856
Part N	Dual Function Assets	857
6.24	Dual Function Assets	857
6.24.1	Application of this Part	857

6.24.2	Dual Function Assets	857
6.25	AER determination of applicable pricing regime for Dual Function Assets.....	858
6.26	Division of Distribution Network Service Provider's revenue.....	859
Part O	Annual Benchmarking Report.....	860
6.27	Annual Benchmarking Report.....	860
Part P	Distribution Reliability Measures Guidelines	860
6.28	Distribution Reliability Measures Guidelines	860
Schedule 6.1	Contents of building block proposals.....	861
S6.1.1	Information and matters relating to capital expenditure	861
S6.1.2	Information and matters relating to operating expenditure.....	862
S6.1.3	Additional information and matters	863
Schedule 6.2	Regulatory Asset Base	865
S6.2.1	Establishment of opening regulatory asset base for a regulatory control period	865
S6.2.2	Prudency and efficiency of capital expenditure.....	870
S6.2.2A	Reduction for inefficient past capital expenditure	871
S6.2.2B	Depreciation.....	873
S6.2.3	Roll forward of regulatory asset base within the same regulatory control period	874
6A.	Economic Regulation of Transmission Services	877
Part A	Introduction.....	877
6A.1	Introduction to Chapter 6A	877
6A.1.1	Economic regulation of transmission services generally	877
6A.1.2	[Deleted]	878
6A.1.3	[Deleted]	878
6A.1.4	National regulatory arrangements.....	878
6A.1.5	Application of Chapter 6A to Market Network Service Providers.....	878
6A.1.6	Application of Chapter 6A to AEMO and declared transmission system operators.....	878
Part B	Transmission Determinations Generally	879
6A.2	Transmission determinations.....	879
6A.2.1	Duty of AER to make transmission determinations	879
6A.2.2	Components of transmission determinations	879
6A.2.3	Guidelines	879
Part C	Regulation of Revenue - Prescribed Transmission Services	880
6A.3	Allowed revenue from prescribed transmission services	880
6A.3.1	Allowed revenue for regulatory year	880
6A.3.2	Adjustment of maximum allowed revenue	880
6A.4	Revenue determinations	881
6A.4.1	Introduction.....	881
6A.4.2	Contents of revenue determination	881

6A.5	Post-tax revenue model.....	882
6A.5.1	Introduction.....	882
6A.5.2	Preparation, publication and amendment of post-tax revenue model.....	882
6A.5.3	Contents of post-tax revenue model	883
6A.5.4	Building blocks approach	884
6A.5.5	Shared assets	885
6A.5.6	Expenditure Forecast Assessment Guidelines	886
6A.5A	Capital expenditure incentive mechanisms	886
6A.6	Matters relevant to the making of revenue determinations.....	887
6A.6.1	Regulatory asset base	887
6A.6.2	Return on capital	888
6A.6.3	Depreciation.....	891
6A.6.4	Estimated cost of corporate income tax	892
6A.6.5	Efficiency benefit sharing scheme	893
6A.6.5A	Capital expenditure sharing scheme	894
6A.6.6	Forecast operating expenditure	895
6A.6.7	Forecast capital expenditure	898
6A.6.8	The X factor	902
6A.6.9	Pass through events.....	903
6A.7	Matters relevant to the adjustment of revenue cap after making of revenue determination	903
6A.7.1	Reopening of revenue determination for capital expenditure.....	903
6A.7.2	Network support pass through	906
6A.7.3	Cost pass through.....	908
6A.7.4	Service target performance incentive scheme.....	914
6A.7.5	Small-scale incentive scheme	916
6A.8	Contingent Projects	917
6A.8.1	Acceptance of a Contingent Project in a revenue determination	917
6A.8.2	Amendment of revenue determination for contingent project.....	918
Part D	[Deleted]	923
Part E	Procedure - Revenue determinations and pricing methodologies	923
6A.10	Revenue Proposal and proposed pricing methodology	923
6A.10.1A	AER's framework and approach paper	923
6A.10.1B	Notification of approach to forecasting expenditure	925
6A.10.1	Submission of proposal, pricing methodology and information.....	925
6A.10.2	[Deleted]	927
6A.11	Preliminary examination and consultation	927
6A.11.1	Preliminary examination and determination of non-compliance with relevant requirements.....	927
6A.11.2	Resubmission of proposal, framework, pricing methodology or information.....	928
6A.11.2A	Confidential information.....	928
6A.11.3	Consultation	928
6A.12	Draft decision and further consultation.....	929
6A.12.1	Making of draft decision	929

6A.12.2	Publication of draft decision and consultation.....	930
6A.12.3	Submission of revised proposal or pricing methodology	930
6A.12.4	Submissions on specified matters	932
6A.13	Final decision.....	932
6A.13.1	Making of final decision	932
6A.13.2	Refusal to approve amounts, values, framework or pricing methodology	932
6A.13.2A	Out of scope revised documents or late submissions.....	933
6A.13.3	Notice of final decision	934
6A.13.4	Making of transmission determination	934
6A.14	Requirements relating to draft and final decisions.....	934
6A.14.1	Contents of decisions	934
6A.14.2	Reasons for decisions.....	937
6A.14.3	Circumstances in which matters must be approved or accepted.....	937
6A.15	Revocation of revenue determination or amendment of pricing methodology for wrong information or error	940
6A.16	Miscellaneous.....	941
6A.16A	Transmission Confidentiality Guidelines	941
Part F	Information Disclosure	942
6A.17	Information disclosure by Transmission Network Service Providers.....	942
6A.17.1	Information to be provided to AER	942
6A.17.2	Information Guidelines	943
6A.18	[Deleted]	945
Part G	Cost Allocation	945
6A.19	Cost allocation	945
6A.19.1	Duty to comply with Cost Allocation Methodology.....	945
6A.19.2	Cost Allocation Principles	945
6A.19.3	Cost Allocation Guidelines	946
6A.19.4	Cost Allocation Methodology.....	947
Part H	Transmission Consultation Procedures	948
6A.20	Transmission consultation procedures	948
Part I	Ring-Fencing Arrangements for Transmission Network Service Providers.....	949
6A.21	Transmission Ring-Fencing Guidelines	949
6A.21.1	Compliance with Transmission Ring-Fencing Guidelines	949
6A.21.2	Development of Transmission Ring-Fencing Guidelines.....	950
Part J	Prescribed Transmission Services - Regulation of Pricing	951
6A.22	Terms used in Part J	951
6A.22.1	Aggregate annual revenue requirement (AARR)	951
6A.22.2	Annual service revenue requirement (ASRR)	951
6A.22.3	Meaning of attributable cost share	951
6A.22.4	Meaning of attributable connection point cost share	952

6A.23	Pricing Principles for Prescribed Transmission Services	952
6A.23.1	Introduction.....	952
6A.23.2	Principles for the allocation of the aggregate annual revenue requirement	952
6A.23.3	Principles for the allocation of the annual service revenue requirement to connection points.....	953
6A.23.4	Principles for the recovery of the Annual Service Revenue Requirement as prices	956
6A.24	Pricing methodology	958
6A.24.1	Pricing methodologies generally.....	958
6A.24.2	Publication of pricing methodology and transmission network prices	959
6A.24.3	Basis for setting prices pending approval of pricing methodology	960
6A.24.4	Basis for setting prices pending approval of maximum allowed revenue	960
6A.25	Pricing methodology guidelines for prescribed transmission services	961
6A.25.1	Making and amending of pricing methodology guidelines	961
6A.25.2	Contents of pricing methodology guidelines	962
6A.26	Prudent discounts.....	963
6A.26.1	Agreements for prudent discounts for prescribed transmission services.....	963
6A.26.2	Application to AER for approval of proposed prudent discount amounts	964
6A.27	Billing Process	966
6A.27.1	Billing for prescribed transmission services	966
6A.27.1A	Billing of modified load export charges	966
6A.27.2	Minimum information to be provided in network service bills	966
6A.27.3	Obligation to pay charges for prescribed transmission services	967
6A.27.4	Payments between Transmission Network Service Providers in the same region	967
6A.27.5	Calculation of financial transfers between Transmission Network Service Providers in the same region.....	968
6A.28	Prudential Requirements	968
6A.28.1	Prudential Requirements for prescribed transmission services	968
6A.28.2	Capital contribution or prepayment for a specific asset.....	968
6A.28.3	Treatment of past capital contributions.....	968
6A.29	Multiple Transmission Network Service Providers.....	969
6A.29.1	Multiple Transmission Network Service Providers within a region.....	969
6A.29.2	Single Transmission Network Service Provider within a region.....	970
6A.29.3	Allocation over several regions	970
6A.29A	Modified load export charges	970
6A.29A.1	Single Transmission Network Service Provider in a Region.....	970
6A.29A.2	Calculation of the modified load export charges	970
6A.29A.3	Calculation of adjustments to the modified load export charge	971
6A.29A.4	Billing the modified load export charge	971

6A.29A.5	Allocation and billing process where multiple Transmission Network Service Providers in a Region.....	972
Part K	Commercial arbitration for disputes about terms and conditions of access for prescribed and negotiated transmission services	973
[Deleted]		973
Part L	Annual Benchmarking Report.....	973
6A.31	Annual Benchmarking Report.....	973
Schedule 6A.1	Contents of Revenue Proposals.....	973
S6A.1.1	Information and matters relating to capital expenditure	973
S6A.1.2	Information and matters relating to operating expenditure.....	974
S6A.1.3	Additional information and matters	975
Schedule 6A.2	Regulatory Asset Base	978
S6A.2.1	Establishment of opening regulatory asset base for a regulatory control period	978
S6A.2.2	Prudency and efficiency of capital expenditure.....	983
S6A.2.2A	Reduction for inefficient past capital expenditure	984
S6A.2.2B	Depreciation.....	986
S6A.2.3	Removal of assets from regulatory asset base	987
S6A.2.4	Roll forward of regulatory asset base within the same regulatory control period	988
Schedule 6A.3	CRNP methodology and modified CRNP methodology.....	989
S6A.3.1	Meaning of optimised replacement cost	989
S6A.3.2	CRNP methodology	989
S6A.3.3	Modified CRNP methodology	990
Schedule 6A.4	Application of this Chapter to AEMO and declared transmission system operators.....	990
S6A.4.1	Application of this Chapter to AEMO etc	990
S6A.4.2	Exclusions, qualifications and modifications	991
Chapter 6B	Retail markets	1001
Part A	Retail support.....	1001
Division 1 – Application and definitions		1001
6B.A1.1	Application of this Part	1001
Division 2	Billing and payment rules	1002
6B.A2.1	Obligation to pay.....	1002
6B.A2.2	Direct customer billing and energy-only contracts.....	1002
6B.A2.3	Calculating network charges.....	1002
6B.A2.4	Statement of charges	1002
6B.A2.5	Time and manner of payment	1003
Division 3	Matters incidental to billing and payment.....	1003
6B.A3.1	Adjustment of network charges	1003
6B.A3.2	Tariff reassignment	1004
6B.A3.3	Disputed statements of charges.....	1005
6B.A3.4	Interest.....	1006

6B.A3.5	Notification of changes to charges.....	1006
Part B	Credit support required for late payment	1006
Division 1	Application and definitions	1007
6B.B1.1	Application of Part B	1007
6B.B1.2	Definitions.....	1007
Division 2	Requirements for credit support	1007
6B.B2.1	Distribution Network Service Provider may require credit support in limited circumstances	1007
Division 3	Provision of credit support by retailers	1008
6B.B3.1	Retailer to provide credit support	1008
6B.B3.2	Acceptable form of credit support	1008
Division 4	Other Rules relating to credit support.....	1009
6B.B4.1	Application of credit support	1009
6B.B4.2	Return of credit support	1009
6B.B4.3	Other retailer obligations	1009
Schedule 6B.1	Prescribed form of unconditional undertaking for credit support	1010
7.	Metering.....	1013
Part A	Introduction.....	1013
7.1	Introduction to the Metering Chapter	1013
7.1.1	Contents	1013
Part B	Roles and Responsibilities	1013
7.2	Role and Responsibility of financially responsible Market Participant	1013
7.2.1	Obligations of financially responsible Market Participants to establish metering installations	1013
7.2.2	[Not used].....	1014
7.2.3	Agreements with Local Network Service Provider	1014
7.2.4	[Not used].....	1015
7.2.5	Agreements with Metering Provider.....	1015
7.3	Role and Responsibility of Metering Coordinator.....	1015
7.3.1	Responsibility of the Metering Coordinator	1015
7.3.2	Role of the Metering Coordinator.....	1015
7.4	Qualification and Registration of Metering Providers, Metering Data Providers and Embedded Network Managers.....	1019
7.4.1	Qualifications and registration of Metering Providers.....	1019
7.4.2	Qualifications and registration of Metering Data Providers	1020
7.4.2A	Qualifications and registration of Embedded Network Managers.....	1021
7.4.2B	List of Embedded Network Managers	1021
7.4.3	Nature of appointment of Metering Provider or Metering Data Provider.....	1021
7.4.4	Deregistration of Metering Providers, Metering Data Providers and Embedded Network Managers.....	1022

7.5	Role and Responsibility of AEMO	1023
7.5.1	Responsibility of AEMO for the collection, processing and delivery of metering data	1023
7.5.2	AEMO's costs in connection with metering installation.....	1024
7.5A	Role and Responsibility of Embedded Network Managers	1024
7.5A.1	Responsibility of Embedded Network Managers for management services	1024
7.5A.2	EN information	1025
Part C	Appointment of Metering Coordinator	1025
7.6	Appointment of Metering Coordinator	1025
7.6.1	Commercial nature of the Metering Coordinator appointment and service provision	1025
7.6.2	Persons who may appoint Metering Coordinators.....	1026
7.6.3	Appointment with respect to transmission network connection	1027
7.6.4	Type 7 metering installations.....	1027
7.7	Metering Coordinator default arrangements.....	1028
7.7.1	Obligations of financially responsible Market Participants on Metering Coordinator default event and end of contract term.....	1028
7.7.2	Notices to be provided by Metering Coordinator	1029
7.7.3	AEMO may issue breach notice	1030
Part D	Metering installation.....	1031
7.8	Metering installation arrangements.....	1031
7.8.1	Metering installation requirements	1031
7.8.2	Metering installation components.....	1031
7.8.3	Small customer metering installations	1036
7.8.4	Type 4A metering installation	1036
7.8.5	Emergency management.....	1038
7.8.6	Network devices.....	1038
7.8.7	Metering point.....	1041
7.8.8	Metering installation types and accuracy.....	1042
7.8.9	Meter churn.....	1042
7.8.10	Meter installation malfunctions	1044
7.8.11	Changes to metering equipment, parameters and settings within a metering installation.....	1044
7.8.12	Special site or technology related conditions.....	1045
7.8.13	Joint metering installations	1046
7.9	Inspection, Testing and Audit of Metering installations	1047
7.9.1	Responsibility for testing	1047
7.9.2	Actions in event of non-compliance	1049
7.9.3	Audits of information held in metering installations	1050
7.9.4	Errors found in metering tests, inspections or audits	1050
7.9.5	Retention of test records and documents	1051
7.9.6	Metering installation registration process.....	1052
Part E	Metering Data.....	1052
7.10	Metering Data Services.....	1052
7.10.1	Metering Data Services.....	1052

7.10.2	Data management and storage	1053
7.10.3	Provision of metering data to certain persons	1055
7.10.4	Use of check metering data	1055
7.10.5	Periodic energy metering	1055
7.10.6	Time settings	1056
7.10.7	Metering data performance standards	1057
7.11	Metering data and database	1059
7.11.1	Metering database	1059
7.11.2	Data validation, substitution and estimation	1060
7.11.3	Changes to energy data or to metering data	1060
7.12	Register of Metering Information	1061
7.12.1	Metering register	1061
7.12.2	Metering register discrepancy	1061
7.13	Disclosure of NMI information	1061
7.13.1	Application of this Rule	1061
7.13.2	NMI and NMI checksum	1061
7.13.3	NMI Standing Data	1062
7.14	Metering data provision to retail customers	1062
Part F	Security of metering installation and energy data	1063
7.15	Security of metering installation and energy data	1063
7.15.1	Confidentiality	1063
7.15.2	Security of metering installations	1063
7.15.3	Security controls for energy data	1064
7.15.4	Additional security controls for small customer metering installations	1066
7.15.5	Access to data	1067
PART G	Procedures	1069
7.16	Procedures	1069
7.16.1	Obligation to establish, maintain and publish procedures	1069
7.16.2	Market Settlement and Transfer Solution Procedures	1069
7.16.3	Requirements of the metrology procedure	1070
7.16.4	Jurisdictional metrology material in metrology procedure	1071
7.16.5	Additional metrology procedure matters	1073
7.16.6	Requirements of the service level procedures	1074
7.16.6A	Requirements of the ENM service level procedures	1075
Clause 7.16.6B	Guide to embedded networks	1077
7.16.7	Amendment of procedures in the Metering Chapter	1077
7.16.8	National Measurement Act	1078
Part H	B2B Requirements	1078
7.17	B2B Arrangements	1078
7.17.1	B2B e-Hub	1078
7.17.2	B2B e-Hub Participants	1079
7.17.3	Content of the B2B Procedures	1080
7.17.4	Changing B2B Procedures	1081
7.17.5	B2B Decision	1083
7.17.6	Establishment of Information Exchange Committee	1084

7.17.7	Functions and powers of Information Exchange Committee	1085
7.17.8	Obligations of Members	1086
7.17.9	Meetings of Information Exchange Committee.....	1087
7.17.10	Nomination, election and appointment of Members.....	1088
7.17.11	Qualifications of Members	1089
7.17.12	Information Exchange Committee Election Procedures and Information Exchange Committee Operating Manual.....	1090
7.17.13	Cost Recovery	1091
Schedule 7.1	Metering register.....	1091
S7.1.1	General.....	1091
S7.1.2	Metering register information	1092
Schedule 7.2	Metering Provider.....	1093
S7.2.1	General.....	1093
S7.2.2	Categories of registration.....	1094
S7.2.3	Capabilities of Metering Providers for metering installations types 1, 2, 3, 4 and 4A.....	1095
S7.2.4	Capabilities of Metering Providers for metering installations types 5 and 6.....	1098
S7.2.5	Capabilities of Metering Providers for small customer metering installations	1098
S7.2.6	Capabilities of the Accredited Service Provider category	1098
Schedule 7.3	Metering Data Provider	1099
S7.3.1	General.....	1099
S7.3.2	Categories of registration.....	1099
S7.3.3	Capabilities of Metering Data Providers.....	1099
S7.3.4	Capabilities of Metering Data Providers for small customer metering installations	1101
Schedule 7.4	Types and Accuracy of Metering installations.....	1102
S7.4.1	General requirements	1102
S7.4.2	Metering installations commissioned prior to 13 December 1998	1102
S7.4.3	Accuracy requirements for metering installations	1103
S7.4.4	Check metering	1109
S7.4.5	Resolution and accuracy of displayed or captured data.....	1109
S7.4.6	General design standards	1110
S7.4.6.1	Design requirements	1110
S7.4.6.2	Design guidelines.....	1111
Schedule 7.5	Requirements of minimum services specification.....	1111
S7.5.1	Minimum services specification	1111
Schedule 7.6	Inspection and Testing Requirements.....	1115
S7.6.1	General.....	1115
S7.6.2	Technical Guidelines	1117
Schedule 7.7	Embedded Network Managers	1118
S7.7.1	General.....	1118
S7.7.2	Capabilities of Embedded Network Managers	1118
8.	Administrative Functions.....	1123

Part A	Introductory	1123
8.1	Administrative functions	1123
8.1.1	[Deleted]	1123
8.1.2	[Deleted]	1123
8.1.3	Structure of this Chapter	1123
Part B	Disputes.....	1124
8.2	Dispute Resolution	1124
8.2.1	Application and guiding principles.....	1124
8.2.2	The Dispute Resolution Adviser.....	1127
8.2.3	Dispute management systems of Registered Participants and AEMO.....	1128
8.2.4	Stage 1 - dispute resolution through Registered Participants' DMS	1129
8.2.5	Stage 2 - dispute resolution process.....	1131
8.2.6A	Establishment of Dispute Resolution Panel	1132
8.2.6B	Parties to DRP Proceedings	1133
8.2.6C	Proceedings of the DRP	1134
8.2.6D	Decisions of the DRP	1135
8.2.6	[Deleted]	1135
8.2.7	Legal representation.....	1135
8.2.8	Cost of dispute resolution	1136
8.2.9	Effect of resolution	1136
8.2.10	Recording and publication	1137
8.2.11	Appeals on questions of law	1137
8.2.12	[Deleted]	1137
8.2A	B2B Determination Disputes.....	1137
8.2A.1	Application of rule 8.2	1137
8.2A.2	How rule 8.2 applies	1137
8.3	Power to make Electricity Procedures.....	1140
8.4	[Deleted]	1141
8.5	[Deleted]	1141
Part C	Registered Participants' confidentiality obligations	1141
8.6	Confidentiality.....	1141
8.6.1	Confidentiality	1141
8.6.1A	Application.....	1142
8.6.2	Exceptions.....	1142
8.6.3	Conditions	1144
8.6.4	[Deleted]	1144
8.6.5	Indemnity to AER, AEMC and AEMO	1144
8.6.6	AEMO information	1144
8.6.7	Information on Rules Bodies	1144
Part D	Monitoring and reporting	1145
8.7	Monitoring and Reporting	1145
8.7.1	Monitoring	1145
8.7.2	Reporting requirements and monitoring standards for Registered Participants and AEMO	1145

8.7.3	Consultation required for making general regulatory information order (Section 28H of the NEL).....	1147
8.7.4	Preparation of network service provider performance report (Section 28V of the NEL)	1148
8.7.5	[Deleted]	1149
8.7.6	Recovery of reporting costs	1149
Part E	Reliability panel	1149
8.8	Reliability Panel	1149
8.8.1	Purpose of Reliability Panel.....	1149
8.8.2	Constitution of the Reliability Panel.....	1151
8.8.3	Reliability Panel review process	1153
8.8.4	Determination of protected events	1156
Part F	Rules consultation procedures	1158
8.9	Rules Consultation Procedures.....	1158
Part G	Consumer advocacy funding.....	1160
8.10	Consumer advocacy funding obligation	1160
Part H	Augmentations.....	1161
8.11	Augmentations.....	1161
8.11.1	Application.....	1161
8.11.2	Object.....	1161
8.11.3	Definitions.....	1162
8.11.4	Planning criteria	1162
8.11.5	Construction of augmentation that is not a contestable augmentation.....	1163
8.11.6	Contestable augmentations	1163
8.11.7	Construction and operation of contestable augmentation.....	1164
8.11.8	Funded augmentations that are not subject to the tender process.....	1166
8.11.9	Contractual requirements and principles	1167
8.11.10	Annual planning review	1167
Schedule 8.11	Principles to be reflected in agreements relating to contestable augmentations	1167
S8.11.1	Risk allocation	1167
S8.11.2	Minimum requirements for agreements relating to contestable augmentation.....	1169
S8.11.3	Matters to be dealt with in relevant agreements	1169
Part I	Values of customer reliability	1170
8.12	Development of methodology and publication of values of customer reliability	1170
8A.	Participant Derogations	1175
Part 1	Derogations Granted to TransGrid.....	1175
8A.1	[Deleted]	1175
Part 2	Derogations Granted to EnergyAustralia.....	1175

8A.2	[Deleted]	1175
8A.2A	[Deleted]	1175
Part 3	[Deleted]	1175
Part 4	[Deleted]	1175
Part 5	[Deleted]	1175
Part 6	Derogations Granted to Victorian Market Participants	1175
Part 7	[Deleted]	1176
Part 8	[Deleted]	1176
Part 9	[Deleted]	1176
Part 10	[Deleted]	1176
Part 11	[Deleted]	1176
Part 12	[Deleted]	1176
Part 13	Derogation granted to Aurora Energy (Tamar Valley) Pty Ltd	1176
8A.13	[Deleted]	1176
Part 14	Derogations granted to Ausgrid, Endeavour Energy and Essential Energy	1176
8A.14	Derogations from Chapter 6 for the current regulatory control period and subsequent regulatory control period	1176
8A.14.1	Definitions.....	1176
8A.14.2	Expiry date	1181
8A.14.3	Application of Rule 8A.14	1181
8A.14.4	Recovery of revenue across the current regulatory control period and subsequent regulatory control period	1181
8A.14.5	Recovery of revenue in subsequent regulatory control period only and no reopening of subsequent distribution determination required.....	1183
8A.14.6	Recovery of revenue in subsequent regulatory control period only and reopening of distribution determination is required.....	1184
8A.14.7	Requirements for adjustment determination	1186
8A.14.8	Application of Chapter 6 under participant derogation	1186
Part 15	Derogations granted to ActewAGL	1188
8A.15	Derogations from Chapter 6 for the current regulatory control period and subsequent regulatory control period	1188
8A.15.1	Definitions.....	1188
8A.15.2	Expiry date	1192
8A.15.3	Application of Rule 8A.15	1192
8A.15.4	Recovery of revenue across the current regulatory control period and subsequent regulatory control period	1192
8A.15.5	Recovery of revenue in subsequent regulatory control period only and no reopening of subsequent distribution determination required.....	1194
8A.15.6	Recovery of revenue in subsequent regulatory control period only and reopening of distribution determination is required.....	1196
8A.15.7	Requirements for adjustment determination	1198
8A.15.8	Application of Chapter 6 under participant derogation	1198

9.	Jurisdictional Derogations and Transitional Arrangements	1203
9.1	Purpose and Application	1203
9.1.1	Purpose.....	1203
9.1.2	Jurisdictional Derogations	1203
Part A	Jurisdictional Derogations for Victoria	1203
9.2	[Deleted]	1203
9.3	Definitions	1203
9.3.1	General Definitions	1203
9.3.2	[Deleted]	1205
9.3A	Fault levels	1205
9.4	Transitional Arrangements for Chapter 2 - Registered Participants, Registration and Cross Border Networks.....	1206
9.4.1	[Deleted]	1206
9.4.2	Smelter Trader	1206
9.4.3	Smelter Trader: compliance	1207
9.4.4	Report from AER.....	1209
9.4.5	Cross Border Networks.....	1210
9.5	[Deleted]	1210
9.6	Transitional Arrangements for Chapter 4 - System Security.....	1210
9.6.1	Operating Procedures (clause 4.10.1)	1210
9.6.2	Nomenclature Standards (clause 4.12)	1210
9.7	Transitional Arrangements for Chapter 5 - Network Connection	1211
9.7.1	[Deleted]	1211
9.7.2	[Deleted]	1211
9.7.3	[Deleted]	1211
9.7.4	Regulation of Distribution Network Connection	1211
9.7.5	[Deleted]	1212
9.7.6	[Deleted]	1212
9.7.7	[Deleted]	1212
9.8	Transitional Arrangements for Chapter 6 - Network Pricing.....	1212
9.8.1	[Deleted]	1212
9.8.2	[Deleted]	1212
9.8.3	[Deleted]	1212
9.8.4	Transmission Network Pricing	1212
9.8.4A	[Deleted]	1214
9.8.4B	[Deleted]	1214
9.8.4C	[Deleted]	1214
9.8.4D	[Deleted]	1214
9.8.4E	[Deleted]	1214
9.8.4F	[Deleted]	1214
9.8.4G	[Deleted]	1214
9.8.5	[Deleted]	1214
9.8.6	[Deleted]	1214

9.8.7	Distribution network pricing – transitional application of former Chapter 6.....	1214
9.8.8	Exclusion of AER's power to aggregate distribution systems and parts of distribution systems	1215
9.9	Transitional Arrangements for Chapter 7 - Metering	1216
9.9.1	Metering Installations To Which This Schedule Applies	1216
9.9.2	[Deleted]	1216
9.9.3	[Deleted]	1216
9.9.4	[Deleted]	1216
9.9.5	[Deleted]	1216
9.9.6	[Deleted]	1216
9.9.7	[Deleted]	1216
9.9.8	[Deleted]	1216
9.9.9	Periodic Energy Metering (clause 7.9.3)	1216
9.9.10	Use of Alternate Technologies (clause 7.13).....	1216
9.9A	[Deleted]	1217
9.9B	[Deleted]	1217
9.9C	Metering services for residential and small business customers	1217
9.9C.1	Definitions.....	1217
9.9C.2	Expiry Date	1218
9.9C.3	Designation as responsible person	1218
9.9C.4	Classification of relevant metering installations.....	1218
9.9C.5	Cost recovery of AMI rollout	1218
9.9C.6	Capability for remote acquisition of metering data	1218
Schedule 9A1.1	[Deleted]	1218
Schedule 9A1.2	[Deleted]	1218
Schedule 9A1.3	[Deleted]	1218
Schedule 9A2	[Deleted]	1218
Schedule 9A3	Jurisdictional Derogations Granted to Generators	1218
1.	Interpretation of tables	1218
2.	Continuing effect	1219
3.	Subsequent agreement	1219
4.	[Deleted]	1219
5.	Reactive Power Capability (clause S5.2.5.1 of schedule 5.2)	1219
6.	[Deleted]	1221
7.	[Deleted]	1221
8.	[Deleted]	1221
9.	[Deleted]	1221
10.	[Deleted]	1221
11.	[Deleted].....	1221
12.	[Deleted]	1221
13.	Governor Systems (load control) (clause S5.2.5.11 of schedule 5.2).....	1221
14.	[Deleted]	1221
15.	[Deleted]	1221
16.	Excitation Control System (clause S5.2.5.13 of schedule 5.2).....	1221
Part B	Jurisdictional Derogations for New South Wales	1222

9.10	[Deleted]	1222
9.11	Definitions	1222
9.11.1	Definitions used in this Part B	1222
9.12	Transitional Arrangements for Chapter 2 - Generators, Registered Participants, Registration and Cross Border Networks	1223
9.12.1	[Deleted]	1223
9.12.2	Customers	1223
9.12.3	Power Traders	1223
9.12.4	Cross Border Networks	1226
9.13	[Deleted]	1227
9.14	Transitional Arrangements for Chapter 4 - System Security	1227
9.14.1	Power System Operating Procedures	1227
9.15	NSW contestable services for Chapter 5A	1227
9.15.1	Definitions	1227
9.15.2	Chapter 5A not to apply to certain contestable services	1228
9.16	Transitional Arrangements for Chapter 6 - Network Pricing	1228
9.16.1	NSW contestable services	1228
9.16.2	[Deleted]	1228
9.16.3	Jurisdictional Regulator	1228
9.16.4	Deemed Regulated Interconnector	1228
9.16.5	[Deleted]	1228
9.17	Transitional Arrangements for Chapter 7 - Metering	1228
9.17.1	Extent of Derogations	1228
9.17.2	Initial Registration (clause 7.1.2)	1229
9.17.3	Amendments to Schedule 9G1	1229
9.17.4	Compliance with AS/NZ ISO 9002 (clause S7.4.3(f) of schedule 7.4)	1229
9.17A	[Deleted]	1230
9.18	[Deleted]	1230
Part C	Jurisdictional Derogations for the Australian Capital Territory	1230
9.19	[Deleted]	1230
9.20	Definitions and Transitional Arrangements for Cross-Border Networks	1230
9.20.1	Definitions	1230
9.20.2	Cross Border Networks	1230
9.21	[Deleted]	1231
9.22	[Deleted]	1231
9.23	Transitional Arrangements for Chapter 6 - Network Pricing	1231
9.23.1	[Deleted]	1231
9.23.2	[Deleted]	1231
9.23.3	[Deleted]	1231
9.23.4	[Deleted]	1231

9.24	Transitional Arrangements.....	1231
9.24.1	Chapter 7 - Metering.....	1231
9.24.2	[Deleted]	1231
9.24A	[Deleted]	1231
Part D	Jurisdictional Derogations for South Australia	1231
9.25	Definitions.....	1231
9.25.1	[Deleted]	1231
9.25.2	Definitions.....	1231
9.26	Transitional Arrangements for Chapter 2 - Registered Participants, Registration And Cross Border Networks.....	1234
9.26.1	Registration as a Generator	1234
9.26.2	Registration as a Customer	1235
9.26.3	Cross Border Networks.....	1235
9.26.4	[Deleted]	1236
9.26.5	Registration as a Network Service Provider	1236
9.27	[Deleted].....	1236
9.28	Transitional Arrangements for Chapter 5 - Network Connection	1236
9.28.1	Application of clause 5.2	1236
9.28.2	[Deleted]	1237
9.29	Transitional Arrangements for Chapter 6 - Economic Regulation of Distribution Services.....	1237
9.29.1	[Deleted]	1237
9.29.2	[Deleted]	1237
9.29.3	[Deleted]	1237
9.29.4	[Deleted]	1237
9.29.5	Distribution Network Pricing – South Australia.....	1237
9.29.6	Capital contributions, prepayments and financial guarantees.....	1238
9.29.7	Ring fencing.....	1239
9.29A	Monitoring and reporting	1239
9.30	Transitional Provisions.....	1240
9.30.1	Chapter 7 - Metering.....	1240
Part E	Jurisdictional Derogations for Queensland.....	1240
9.31	[Deleted]	1240
9.32	Definitions and Interpretation	1240
9.32.1	Definitions.....	1240
9.32.2	Interpretation.....	1242
9.33	Transitional Arrangements for Chapter 1	1243
9.33.1	[Deleted]	1243
9.34	Transitional Arrangements for Chapter 2 - Registered Participants and Registration	1243
9.34.1	Application of the Rules in Queensland (clauses 2.2 and 2.5)	1243
9.34.2	Stanwell Cross Border Leases (clause 2.2).....	1243
9.34.3	[Deleted]	1243

9.34.4	Registration as a Customer (clause 2.3.1).....	1243
9.34.5	There is no clause 9.34.5.....	1244
9.34.6	Exempted generation agreements (clause 2.2).....	1244
9.35	[Deleted]	1249
9.36	[Deleted]	1249
9.37	Transitional Arrangements for Chapter 5 - Network Connection.....	1249
9.37.1	[Deleted]	1249
9.37.2	Existing connection and access agreements (clause 5.2).....	1249
9.37.3	[Deleted]	1250
9.37.4	[Deleted]	1250
9.37.5	Forecasts for connection points to transmission network (clause 5.11.1)	1250
9.37.6	There is no clause 9.37.6.....	1250
9.37.7	Cross Border Networks.....	1250
9.37.8	[Deleted]	1250
9.37.9	Credible contingency events (clause S5.1.2.1 of schedule 5.1).....	1250
9.37.10	Reactive power capability (clause S5.2.5.1 of schedule 5.2).....	1251
9.37.11	[Deleted]	1251
9.37.12	Voltage fluctuations (clause S5.1.5 of schedule 5.1).....	1251
9.37.13	[Deleted]	1254
9.37.14	[Deleted]	1254
9.37.15	[Deleted]	1254
9.37.16	[Deleted]	1254
9.37.17	[Deleted]	1254
9.37.18	[Deleted]	1254
9.37.19	Generating unit response to disturbances (clause S5.2.5.3 of schedule 5.2)	1254
9.37.20	[Deleted]	1254
9.37.21	Excitation control system (clause S.5.2.5.13 of schedule 5.2)	1254
9.37.22	[Deleted]	1255
9.37.23	Annual forecast information for planning purposes (schedule 5.7).....	1255
9.38	Transitional Arrangements for Chapter 6 - Network Pricing.....	1255
9.38.1	[Deleted]	1255
9.38.2	[Deleted]	1255
9.38.3	[Deleted]	1255
9.38.4	Interconnectors between regions.....	1255
9.38.5	Transmission pricing for exempted generation agreements	1256
9.39	Transitional Arrangements for Chapter 7 - Metering	1256
9.39.1	Metering installations to which this clause applies.....	1256
9.39.2	[Deleted]	1257
9.39.3	[Deleted]	1257
9.39.4	[Deleted]	1257
9.39.5	[Deleted]	1257
9.40	Transitional Arrangements for Chapter 8 - Administration Functions.....	1257
9.40.1	[Deleted]	1257
9.40.2	[Deleted]	1257

9.40.3	[Deleted]	1257
9.41	[Deleted]	1257
Schedule 9E1	Exempted Generation Agreements	1257
Part F	Jurisdictional Derogations for Tasmania	1258
9.42	Definitions and interpretation	1258
9.42.1	Definitions.....	1258
9.42.2	Interpretation.....	1259
9.42.3	National grid, power system and related expressions.....	1260
9.43	[Deleted]	1260
9.44	Transitional arrangements for Chapter 2 – Registered Participants and Registration - Customers (clause 2.3.1(e)).....	1260
9.45	Tasmanian Region (clause 3.5)	1260
9.47	Transitional arrangements for Chapter 5- Network Connection.....	1260
9.47.1	Existing Connection Agreements	1260
9.48	Transitional arrangements - Transmission and Distribution Pricing	1261
9.48.4A	Ring fencing.....	1261
9.48.4B	Uniformity of tariffs for small customers	1261
9.48.5	Transmission network.....	1261
9.48.6	Deemed regulated interconnector	1261
Part G	Schedules to Chapter 9	1262
Schedule 9G1	Metering Transitional Arrangements	1262
1.	Introduction.....	1262
2.	[Deleted]	1262
3.	General Principle	1262
4.	[Deleted]	1262
5.	Accuracy Requirements	1262
6.	[Deleted]	1263
7.	[Deleted]	1263
8.	[Deleted]	1263
9.	[Deleted]	1263
10.	[Deleted]	1263
10.	Glossary	1267
11.	Savings and Transitional Rules	1397
Part A	Definitions.....	1397
Part B	System Restart Ancillary Services (2006 amendments)	1397
11.2	Rules consequent on making of the National Electricity Amendment (System Restart Ancillary Services and pricing under market suspension) Rule 2006	1397
11.2.1	Transitional provision for acquisition of non-market ancillary services.....	1397

11.3	[Deleted]	1398
Part C	Dispute Resolution for Regulatory Test (2006 amendments)	1398
11.4	Rules consequent on making of the National Electricity Amendment (Dispute Resolution for Regulatory Test) Rule 2006.....	1398
11.4.1	Continuation of things done under old clause 5.6.6.....	1398
Part D	Metrology (2006 amendments)	1399
11.5	Rules consequential on the making of the National Electricity Amendment (Metrology) Rule 2006	1399
11.5.1	Definitions.....	1399
11.5.2	Metrology procedures continues to apply until 31 December 2006	1399
11.5.3	Responsible person	1399
11.5.4	NEMMCO's responsibility to develop a metrology procedure	1399
11.5.5	Jurisdictional metrology material in the metrology procedure	1400
Part E	Economic Regulation of Transmission Services (2006 amendments)	1401
11.6	Rules consequent on making of the National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006.....	1401
11.6.1	Definitions.....	1401
11.6.2	New Chapter 6A does not affect existing revenue determinations.....	1402
11.6.3	Old Part C and Schedules 6.2, 6.3, 6.4, 6.7 and 6.8 of old Chapter 6.....	1403
11.6.4	Old Part F of Chapter 6.....	1403
11.6.5	Application of new Chapter 6A to Transmission Network Service Providers	1403
11.6.6	Application of Chapter 6 to old distribution matters	1403
11.6.7	References to the old Chapter 6	1403
11.6.8	References to provisions of the old Chapter 6	1404
11.6.9	Roll forward of regulatory asset base for first regulatory control period	1404
11.6.10	Other adjustment carry-over mechanisms from current to first regulatory control period.....	1404
11.6.11	Clause consequent upon making National Electricity Amendment (Cost Allocation Arrangements for Transmission Services) Rule No 2009 No 3 - Transition to new Chapter 6A: existing prescribed connection services	1404
11.6.12	Powerlink transitional provisions	1407
11.6.13	ElectraNet easements transitional provisions	1411
11.6.14	TransGrid contingent projects.....	1411
11.6.15	Transmission determination includes existing revenue determinations.....	1412
11.6.16	References to regulatory control period.....	1412
11.6.17	Consultation procedure for first proposed guidelines	1412
11.6.18	Reliance on proposed guidelines for SP AusNet, VENCORP and ElectraNet	1413
11.6.19	EnergyAustralia transitional provisions.....	1413
11.6.20	Basslink transitional provisions	1416
11.6.21	SPI Powernet savings and transitional provision.....	1417

11.6.22	Interim arrangements pricing-related information.....	1419
Part F	Reform of Regulatory Test Principles (2006 amendments)	1419
11.7	Rules consequent on making of the National Electricity Amendment (Reform of the Regulatory Test Principles) Rule 2006.....	1419
11.7.1	Definitions.....	1419
11.7.2	Amending Rule does not affect old clause 5.6.5A.....	1420
Part G	Pricing of Prescribed Transmission Services (2006 amendments)	1420
11.8	Rules consequent on making the National Electricity Amendment (Pricing of Prescribed Transmission Services) Rule 2006.....	1420
11.8.1	Definitions.....	1420
11.8.2	Regulated interconnectors.....	1421
11.8.3	Application of new Part J of Chapter 6A to Transmission Network Service Providers	1421
11.8.4	Reliance on agreed interim guideline for ElectraNet, SPAusNet, and VenCorp	1421
11.8.5	Prudent discounts under existing agreements	1422
11.8.6	Application of prudent discounts regime under rule 6A.26.....	1422
11.8.7	Prudent discounts pending approval of pricing methodology	1422
Part H	Reallocations (2007 amendments)	1423
11.9	Rules consequent on the making of the National Electricity Amendment (Reallocations) Rule 2007	1423
11.9.1	Definitions.....	1423
11.9.2	Existing and transitional reallocations	1424
Part I	Technical Standards for Wind Generation (2007 amendments)	1424
11.10	Rules consequent on making of the National Electricity Amendment (Technical Standards for Wind Generation and other Generator Connections) Rule 2007	1424
11.10.1	Definitions.....	1424
11.10.2	Provision of information under S5.2.4 in registration application.....	1424
11.10.3	Access standards made under the old Chapter 5.....	1425
11.10.4	Modifications to plant by Generators	1425
11.10.5	Technical Details to Support Application for Connection and Connection Agreement	1425
11.10.6	Transitional arrangements for establishment of performance standards	1426
11.10.7	Jurisdictional Derogations for Queensland.....	1426
11.10A	Rules consequent on the making of the National Electricity Amendment (Central Dispatch and Integration of Wind and Other Intermittent Generation) Rule 2008.....	1426
11.10A.1	Definitions.....	1426
11.10A.2	Registration and reclassification of classified generating units	1427
11.10A.3	Registered generating unit	1428
11.10A.4	Classification of potential semi-scheduled generating unit	1428

11.10A.5	Participant fees	1428
11.10A.6	Timetable	1429
11.10A.7	Procedure for contribution factors for ancillary service transactions	1429
11.10A.8	Guidelines for energy conversion model information	1429
Part J	Cost Recovery of Localised Regulation Services (2007 amendments)	1430
11.11	Rules consequent on making of the National Electricity Amendment (Cost Recovery of Localised Regulation Services) Rule 2007.....	1430
11.11.1	Definitions.....	1430
11.11.2	Action taken by NEMMCO for the purposes of Amending Rule	1430
11.12	[Deleted]	1430
Part L	[Deleted]	1430
Division 1	General Provisions	1430
11.14	General provisions	1430
Part M	Economic Regulation of Distribution Services (2007 amendments)	1434
Division 1	General Provisions	1434
11.14	General provisions	1434
Division 2	[Deleted]	1438
Division 3	Transitional arrangements for first distribution determination for Queensland Distribution Network Service Providers	1438
11.16	Transitional arrangements for first distribution determination for Queensland Distribution Network Service Providers	1438
Division 4	Transitional provisions of specific application to Victoria	1441
11.17	Transitional provisions of specific application to Victoria.....	1441
Part N	Registration of Foreign Based Persons and Corporations as Trader Class Participants (2007 amendments).....	1444
11.18	Rules consequential on the making of the National Electricity Amendment (Registration of Foreign Based Persons and Corporations as Trader Class Participants) Rule 2007.....	1444
11.18.1	Definitions.....	1444
11.18.2	Auction rules.....	1444
Part O	Process for Region Change (2007 amendments)	1444
11.19	Rules consequent on making of the National Electricity Amendment (Process for Region Change) Rule 2007.....	1444
11.19.1	Definitions.....	1444
11.19.2	Regions Publication	1444
Part P	Integration of NEM Metrology Requirements.....	1445
11.20	Rules consequential on the making of the National Electricity Amendment (Integration of NEM Metrology Requirements) Rule 2008.....	1445
11.20.1	Definitions.....	1445

11.20.2	Metering installations for non-market generating units immediately prior to 30 June 2008	1445
11.20.3	First-tier load metering installations	1446
11.20.4	First-tier load metering installations in Victoria	1446
11.20.5	Minimalist Transitioning Approach in Queensland	1446
11.20.6	First-tier jurisdictional requirements publication	1446
11.20.7	Metrology procedure	1447
Part PA	Reliability Settings: Information Safety Net and Directions	1447
11.21	Rules consequential on the making of the National Electricity Amendment (NEM Reliability Settings: Information Safety Net and Directions) Rule 2008	1447
11.21.1	Definitions	1447
11.21.2	EAAP guidelines	1447
11.21.3	[Deleted]	1447
11.21.4	[Deleted]	1447
11.21.5	Timetable	1447
11.21.6	Power system security and reliability standards	1448
11.21.7	Report on statement of opportunities	1448
11.21.8	Methodology for dispatch prices and ancillary services prices	1448
Part Q	Regulatory Test Thresholds and Information Disclosure on Network Replacements	1448
11.22	Rules consequential on the making of the National Electricity Amendment (Regulatory Test Thresholds and Information Disclosure on Network Replacements) Rule 2008	1448
11.22.1	Definitions	1448
11.22.2	Amending Rule does not affect existing regulatory test	1449
Part R	Performance Standard Compliance of Generators	1449
11.23	Rules consequential on the making of the National Electricity Amendment (Performance Standards Compliance of Generators) Rule 2008	1449
11.23.1	Definitions	1449
11.23.2	Application of rule 11.23 for compliance programs implemented immediately after the commencement of the Amending Rule	1449
11.23.3	Application of rule 11.23 for compliance programs implemented immediately prior to the commencement of the Amending Rule	1450
11.23.4	Application of rule 11.23 for compliance programs not implemented immediately prior to the commencement of the Amending Rule	1450
Part S	[Deleted]	1450
Part U	Confidentiality Arrangements concerning Information required for Power System Studies	1450
11.25	Rule consequential on the making of the National Electricity Amendment (Confidentiality Arrangements in Respect of Information Required for Power System Studies) Rule 2009	1450
11.25.1	Definitions	1450
11.25.2	Transitional arrangements for the provision of information	1450

Part V	WACC Reviews: Extension of Time	1452
11.26	Rule consequential on the making of the National Electricity Amendment (WACC Reviews: Extension of Time) Rule 2009.....	1452
11.26.1	Definitions.....	1452
11.26.2	Extension of time to submit a regulatory proposal for the regulatory control period 2010-2015.....	1452
Part W	National Transmission Statement	1452
11.27	Rules consequent on the making of the National Electricity Amendment (National Transmission Statement) Rule 2009.....	1452
11.27.1	Definitions.....	1452
11.27.2	Purpose.....	1453
11.27.3	Application of rule 11.27	1453
11.27.4	National Transmission Statement	1453
11.27.5	Scope and Content of National Transmission Network Development Plan.....	1455
11.27.6	Energy Adequacy Assessment Projection	1455
11.27.7	Amendment to Last Resort Power	1456
11.27.8	Actions taken prior to commencement of Rule	1456
Part X	National Transmission Planning	1456
11.28	Rules consequential on the making of the National Electricity (Australian Energy Market Operator) Amendment Rules 2009.....	1456
11.28.1	Definitions.....	1456
11.28.2	Jurisdictional planning bodies and representatives.....	1456
11.28.3	Criteria and guidelines published by Inter-regional Planning Committee.....	1457
11.28.4	Augmentation technical reports	1457
11.28.5	Last Resort Planning Power	1457
11.28.6	Inter-network power system tests	1458
11.28.7	Control and protection settings for equipment.....	1458
11.28.8	Revenue Proposals	1458
Part Y	Regulatory Investment Test for Transmission.....	1458
11.29	Rules consequent on making of the National Electricity Amendment (Regulatory Investment Test for Transmission) Rule 2009.....	1458
11.29.1	Definitions.....	1458
11.29.2	Period when Amending Rule applies to transmission investment.....	1459
Part Z	Congestion Information Resource.....	1460
11.30	Rules consequent on the making of the National Electricity Amendment (Congestion Information Resource) Rule 2009	1460
11.30.1	Definitions.....	1460
11.30.2	Interim congestion Information resource	1460
Part ZA	Reliability and emergency reserve trader (2009 amendments)	1462
11.31	Rules consequent on the making of the National Electricity Amendment (Improved RERT Flexibility and Short-notice Reserve Contracts) Rule 2009.....	1462

11.31.1	Definitions.....	1462
11.31.2	Purpose.....	1462
11.31.3	Amendments to Reliability Panel's RERT Guidelines.....	1463
11.31.4	Amendments to AEMO's RERT procedures for exercising the RERT	1463
Part ZB	Early Application of Market Impact Parameters.....	1464
11.32	Rules consequent on the making of the National Electricity Amendment (Early Implementation of Market Impact Parameters) Rule 2010	1464
11.32.1	Definitions.....	1464
11.32.2	Purpose.....	1465
11.32.3	Early application of the market impact component of the service target performance incentive scheme.....	1465
Part ZC	Transparency of operating data	1468
11.33	Rules consequential on the making of National Electricity Amendment (Transparency of Operating Data) Rule 2010.....	1468
11.33.1	Definitions.....	1468
11.33.2	Spot market operations timetable.....	1468
Part ZD	Cost Recovery for Other Services Directions.....	1470
11.34	Rules consequent on making of the National Electricity Amendment (Cost Recovery for Other Services Directions) Rule 2010.....	1470
11.34.1	Definitions.....	1470
11.34.2	Period when Amending Rules applies to funding of compensation	1471
Part ZE	Payments under Feed-in Schemes and Climate Change Funds	1471
11.35	Rules consequential on the making of the National Electricity Amendment (Payments under Feed-in Schemes and Climate Change Funds) Rule 2010	1471
11.35.1	Definitions.....	1471
11.35.2	Application of recovery of jurisdictional scheme Rules.....	1472
11.35.3	Reporting on jurisdictional schemes.....	1473
11.35.4	Revocation and substitution of distribution determination for jurisdictional scheme recovery	1474
Part ZF	Transitional Arrangements for Ministerial Smart Meter Roll Out Determinations	1475
11.36	Ministerial Smart Meter Roll Out Determinations	1475
11.36.1	Definitions.....	1475
11.36.2	Meaning of relevant metering installation	1475
11.36.3	Period of application of rule to relevant metering installation	1476
11.36.4	Designation of responsible person	1476
11.36.5	[Deleted]	1476
11.36.6	[Deleted]	1476
Part ZG	Provision of Metering Data Services and Clarification of Existing Metrology Requirements.....	1476

11.37	Rules consequential on the making of the National Electricity Amendment (Provision of Metering Data Services and Clarification of Existing Metrology Requirements) Rule 2010	1476
11.37.1	Definitions.....	1476
11.37.2	Commencement of special site or technology related conditions.....	1476
11.37.3	Initial service level procedures	1477
Part ZH	Spot Market Operations Timetable	1477
11.38	Rules consequential on the making of National Electricity Amendment (Amendments to PASA-related Rules) Rule 2010	1477
11.38.1	Definitions.....	1477
11.38.2	Spot market operations timetable.....	1478
Part ZI	DNSP Recovery of Transmission-related Charges	1478
11.39	Rules consequential on the making of the National Electricity Amendment (DNSP Recovery of Transmission-related Charges) Rule 2011	1478
11.39.1	Definitions.....	1478
11.39.2	Recovery by Victorian distribution network service providers during current regulatory control period.....	1479
11.39.3	Recovery by Victorian distribution network service providers for shared network augmentations.....	1480
11.39.4	Bairnsdale network support agreement.....	1480
11.39.5	Approval of pricing proposal	1480
11.39.6	Ergon Energy transitional charges	1480
11.39.7	Energex transitional charges	1480
Part ZJ	Network Support and Control Ancillary Services.....	1480
11.40	Rules consequential on the making of the National Electricity Amendment (Network Support and Control Ancillary Services) Rule 2011.....	1480
11.40.1	Definitions.....	1480
11.40.2	Purpose.....	1481
11.40.3	Existing NCAS contracts to continue	1481
11.40.4	Amendments to existing guidelines	1481
11.40.5	New procedures	1482
11.40.6	Decisions and actions taken prior to Amending Rule.....	1482
Part ZK	Application of Dual Marginal Loss Factors	1482
11.41	Rules consequential on the making of the National Electricity Amendment (Application of Dual Marginal Loss Factors) Rule 2011.....	1482
11.41.1	Definitions.....	1482
11.41.2	Amendments to loss factor methodology	1483
11.41.3	Procedure applying dual intra-regional loss factors in central dispatch and spot market transactions.....	1483
11.41.4	Publication of intra-regional loss factors	1483
Part ZL	Tasmania Tranche 5a Procedure Changes.....	1483

11.42	Rules consequential on the making of the National Electricity Amendment (Tasmania Tranche 5a Procedure Changes) Rule 2011.....	1483
11.42.1	Definitions.....	1483
11.42.2	AEMO may amend Relevant Procedures	1484
Part ZM	Application and Operation of Administered Price Periods	1484
11.43	Rules consequential on the making of National Electricity Amendment (Application and Operation of Administered Price Periods) Rule 2011	1484
11.43.1	Definitions.....	1484
11.43.2	Administered Price Cap Schedule	1485
Part ZO	Negative Intra-regional Settlements Residue	1485
11.45	Rules consequential on the making of National Electricity Amendment (Negative Intra-regional Settlements Residue) Rule 2012.....	1485
11.45.1	Definitions.....	1485
11.45.2	Recovery of negative settlements residue prior to consultation under the Amending Rule	1486
11.45.3	First consultation on negative intra-regional settlements residue procedure.....	1486
Part ZP	Interim Connection Charging Rules	1487
11.46	Rules consequential to the insertion of Chapter 5A by the National Electricity (National Energy Retail Law) Amendment Rule 2012.....	1487
Division 1	Preliminary.....	1487
Division 2	Jurisdictional differences	1489
Division 3	General provisions	1497
Part ZQ	NSW transitional retail support and credit support rules	1497
11.47	Rules consequential on the insertion of Chapter 6B by the National Electricity (National Energy Retail Law) Amendment Rule 2012.....	1497
Division 1	Preliminary.....	1497
Part ZR	Miscellaneous transitional rules—NERL	1503
11.48	Rules consequential on the making of the National Electricity (National Energy Retail Law) Amendment Rule 2012.....	1503
11.48.1	Extension of time period for AER to consider certain pass through applications	1503
Part ZS	Cost pass through arrangements for Network Service Providers.....	1504
11.49	Rules consequential on the making of National Electricity Amendment (Cost pass through arrangements for Network Service Providers) Rule 2012	1504
11.49.1	Definitions.....	1504

11.49.2	Terrorism event is a cost pass through event in the current regulatory control period	1504
11.49.3	Transitional arrangement for Powerlink.....	1504
11.49.4	Transitional arrangements for ElectraNet and Murraylink	1505
Part ZT	Distribution Network Planning and Expansion	1505
11.50	Rules consequential on the making of the National Electricity Amendment (Distribution Network Planning and Expansion) Rule 2012.....	1505
11.50.1	Interpretation.....	1505
11.50.2	Definitions.....	1506
11.50.3	Timing for first Distribution Annual Planning Report	1506
11.50.4	Contents of Distribution Annual Planning Report.....	1506
11.50.5	Transition from the regulatory test to the regulatory investment test for distribution	1508
Part ZU	New Prudential Standard and Framework in the NEM	1509
11.51	Rules consequential on the making of the National Electricity Amendment (New Prudential Standard and Framework in the NEM) Rule 2012.....	1509
11.51.1	Definitions.....	1509
11.51.2	AEMO's responsibility to develop and publish the credit limit procedures	1509
11.51.3	Transition to the framework for determining prudential settings	1509
11.51.4	Prior consultation, step, decision or action taken by AEMO.....	1510
Part ZV	Small Generation Aggregator Framework.....	1510
11.52	Rules consequential on the making of the National Electricity Amendment (Small Generation Aggregator Framework) Rule 2012.....	1510
11.52.1	Definitions.....	1510
11.52.2	Commencement of participant fees as well as transactions, funding and settlements under Chapter 3 for Market Small Generation Aggregators.....	1511
11.52.3	Participant fees for Market Small Generation Aggregators.....	1511
11.52.4	Ancillary service transactions, funding of compensation for directions and intervention settlements for directions for Market Small Generation Aggregators.....	1512
11.52.5	Amendments to the carbon dioxide equivalent intensity index procedures	1512
11.52.6	Amendments of the metrology procedures	1513
11.52.7	Amendments to the Market Settlement and Transfer Solution Procedures.....	1513
Part ZW	Economic Regulation of Network Service Providers (2012 amendments)	1514
Division 1	Miscellaneous transitional provisions	1514
11.53	Publication of Chapter 6 Guidelines	1514
11.54	Publication of Chapter 6A Guidelines	1515

Division 2	Transitional provisions for NSW/ACT Distribution Network Service Providers	1517
11.55	General provisions	1517
11.56	Special provisions applying to affected DNSPs	1520
Division 3	Transitional provisions for NSW and Tasmanian Transmission Network Service Providers and Directlink.....	1532
11.57	General provisions	1532
11.58	Special provisions applying to affected TNSPs.....	1535
Division 4	Transitional provisions for the Victorian TNSP	1544
11.59	Special provisions applying to the Victorian TNSP	1544
Division 5	Transitional provisions for Qld/SA and Victorian Distribution Network Service Providers.....	1546
11.60	Special provisions applying to the Qld/SA and Victorian Distribution Network Service Providers.....	1546
Division 6	Review of past capital expenditure.....	1552
11.61	Definitions and application	1552
11.62	Review of past capital expenditure under Chapter 6	1552
11.63	Review of past capital expenditure under Chapter 6A	1553
Part ZX	Inter-regional Transmission Charging	1553
11.64	Rules consequent on the making of the National Electricity Amendment (Inter-regional Transmission Charging) Rule 2013	1553
11.64.1	Definitions.....	1553
11.64.2	Amendments to the pricing methodology guidelines	1554
11.64.3	Amendments to the pricing methodologies of Transmission Network Service Providers	1554
11.64.4	Commencement of clause 6A.23.3(f) for further adjustments	1555
Part ZY	Network Service Provider Expenditure Objectives.....	1555
11.65	Rules consequent on the making of the National Electricity Amendment (Network Service Provider Expenditure Objectives) Rule 2013	1555
11.65.1	Definitions.....	1555
11.65.2	Application of rule 11.65	1556
Part ZZ	Access to NMI Standing Data	1556
11.66	Rules consequent on the making of the National Electricity Amendment (Access to NMI Standing Data) Rule 2013	1556
11.66.1	Definitions.....	1556
11.66.2	Minor amendment of the Market Settlement and Transfer Solution Procedures.....	1556
Part ZZA	Publication of Zone Substation Data.....	1557
11.67	Rules consequent on the making of the National Electricity Amendment (Publication of Zone Substation Data) Rule 2014.....	1557
11.67.1	Definitions.....	1557
11.67.2	Distribution Network Service Providers' obligations to commence on the next DAPR date	1557
Part ZZB	Connecting Embedded Generators	1557

11.68	Rules consequential on the making of the National Electricity Amendment (Connecting embedded generators) Rule 2014	1557
11.68.1	Definitions.....	1557
11.68.2	Continuation of enquiries lodged.....	1558
Part ZZC	Customer access to information about their energy consumption.....	1558
11.69	Rules consequential on the making of the National Electricity Amendment (Customer access to information about their energy consumption) Rule 2014.....	1558
11.69.1	Definitions.....	1558
11.69.2	AEMO to develop and publish the metering data provision procedure.....	1558
Part ZZD	National Electricity Amendment (Distribution Network Pricing Arrangements) Rule 2014.....	1558
Division 1	Miscellaneous transitional provisions	1558
11.70	General provisions	1558
11.70.1	Definitions.....	1558
Division 2	Transitional provisions for NSW/ACT and Qld/SA Distribution Network Service Providers.....	1561
11.72	General provisions	1561
11.772.1	Definitions.....	1561
Division 3	Transitional provisions for Tasmanian Distribution Network Service Provider	1568
11.74	Application of former Chapter 6.....	1568
Division 4	Transitional provisions for Victorian Distribution Network Service Providers	1568
11.75	General provisions	1568
11.75.1	Definitions.....	1568
11.76	Special provisions applying to affected DNSPs	1568
11.76.1	Distribution determination and pricing proposals.....	1568
11.76.2	Tariff structure statement	1569
Part ZZE	Early Application of Network Capability Component (STPIS)	1575
11.77	Rules consequent on the making of the National Electricity Amendment (Early Application of Service Target Performance Incentive Scheme (STPIS) Components for Transmission Businesses) Rule 2015	1575
11. 77.1	Definitions.....	1575
11.77.2	Purpose.....	1576
11.77.3	Earlier application of the network capability component of the service target performance incentive scheme	1576
Part ZZF	National Electricity Amendment (Governance arrangements and implementation of the reliability standard and settings) Rule 2015.....	1578

11.78	Rules consequent on the making of the National Electricity Amendment (Governance arrangements and implementation of the reliability standards and settings) Rule 2015	1578
11.78.1	Definitions.....	1578
11.78.2	Existing power system security and reliability standards	1579
11.78.3	Reliability standard and settings guidelines.....	1579
11.78.4	Reliability standard implementation guidelines.....	1579
Part ZZG	Improving demand side participation information provided to AEMO by registered participants	1582
11.79	Rules consequential on making of the National Electricity Amendment (Improving demand side participation information provided to AEMO by registered participants) Rule 2015.....	1582
11.79.1	AEMO to develop and publish the demand side participation information guidelines	1582
Part ZZH	Transitional Arrangements for Aligning TasNetworks' regulatory control periods.....	1582
11.80	National Electricity Amendment (Aligning TasNetworks' regulatory control periods) Rule 2015	1582
11.80.1	Definitions.....	1582
11.80.2	Application of rule 11.80	1583
11.80.3	Next regulatory control period.....	1583
11.80.4	Subsequent regulatory control period	1583
Part ZZI	System Restart Ancillary Services.....	1583
11.81	Rules consequential on the making of the National Electricity Amendment (System Restart Ancillary Services) Rule 2015.....	1583
11.81.1	Definitions.....	1583
11.81.2	System restart standard	1584
11.81.3	SRAS Guideline.....	1584
11.81.4	Regional Benefit Ancillary Services Procedures	1584
11.81.5	Consultation prior to the Commencement Date.....	1584
11.81.6	Existing SRAS Contract	1584
Part ZZJ	Demand management incentive scheme	1585
11.82	Rules consequential on making of the National Electricity Amendment (Demand management incentive scheme) Rule 2015.....	1585
11.82.1	Definitions.....	1585
11.82.2	AER to develop and publish the demand management incentive scheme and demand management innovation allowance mechanism	1585
Part ZZK	AEMO access to demand forecasting information	1585
11.83	Rules consequential on the making of the National Electricity Amendment (AEMO access to demand forecasting information) Rule 2015.....	1585
11.83.1	AEMO to include supporting information in NTNDP database.....	1585

Part ZZL	Compensation arrangements following application of an Administered Price Cap or Administered Floor Price.....	1586
11.84	Rules consequential on the making of the National Electricity Amendment (Compensation Arrangements following application of an Administered Price Cap and Administered Floor Price) Rule 2016.....	1586
11.84.1	Definitions.....	1586
11.84.2	Compensation Guidelines	1586
Part ZZM	Common definitions of distribution reliability measures.....	1586
11.85	Rules consequential on the making of the National Electricity Amendment (Common definitions of distribution reliability measures) Rule 2015	1586
11.85.1	Definitions.....	1586
11.85.2	Distribution reliability measures guidelines	1587
11.85.3	Amended STPIS.....	1587
Part ZZN	Expanding competition in metering and metering related services	1587
11.86	Rules consequent on making of the National Electricity Amendment (Expanding competition in metering and related services) Rule 2015.....	1587
11.86.1	Definitions.....	1587
11.86.2	References to old Chapter 7	1587
11.86.3	References to provisions of the old Chapter 7	1588
11.86.4	References to responsible person.....	1588
11.86.5	Continued operation of old Rules until the effective date	1588
11.86.6	New and amended procedures	1588
11.86.7	Metering Coordinator for type 5 or 6 metering installation from effective date	1589
11.86.8	Distribution Ring Fencing Guidelines	1592
11.86.9	[Deleted]	1592
Part ZZO	Embedded Networks.....	1592
11.87	Rules consequential on the making of the National Electricity Amendment (Embedded Networks) Rule 2015.....	1592
11.87.1	Definitions.....	1592
11.87.2	Amended Procedures and NMI Standing Data Schedule	1593
11.87.3	ENM service level procedures and guide to embedded networks and list of Embedded Network Managers.....	1593
11.87.4	Exemptions under section 13 of the National Electricity Law	1593
Part ZZP	Meter Replacement Processes.....	1594
11.88	Rules consequential on the making of the National Electricity Amendment (Meter Replacement Processes) Rule 2016.....	1594
11.88.1	Definitions.....	1594
11.88.2	Amended Procedures	1594
Part ZZQ	Energy Adequacy Assessment Projection.....	1595

11.89	Rules consequential to the National Electricity Amendment (Energy Adequacy Assessment Projection timeframes) Rule 2016.....	1595
11.89.1	Amended guideline and timetable	1595
Part ZZR	Reliability and emergency reserve trader (2016 amendments)	1595
11.90	Rules consequent on the making of the National Electricity Amendment (Extension of the Reliability and Emergency Reserve Trader) Rule 2016	1595
11.90.1	Definitions.....	1595
11.90.2	Amendments to Reliability Panel's RERT Guidelines.....	1595
11.90.3	Amendments to AEMO's RERT procedures	1595
11.90.4	Reserve contracts entered into before Schedule 2 commencement date.....	1596
Part ZZS	Updating the electricity B2B framework.....	1596
11.91	Rules consequential on the making of the National Electricity Amendment (Updating the electricity B2B framework) rule 2016.....	1596
11.91.1	Definitions.....	1596
11.91.2	B2B Procedures	1597
11.91.3	Information Exchange Committee Election Procedures and Information Exchange Committee Operating Manual.....	1597
11.91.4	The New IEC	1598
11.91.5	Amended Procedures	1599
11.91.6	B2B e-Hub Participant accreditation process	1600
11.91.7	New IEC Budget and 2016 Annual Report.....	1600
11.91.8	Cost recovery	1601
Part ZZT	Application of Offsets in the Prudential Margin Calculation.....	1601
11.92	Rules consequential on the making of the National Electricity Amendment (Application of Offsets in the Prudential Margin Calculation) Rule 2016	1601
11.92.1	Definitions.....	1601
11.92.2	Amended procedures	1601
Part ZZU	Rate of Return Guidelines Review	1602
11.93	Rules consequential on the making of the National Electricity Amendment (Rate of Return Guidelines Review) Rule 2016	1602
11.93.1	Definitions.....	1602
11.93.2	Application of current rate of return guidelines to making of a distribution determination for the subsequent regulatory control period	1603
Part ZZV	Demand Response Mechanism and Ancillary Services Unbundling.....	1604
11.94	Rules consequential on the making of the National Electricity Amendment (Demand Response Management and Ancillary Services Unbundling) rule 2016.....	1604
11.94.1	Definitions.....	1604
11.94.2	Participant fees for Market Ancillary Service Providers	1604

Part ZZW	Local Generation Network Credits	1604
11.95	Rules consequential on the making of the National Electricity Amendment (Local Generation Network Credits) Rule 2016	1604
11.95.1	Definitions.....	1604
11.95.2	System limitation template	1604
Part ZZX	Retailer-Distributor Credit Support Requirements.....	1605
11.96	Rules consequent on the making of the National Electricity Amendment (Retailer Distributor Credit Support Requirements) Rule 2017 No. 1	1605
11.96.1	Definitions.....	1605
11.96.2	Continued operation of old Chapter 6B	1605
11.96.3	Interaction with Chapter 6	1605
11.96.4	Application of new Chapter 6B	1605
Part ZZY	Emergency Frequency Control Schemes	1606
11.97	Rules consequent on the making of the National Electricity Amendment (Emergency frequency control schemes) Rule 2017	1606
11.97.1	Definitions	1606
11.97.2	Interim frequency operating standards for protected events.....	1606
11.97.3	First power system frequency risk review	1607
11.97.4	AEMO must review existing load shedding procedures.....	1607
11.97.5	Load shedding procedures	1607
Part ZZZ	Transmission Connection and Planning Arrangements	1608
11.98	Rules consequential on the making of the National Electricity Amendment (Transmission Connection and Planning Arrangements) Rule 2017.....	1608
11.98.1	Definitions.....	1608
11.98.2	Grandfathering of existing dedicated connection assets.....	1609
11.98.3	Preparatory steps for registration changes under the Amending Rule	1610
11.98.4	Participant fees for Dedicated Connection Asset Service Providers	1610
11.98.5	Existing Connection Agreements	1610
11.98.6	Connection process	1611
11.98.7	Transmission Annual Planning Report	1611
11.98.8	Preservation for adoptive jurisdictions	1611
Part ZZZA	Replacement expenditure planning arrangements	1612
11.99	Rules consequential on the making of the National Electricity Amendment (Replacement expenditure planning arrangements) Rule 2017	1612
11.99.1	Definitions.....	1612
11.99.2	Interpretation.....	1613
11.99.3	Transitional arrangements for affected DNSPs	1613
11.99.4	Amendments to RIT documentation.....	1614
11.99.5	Transitional arrangements relating to excluded projects	1614
11.99.6	Transitional arrangements relating to Victorian bushfire mitigation projects.....	1614
11.99.7	Transitional arrangements relating to review of costs thresholds.....	1615

Part ZZZB	Managing the rate of change of power system frequency	1615
11.100	Rules consequential on the making of the National Electricity Amendment (Managing the rate of change of power system frequency) Rule 2017	1615
11.100.1	Definitions.....	1615
11.100.2	Inertia sub-networks.....	1616
11.100.3	Inertia requirements methodology	1616
11.100.4	Inertia requirements	1617
11.100.5	NSCAS not to be used to meet an inertia shortfall after 1 July 2019	1617
11.100.6	Inertia network services may be used to meet an NSCAS gap declared in the NSCAS transition period.....	1618
11.100.7	Inertia network services made available before the commencement date.....	1618
Part ZZZC	Managing power system fault levels.....	1619
11.101	Rules consequential on the making of the National Electricity Amendment (Managing power system fault levels) Rule 2017.....	1619
11.101.1	Definitions.....	1619
11.101.2	System strength impact assessment guidelines.....	1620
11.101.3	System strength requirements methodology	1620
11.101.4	System strength requirements	1621
11.101.5	NSCAS not to be used to meet a fault level shortfall after 1 July 2019.....	1621
11.101.6	System strength services may be used to meet an NSCAS gap declared in the NSCAS transition period.....	1622
11.101.7	Withdrawal of a system strength-related NSCAS gap already declared.....	1622
11.101.8	System strength services made available before the commencement date	1623
Part ZZZD	Generating System Model Guidelines.....	1623
11.102	Making of Power System Model Guidelines.....	1623
Part ZZZE	Five Minute Settlement.....	1623
11.103	Rules consequential on the making of the National Electricity Amendment (Five Minute Settlement) Rule 2017.....	1623
11.103.1	Definitions.....	1623
11.103.2	Amendments to procedures.....	1624
11.103.3.	Exemption for certain metering installations	1625
11.103.4	New or replacement meters	1626
11.103.5	Metering installations exempt from metering data provision requirements.....	1626
11.103.6	Exemption from meter data storage requirements	1626
11.103.7	Default offers and bids submitted prior to the commencement date	1626
Part ZZZF	Contestability of energy services	1626
11.104	Rules consequential on the making of the National Electricity Amendment (Contestability of energy services) Rule 2017.....	1626
11.104.1	Definitions.....	1626
11.104.2	New guidelines.....	1628

11.104.3	Transitional arrangements for application of Distribution Service Classification Guidelines and service classification provisions	1628
11.104.4	Transitional arrangements for application of Asset Exemption Guidelines, exemption applications and asset exemption decisions.....	1629
11.104.5	Transitional arrangements for adjustment in value of regulatory asset base.....	1630
Part ZZZG	Declaration of lack of reserve conditions.....	1631
11.105	Making of lack of reserve declaration guidelines.....	1631
11.105.1	Definitions.....	1631
11.105.2	Making of lack of reserve declaration guidelines	1631
Part ZZZH	Implementation of demand management incentive scheme	1631
11.106	Implementation of demand management incentive scheme	1631
11.106.1	Definitions.....	1631
11.106.2	Purpose.....	1631
11.106.3	Early application of revised demand management incentive scheme	1632
Part ZZZI	Reinstatement of long notice Reliability and Emergency Reserve Trader.....	1633
11.107	Rules consequential on the making of the National Electricity Amendment (Reinstatement of long notice Reliability and Emergency Reserve Trader) Rule 2018	1633
11.107.1	Definitions.....	1633
11.107.2	New RERT guidelines	1634
11.107.3	Amendments to RERT procedures	1637
11.107.4	Reserve contracts entered into before the commencement date	1638
Part ZZZJ	Register of distributed energy resources	1638
11.108	Rules consequential on the making of the National Electricity Amendment (Register of distributed energy resources) Rule 2018.....	1638
11.108.1	Definitions.....	1638
11.108.2	AEMO to develop and publish DER register information guidelines	1638
11.108.3	NSPs to provide AEMO with existing DER generation information	1638

CHAPTER 1

1. Introduction

1.1 Preliminary

1.1.1 References to the Rules

These Rules (the *Rules*) are called the National Electricity Rules.

1.1.2 Italicised expressions

Italicised expressions in the *Rules* are defined in the glossary in Chapter 10.

1.1.3 [Deleted]

1.2 Background

These Rules are the National Electricity Rules made under the *National Electricity Law* and may be amended from time to time in accordance with the *National Electricity Law*.

1.3 Nomenclature of and references to provisions of a Chapter

1.3.1 Introduction

- (a) This rule applies to provisions inserted after 16 November 2006, and applies unless the context otherwise requires.
- (b) In this rule, "numbered" means identified by one or more numbers or one or more letters, or by a combination of one or more numbers and one or more letters.

1.3.2 Parts, Divisions and Subdivisions

- (a) Chapters may contain numbered Parts.
- (b) Parts may contain numbered Divisions.
- (c) Divisions may contain numbered Subdivisions.
- (d) The following table indicates how Parts, Divisions and Subdivisions may be referred to in the *Rules*.

Level	Provision	Internal reference in same level	External reference in preceding level
1	Chapter 1		
2	Part A	this Part	Part A

Level	Provision	Internal reference in same level	External reference in preceding level
3	Division 1	this Division	Division 1
4	Subdivision 1	this Subdivision	Subdivision 1

Note:

The numbering of the provisions in the table is by way of example.

1.3.3 Rules, clauses, paragraphs, subparagraphs and other items

- (a) Chapters, Parts, Divisions and Subdivisions of the *Rules* may contain numbered rules.
- (b) Rules may contain numbered clauses.
- (c) Rules and clauses may contain numbered paragraphs.
- (d) Paragraphs may contain numbered subparagraphs.
- (e) Subparagraphs may contain numbered items.
- (f) The following table indicates how rules, clauses, paragraphs, subparagraphs and other numbered items may be referred to in the *Rules*.

Level	Provision	Internal reference in same level	External reference in preceding level
1	Chapter, Part or Subdivision		
2	rule 1.2	this rule	rule 1.2
3	clause 1.2.3	this clause	clause 1.2.3
4	rule 1.2(a) clause 1.2.3(a)	this paragraph this paragraph	paragraph (a) paragraph (a)
5	rule 1.2(a)(1) clause 1.2.3(a)(1)	this subparagraph this subparagraph	subparagraph (1) subparagraph (1)
6	rule 1.2(a)(1)(i) clause 1.2.3(a)(1)(i)	this rule 1.2(a)(1)(i) this clause 1.2.3(a)(1)(i)	rule 1.2(a)(1)(i) clause 1.2.3(a)(1)(i)
7	rule 1.2(a)(1)(i)(A) clause	this rule 1.2(a)(1)(i)(A) this clause	rule 1.2(a)(1)(i)(A) clause 1.2.3(a)(1)(i)(A)

Level	Provision	Internal reference in same level	External reference in preceding level
	1.2.3(a)(1)(i)(A)	1.2.3(a)(1)(i)(A)	

Note:

The numbering of the provisions in the table is by way of example.

1.4 Effect of renumbering of provisions of the Rules

- (a) The renumbering of a provision of the *Rules* by an *Amending Rule* does not affect anything done or omitted under the provision before the *Amending Rule* comes into operation.
- (b) A reference (however expressed) in the *Rules* or in any other document to that provision is taken to be a reference to the provision as renumbered.
- (c) Paragraphs (a) and (b) have effect whether or not the renumbered provision is also relocated.

1.5 [Deleted]

1.6 [Deleted]

1.7 Interpretation

1.7.1 General

In the *Rules*, unless the context otherwise requires:

- (a) headings are for convenience only and do not affect the interpretation of the *Rules*;
- (b) words importing the singular include the plural and vice versa;
- (c) words importing a gender include any gender;
- (d) when italicised, other parts of speech and grammatical forms of a word or phrase defined in the *Rules* have a corresponding meaning;
- (e) an expression importing a natural person includes any company, partnership, trust, joint venture, association, corporation or other body corporate and any government agency;
- (f) a reference to any thing includes a part of that thing;
- (g) a reference to a chapter, condition, clause, schedule or part is to a chapter, condition, clause, schedule or part of the *Rules*;
- (h) a reference to any statute, regulation, proclamation, order in council, ordinances or by-laws includes all statutes, regulations, proclamations,

orders in council, ordinances and by-laws varying, consolidating, re-enacting, extending or replacing them and a reference to a statute includes all regulations, proclamations, orders in council, ordinances, by-laws and determinations issued under that statute;

- (i) a reference to a document or a provision of a document includes an amendment or supplement to, or replacement or novation of, that document or that provision of that document;
- (j) a reference to a person includes that person's executors, administrators, successors, substitutes (including, without limitation, persons taking by novation) and permitted assigns;
- (k) a period of time:
 - (1) which dates from a given *day* or the *day* of an act or event is to be calculated exclusive of that *day*; or
 - (2) which commences on a given *day* or the *day* of an act or event is to be calculated inclusive of that *day*;
- (l) an event which is required under the *Rules* to occur on or by a stipulated *day* which is not a *business day* may occur on or by the next *business day*; and
- (m) the schedules to the *Rules* form part of the *Rules*.

It is not intended that any of the following provisions of Schedule 2 to the *National Electricity Law* should apply to the *Rules*:

Clauses 2, 4, 9, 10, 11, 21, 28, 29, 30, 31AH, 35, 36, 37 and 38.

This exclusion is in addition to an exclusion that arises from other provisions of the *Rules* in which an intention is expressed, or from which an intention may be inferred, that a provision of the relevant Schedule is not to apply to the *Rules*.

1.8 Notices

1.8.1 Service of notices under the Rules

A notice is properly given under the *Rules* to a person if:

- (a) it is personally served;
- (b) a letter containing the notice is prepaid and posted to the person at an address (if any) supplied by the person to the sender for service of notices or, where the person is a *Registered Participant*, an address shown for that person in the register of *Registered Participants* maintained by AEMO;
- (c) it is sent to the person by facsimile or electronic mail to a number or reference which corresponds with the address referred to in clause 1.8.1(b); or

- (d) the person receives the notice.

1.8.2 Time of service

A notice is treated as being given to a person by the sender:

- (a) where sent by post in accordance with clause 1.8.1(b) to an address in the central business district of a capital city of Australia, on the second *business day* after the *day* on which it is posted;
- (b) where sent by post in accordance with clause 1.8.1(b) to any other address, on the third *business day* after the *day* on which it is posted;
- (c) where sent by facsimile in accordance with clause 1.8.1(c) and a complete and correct transmission report is received:
 - (1) where the notice is of the type in relation to which the addressee is obliged under the *Rules* to monitor the receipt by facsimile outside of, as well as during, business hours, on the *day* of transmission; and
 - (2) in all other cases, on the *day* of transmission if a *business day* or, if the transmission is on a *day* which is not a *business day* or is after 4.00 pm (addressee's time), at 9.00 am on the following *business day*;
- (d) where sent by electronic mail in accordance with clause 1.8.1(c):
 - (1) where the notice is of a type in relation to which the addressee is obliged under the *Rules* to monitor receipt by electronic mail outside of, as well as during, business hours, on the *day* when the notice is recorded as having been first received at the electronic mail destination; and
 - (2) in all other cases, on the *day* when the notice is recorded as having been first received at the electronic mail destination if a *business day* or, if that time is after 4.00 pm (addressee's time) or the *day* is not a *business day*, at 9.00 am on the following *business day*; or
- (e) in any other case, when the person actually receives the notice.

1.8.3 Counting of days

Where a specified period (including, without limitation, a particular number of *days*) must elapse or expire from or after the giving of a notice before an action may be taken neither the *day* on which the notice is given nor the *day* on which the action is to be taken may be counted in reckoning the period.

1.8.4 Reference to addressee

In this rule 1.8, a reference to an addressee includes a reference to an addressee's officers, agents, or employees or any person reasonably believed by the sender to be an officer, agent or employee of the addressee.

1.9 Retention of Records and Documents

Unless otherwise specified in the *Rules*, all records and documents prepared for or in connection with the *Rules* must be retained for a period of at least 7 years.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

1.10 [Deleted]

1.11 AEMO Rule Funds

- (a) *AEMO* must continue to maintain, in the books of the corporation:
 - (1) the registration and administration fund;
 - (2) the security deposit fund; and
 - (3) any other fund which the *Rules* provide will be maintained in *AEMO's* books,(each a "*Rule fund*").
- (b) *AEMO* must ensure that there is paid into each *Rule fund*:
 - (1) in the case of the registration and administration fund, all amounts of *Participant fees* and *auction expense fees* and any other amounts payable under the *auction rules* or *SRD agreements* as *AEMO* considers necessary from time to time other than those which are to be paid into another *Rule fund*;
 - (2) in the case of the security deposit fund, amounts which are received by *AEMO* under clauses 3.3.8A, 3.3.13(a)(2) and 3.3.13(a)(3);
 - (3) in the case of a fund referred to in paragraph (a)(3):
 - (i) all amounts which are received by *AEMO* in connection with carrying out its functions or powers in relation to that fund;
 - (ii) all amounts of *Participant fees* which are received or recovered by *AEMO* which relate to *AEMO's* actual or budgeted costs and expenses for carrying out its functions or powers in relation to that fund; and
 - (4) in the case of each *Rule fund*, income from investment of money in the *Rule fund*.
- (c) In respect of the security deposit fund, *AEMO* must keep records, in respect of each individual *Market Participant*, of:

- (1) security deposits made by that *Market Participant* and actual interest or other income earned on that *Market Participant*'s payments to that fund which will be recorded as credits for that *Market Participant*;
 - (2) any application, or return to that *Market Participant*, of monies in the security deposit fund in accordance with clause 3.3.13A;
 - (3) deductions for liabilities and expenses of the security deposit fund referable, or allocated, to that *Market Participant* which will be recorded as debits to that *Market Participant*; and
 - (4) the credit or debit balance for that *Market Participant*.
- (d) *AEMO* must ensure that money from each *Rule fund* is only applied in payment of:
- (1) in the case of the registration and administration fund, costs and expenses of *AEMO* carrying out its functions or powers:
 - (i) in relation to a fund referred to paragraph (a)(3) to the extent that such costs and expenses cannot be met from the money contained in that fund; or
 - (ii) other than those functions and powers referred to in subparagraph (i);
 - (2) in the case of the security deposit fund, monies owing to *AEMO* by a *Market Participant* or the return of monies to a *Market Participant* in accordance with clause 3.3.13A;
 - (3) in the case of a fund referred to in paragraph (a)(3), costs and expenses of *AEMO* carrying out its functions or powers in relation to that fund; and
 - (4) in the case of each *Rule fund*:
 - (i) other than the security deposit fund, reimbursement to a *Registered Participant* or another *Rule fund* to make any necessary adjustment for any excess amounts which are paid as *Participant fees* as a result of any of *AEMO*'s actual costs and expenses being less than the budgeted costs and expenses or as a result of the payment of any interim *Participant fees*; and
 - (ii) liabilities or expenses of the *Rule fund*.

CHAPTER 2

2. Registered Participants and Registration

2.1 Registered Participants

2.1.1 Purpose

This Chapter sets out and describes the various categories of *Registered Participants* and the registration procedures. It also sets out the fees payable by *Registered Participants*.

2.1.2 General

- (a) **[Deleted]**
- (b) **[Deleted]**
- (c) The different categories of *Registered Participants* have different obligations under the *Rules*.
- (d) Rules 2.2 to 2.7 set out the *Registered Participant* categories and requirements which a person must satisfy in order to be registered by AEMO in relation to each of those *Registered Participant* categories.
- (e) Each prospective *Registered Participant* must apply to AEMO for registration in accordance with rule 2.9.
- (e1) Rule 2.9A sets out the process to be followed in order to transfer a *Registered Participant*'s registration to another person.
- (f) Each *Registered Participant* must pay to AEMO the prescribed fees determined in accordance with the provisions of rule 2.11.

2.2 Generator

2.2.1 Registration as a Generator

- (a) Subject to clause 2.2.1(c), a person must not engage in the activity of owning, controlling or operating a *generating system* that is *connected* to a *transmission or distribution system* unless that person is registered by AEMO as a *Generator*.
- (b) **[Deleted]**
- (c) AEMO may, in accordance with guidelines issued from time to time by AEMO, exempt a person or class of persons from the requirement to register as a *Generator*, subject to such conditions as AEMO deems appropriate, where (in AEMO's opinion) an exemption is not inconsistent with the *national electricity objective*.

Note:

A person who is exempt from registration as a *Generator*, may register with AEMO as a *Small Generation Aggregator* under rule 2.3A.

- (d) Without limitation, an exemption may be given which only relieves a person or class of persons from the requirement to register as a *Generator* in relation to certain specified *generating systems* or classes of *generating systems*.
- (e) To be eligible for registration as a *Generator*, a person must:
 - (1) obtain the approval of AEMO to classify each of the *generating units* that form part of the *generating system* that the person owns, operates or controls, or from which it otherwise sources electricity, as:
 - (i) a *scheduled generating unit*;
 - (ii) a *semi-scheduled generating unit*; or
 - (iii) a *non-scheduled generating unit*;
 - (2) classify the *generating units* in accordance with AEMO's approval as referred to in subparagraph (1); and
 - (3) satisfy AEMO that each *generating system* will be capable of meeting or exceeding its *performance standards*.
- (f) Except in relation to a proposed *generating unit*, a person must also classify each of those *generating units* as either a *market generating unit* or a *non-market generating unit*.
- (f1) A *Generator* may also classify one or more of its *generating units* as an *ancillary service generating unit* where it has obtained the approval of AEMO to do so.
- (g) Nothing in clause 2.2.1(e) or (f) requires the classification of any *generating unit* which forms part of a *generating system* in respect of which an exemption under clause 2.2.1(c) applies.

2.2.2 Scheduled Generator

- (a) A *generating unit* which has a *nameplate rating* of 30 MW or greater or is part of a group of *generating units connected* at a common *connection point* with a combined *nameplate rating* of 30 MW or greater must be classified as a *scheduled generating unit* unless AEMO approves its classification as:
 - (1) a *semi-scheduled generating unit* under clause 2.2.7(b); or
 - (2) a *non-scheduled generating unit* in accordance with clause 2.2.3(b).

- (b) A person must not classify a *generating unit* as a *scheduled generating unit* unless it has obtained the approval of AEMO to do so. AEMO must approve the classification if it is satisfied that the person:
 - (1) has submitted data in accordance with schedule 3.1; and
 - (2) has adequate communications and/or telemetry to support the issuing of *dispatch instructions* and the audit of responses.
- (b1) In relation to an application under clause 2.2.2(b) to classify as a *scheduled generating unit* a *generating unit* with a *nameplate rating* of less than 30 MW, or a *generating unit* that is part of a group of *generating units* connected at a common *connection point* with a combined *nameplate rating* of less than 30 MW, AEMO may approve the classification on such terms and conditions as AEMO considers appropriate.
- (c) A person must comply with any terms and conditions imposed by AEMO as part of an approval under clause 2.2.2(b1).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) **[Deleted]**
- (e) A *Generator* is taken to be a *Scheduled Generator* only in so far as its activities relate to any *scheduled generating unit*.
- (f) A *Scheduled Generator* must operate any *scheduled generating unit* in accordance with the co-ordinated *central dispatch* process operated by AEMO under the provisions of Chapter 3.
- (g) As described in Chapter 3, a *Scheduled Generator* must notify AEMO of the availability of each *scheduled generating unit* in respect of each *trading interval*.
- (h) A *Scheduled Generator* may submit to AEMO a schedule of *dispatch offers* for each *scheduled generating unit* in respect of each *trading interval* for *dispatch* by AEMO.

2.2.3 Non-Scheduled Generator

- (a) A *generating unit* with a *nameplate rating* of less than 30 MW (not being part of a group of *generating units* described in clause 2.2.2(a)) must be classified as a *non-scheduled generating unit* unless AEMO approves its classification as:
 - (1) a *scheduled generating unit* under clause 2.2.2(b); or
 - (2) a *semi-scheduled generating unit* under clause 2.2.7(b).

- (b) A person must not classify a *generating unit* as a *non-scheduled generating unit* unless the person has obtained the approval of AEMO to do so. AEMO must approve the classification if it is satisfied that:
 - (1) the primary purpose for which the relevant *generating unit* operates is local use and the aggregate *sent out generation* at its *connection point* rarely, if ever, exceeds 30 MW; or
 - (2) the physical and technical attributes of the relevant *generating unit* are such that it is not practicable for it to participate in *central dispatch*.
- (c) If, in relation to an application under paragraph (b), in AEMO's opinion it is necessary for any reason (including *power system security*) for the relevant *Generator* to comply with some of the obligations of a *Scheduled Generator* or *Semi-Scheduled Generator* for that *generating unit*, AEMO may approve the classification on such terms and conditions as AEMO considers reasonably necessary.
- (d) A person must comply with any terms and conditions imposed by AEMO under paragraph (c).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (e) A *Generator* is taken to be a *Non-Scheduled Generator* only in so far as its activities relate to a *non-scheduled generating unit*.
- (f) Subject to clause 3.8.2(e), the *non-scheduled generating units* of a *Generator* do not participate in the co-ordinated *central dispatch* process operated by AEMO.

2.2.4 Market Generator

- (a) A *generating unit* whose *sent out generation* is not purchased in its entirety by the *Local Retailer* or by a *Customer* located at the same *connection point* must be classified as a *market generating unit*.
- (b) A *Generator* is taken to be a *Market Generator* only in so far as its activities relate to any *market generating units*.
- (c) A *Market Generator* must sell all *sent out generation* through the *spot market* and accept payments from AEMO for *sent out generation* at the *spot price* applicable at the *connection point* as determined for each *trading interval* in accordance with the provisions of Chapter 3.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) A *Market Generator* must purchase all electricity *supplied* through the *national grid* to the *Market Generator* at that *connection point* from the *spot market* and make payments to *AEMO* for such electricity supplied at the *connection point* as determined for each *trading interval* in accordance with the provisions of Chapter 3.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

2.2.5 Non-Market Generator

- (a) A *generating unit* whose *sent out generation* is purchased in its entirety by the *Local Retailer* or by a *Customer* located at the same *connection point* must be classified as a *non-market generating unit*.
- (b) A *Generator* is taken to be a *Non-Market Generator* only in so far as its activities relate to any *non-market generating unit*.
- (c) A *Non-Market Generator* is not entitled to receive payment from *AEMO* for *sent out generation* except for any compensation that may be payable to it as a *Directed Participant* or *Affected Participant*.

2.2.6 Ancillary services generating unit

- (a) If the *Market Generator* in respect of a *generating unit* wishes to use that *generating unit* to provide *market ancillary services* in accordance with Chapter 3, then the *Market Generator* must apply to *AEMO* for approval to classify the *generating unit* as an *ancillary service generating unit*.
- (b) An application under clause 2.2.6(a) must be in the form prescribed by *AEMO* and specify the *market ancillary services* which the *Market Generator* wishes to provide using the relevant *generating unit*.
- (c) *AEMO* must, within 5 *business days* of receiving an application under clause 2.2.6(a), advise the applicant of any further information or clarification which is required in support of its application if, in *AEMO*'s reasonable opinion, the application:
 - (1) is incomplete; or
 - (2) contains information upon which *AEMO* requires clarification.
- (d) If the further information or clarification required pursuant to clause 2.2.6(c) is not provided to *AEMO*'s satisfaction within 15 *business days* of the request, then the *Market Generator* will be deemed to have withdrawn the application.
- (e) If *AEMO* is reasonably satisfied that:

- (1) the *generating unit* is able to be used to provide the *market ancillary services* referred to in the application in accordance with the *market ancillary service specification*; and
- (2) the *Market Generator* has adequate communication and/or telemetry to support the issuing of *dispatch instructions* and the audit of responses,

then *AEMO* must approve the classification in respect of the particular *market ancillary services*.

- (f) If *AEMO* approves the classification of a *generating unit* as an *ancillary service generating unit*, then *AEMO* may impose on the relevant *Market Generator* such terms and conditions as *AEMO* considers necessary to ensure that the provisions of the *Rules* applying to *market ancillary services* can be met.

- (g) A *Market Generator*:

- (1) must comply with any terms and conditions imposed by *AEMO* under clause 2.2.6(f);

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (2) must ensure that the *market ancillary services* provided using the relevant *ancillary services generating unit* are provided in accordance with the co-ordinated *central dispatch* process operated by *AEMO* under the provisions of Chapter 3 and in accordance with the *market ancillary service specification*;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (3) may submit to *AEMO* *market ancillary service offers* in respect of the *ancillary service generating unit* in accordance with the provisions of Chapter 3; and
- (4) if the *Market Generator* submits a *market ancillary service offer* in respect of the relevant *ancillary service generating unit*, must comply with the *dispatch instructions* from *AEMO* in accordance with the *Rules*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (h) A *Market Generator* with an *ancillary service generating unit* must only sell the *market ancillary services* produced using that *ancillary service generating unit* through the *spot market* in accordance with the provisions of Chapter 3.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (i) A *Market Generator* is not entitled to receive payment from *AEMO* for *market ancillary services* except where those *market ancillary services* are produced using an *ancillary service generating unit* in accordance with Chapter 3 or pursuant to a *direction* or *clause 4.8.9 instruction*.

2.2.7 Semi-Scheduled Generator

- (a) A *generating unit* which has a *nameplate rating* of 30 MW or greater or is part of a group of *generating units connected* at a common *connection point* with a combined *nameplate rating* of 30 MW or greater, must be classified as a *semi-scheduled generating unit* where the output of the *generating unit* is *intermittent* unless *AEMO* approves its classification as:
 - (1) a *scheduled generating unit* under clause 2.2.2(b); or
 - (2) a *non-scheduled generating unit* under clause 2.2.3(b).
- (b) A person must not classify a *generating unit* as a *semi-scheduled generating unit* unless the person has obtained the approval of *AEMO* to do so.
- (c) *AEMO* must approve a request for classification as a *semi-scheduled generating unit* if it is satisfied that the output of the *generating unit* is *intermittent* and that the person:
 - (1) has submitted data in accordance with schedule 3.1;
 - (2) has submitted an *energy conversion model* which contains the information described in the guidelines referred to in paragraph (d); and
 - (3) has adequate communications and telemetry to support the issuing of *dispatch instructions* and the audit of responses.
- (d) *AEMO* must develop and *publish* guidelines in consultation with *Semi-Scheduled Generators* and such other person that *AEMO*, acting reasonably, considers appropriate setting out the information to be contained in *energy conversion models*. Any amendments to the guidelines are also to be made in consultation with *Semi-Scheduled Generators* and such other person that *AEMO*, acting reasonably, considers appropriate.
- (e) In relation to an application under paragraph (b) to classify a *generating unit* with a *nameplate rating* of less than 30 MW, or a *generating unit* that is part

of a group of *generating units connected* at a common *connection point* with a combined *nameplate rating* of less than 30 MW, as a *semi-scheduled generating unit*, AEMO may approve the classification on such terms and conditions as AEMO considers appropriate.

- (f) A person must comply with any terms and conditions imposed by AEMO as part of an approval under paragraph (e).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (g) A *Generator* is taken to be a *Semi-Scheduled Generator* only in so far as its activities relate to a *semi-scheduled generating unit*.
- (h) A *Semi-Scheduled Generator* must operate a *semi-scheduled generating unit* in accordance with the co-ordinated *central dispatch* process operated by AEMO under the provisions of Chapter 3.
- (i) At the time that a person makes a request for AEMO to classify a *semi-scheduled generating unit* under paragraph (c), that person may request to register two or more *generating units* as one *semi-scheduled generating unit* when the *generating units*:
 - (1) are connected at a single site with:
 - (i) the same *intra-regional loss factor*; or
 - (ii) if two *intra-regional loss factors* are determined for the site under clause 3.6.2(b)(2), the same two *intra-regional loss factors*;
 - (2) each have a capacity of not more than 6MW; and
 - (3) have similar *energy conversion models*,

and AEMO must approve the request unless, in AEMO's opinion, registering the relevant *generating units* as one *semi-scheduled generating unit* could adversely impact on *power system security*.

- (j) Notwithstanding that one or more of the conditions set out in paragraph (i) may not have been fulfilled by the *Semi-Scheduled Generator*, AEMO may approve a request received under paragraph (i) if registration as a single *semi-scheduled generating unit* would not materially distort *central dispatch* or adversely affect *power system security*.
- (k) Where AEMO approves a request to register two or more *generating units* as one *semi-scheduled generating unit* in accordance with paragraph (i) or (j), the *generating units* will be taken to be one *semi-scheduled generating unit* for the purposes of the *Rules*.

- (l) For the avoidance of doubt, a *Semi-Scheduled Generator* which operates two or more *semi-scheduled generating units* that could have been registered as a single *semi-scheduled generating unit* under paragraph (i) but were not so registered, may subsequently aggregate those *generating units* in accordance with clause 3.8.3.

2.3 Customer

2.3.1 Registration as a Customer

- (a) A *Customer* is a person so registered by AEMO and who engages in the activity of purchasing electricity *supplied* through a *transmission or distribution system* to a *connection point*.
- (b) To be eligible for registration as a *Customer*, a person must satisfy AEMO (acting reasonably) that:
 - (1) the person intends to classify within a reasonable period of time its electricity purchased at one or more *connection points* as a *first-tier load*, a *second-tier load* or a *market load* or an *intending load*; or
 - (2) registration is for the purpose of acting as a *RoLR*.
- (c) A person must not engage in the activity of purchasing electricity directly from the *market* at any *connection point*, unless that person is registered by AEMO as a *Market Participant* and that *connection point* is classified as one of that person's *market connection points*.
- (d) A person who engages in the activity of purchasing electricity at any *connection point* otherwise than directly from the *market* may, but is not required to, apply for registration by AEMO as a *First-Tier Customer*, a *Second-Tier Customer* or an *Intending Participant* provided that person is entitled to classify its electricity purchased at that *connection point* based on the threshold criteria set out in clause 2.3.1(e).
- (e) A person may not classify its electricity purchased at any *connection point* unless the person satisfies the requirements of the *participating jurisdiction* in which the *connection point* is situated so that (subject to compliance with the *Rules*) the person is permitted to purchase electricity in the *spot market* in relation to that *connection point*.
- (f) A *Market Customer* may classify one or more of its *market loads* as an *ancillary service load* in accordance with clause 2.3.5.

2.3.2 First-Tier Customer

- (a) If any electricity *supplied* through the *national grid* is purchased by a person at a *connection point* directly and in its entirety from the *Local Retailer*, the *load* at that *connection point* may be classified by that person as a *first-tier load*.

- (b) A *Customer* is taken to be a *First-Tier Customer* only in so far as its activities relate to any *first-tier load*.
- (c) A *First-Tier Customer* must not participate in the *spot market* for any *first-tier load*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

2.3.3 Second-Tier Customer

- (a) Subject to clause 2.3.3(d), if any electricity *supplied* through the *national grid* is purchased by a person at a *connection point* other than directly from the *Local Retailer* or the *spot market* all electricity purchased by that person at that *connection point* may be classified by that person as a *second-tier load*.
- (b) A *Customer* is taken to be a *Second-Tier Customer* only in so far as its activities relate to any *second-tier load*.
- (c) A *Second-Tier Customer* must not participate in the *spot market* for any of its *second-tier loads*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) A person's purchase of electricity at a *connection point* may only be classified as a *second-tier load* while a *Market Customer*, from whom the person directly or indirectly purchases the electricity, classifies the *connection point* as one of its *market loads*.

2.3.4 Market Customer

- (a) If electricity, *supplied* through the *national grid* to any person *connected* at a *connection point*, is purchased other than from the *Local Retailer* that *load* at the *connection point* may be classified by that person or, with the consent of that person, by some other person as a *market load*.
- (b) A *Customer* is taken to be a *Market Customer* only in so far as its activities relate to any *market load* and only while it is also registered with AEMO as a *Market Customer*.
- (c) A *Market Customer* must purchase all electricity *supplied* at that *connection point* from the *spot market* and make payments to AEMO for electricity supplied at the *connection point* as determined for each *trading interval* in accordance with provisions of Chapter 3.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) A *Market Customer* may request *AEMO* to classify any of its *market loads* as a *scheduled load*.
- (e) *AEMO* must classify a *market load* as a *scheduled load* if it is satisfied that the *Market Customer*:
 - (1) has submitted data in accordance with schedule 3.1;
 - (2) has adequate communications and/or telemetry to support the issuing of *dispatch instructions* and the audit of responses; and
 - (3) has requested that the *load* be so classified and has not withdrawn that request.
- (f) A *Market Customer* may submit *dispatch bids* in respect of *scheduled loads* in accordance with the provisions of Chapter 3.
- (g) A *Market Customer* who submits *dispatch bids* for *scheduled loads* and makes its *scheduled loads* available for *central dispatch* must comply with the *dispatch instructions* from *AEMO* in accordance with the *Rules*.
- (h) A *Customer* who is also a *Local Retailer* must classify any *connection point* which *connects* its *local area* to another part of the *power system* as a *market load*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

2.3.5 Ancillary services load

- (a) If a *Market Ancillary Service Provider* in respect of a *load*, or the *Market Customer* in respect of a *market load*, wishes to use that *load* or *market load* to provide *market ancillary services* in accordance with Chapter 3, then the *Market Ancillary Service Provider* or *Market Customer* (as the case may be) must apply to *AEMO* for approval to classify the *load* or *market load* as an *ancillary service load*.
- (b) An application under paragraph (a) must be in the form prescribed by *AEMO* and:
 - (1) specify the *market ancillary services* which the *Market Ancillary Service Provider* in respect of a *load* or *Market Customer* in respect of a *market load* (as the case may be) wishes to provide using the relevant *load* or *market load*; and

- (2) in the case of an application made by a *Market Ancillary Service Provider*, not be in respect of a *market load* that is a *scheduled load*.
- (c) *AEMO* must, within 5 *business days* of receiving an application under paragraph (a), advise the applicant of any further information or clarification which is required in support of its application if, in *AEMO*'s reasonable opinion, the application:
 - (1) is incomplete; or
 - (2) contains information upon which *AEMO* requires classification.
- (d) If the further information or clarification required pursuant to paragraph (c) is not provided to *AEMO*'s satisfaction within 15 *business days* of the request, then the *Market Ancillary Service Provider* or *Market Customer* (as applicable) will be deemed to have withdrawn the application.
- (e) If *AEMO* is reasonably satisfied that:
 - (1) the *load* is able to be used to provide the *market ancillary services* referred to in the application in accordance with the *market ancillary service specification*;
 - (1A) the *Market Ancillary Service Provider* or the *Market Customer* (as the case may be) has an arrangement with the *retail customer* at the relevant *connection point* for the supply of *market ancillary services*; and
 - (2) the *Market Ancillary Service Provider* or the *Market Customer* (as the case may be) has adequate communications and/or telemetry to support the issuing of *dispatch instructions* and the audit of responses,then *AEMO* must approve the classification in respect of the particular *market ancillary services*.
- (f) If *AEMO* approves the classification of a *load* as an *ancillary service load*, then *AEMO* may impose on the relevant *Market Ancillary Service Provider* or *Market Customer* (as the case may be) such terms and conditions as *AEMO* considers necessary to ensure that the provisions of the *Rules* applying to *market ancillary services* can be met.
- (g) A *Market Ancillary Service Provider* and *Market Customer* (as applicable):
 - (1) must comply with any terms and conditions imposed by *AEMO* under paragraph (f);

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (2) must ensure that the *market ancillary services* provided using the relevant *ancillary services load* are provided in accordance with the co-ordinated *central dispatch* process operated by AEMO under the provisions of Chapter 3 and in accordance with the *market ancillary service specification*;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (3) may submit to AEMO *market ancillary service offers* in respect of the *ancillary service load* in accordance with the provision of Chapter 3; and
- (4) if the *Market Ancillary Service Provider* or *Market Customer* (as applicable) submits a *market ancillary service offer* in respect of the relevant *ancillary service load*, must comply with the *dispatch instructions* from AEMO in accordance with the *Rules*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (h) A *Market Ancillary Service Provider* or *Market Customer* (as applicable) with an *ancillary service load* must only sell the *market ancillary services* produced using that *ancillary service load* through the *spot market* in accordance with the provisions of Chapter 3.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (i) A *Market Ancillary Service Provider* or *Market Customer* (as applicable) is not entitled to receive payment from AEMO for *market ancillary services* except where those *market ancillary services* are produced using an *ancillary service load* in accordance with Chapter 3 or pursuant to a *direction* or *clause 4.8.9 instruction*.
- (j) A *Market Ancillary Service Provider* and *Market Customer* (as applicable) must immediately notify AEMO if a *load* it has classified as an *ancillary service load* ceases to meet the requirements for classification under this clause 2.3.5.

2.3A Small Generation Aggregator

2.3A.1 Registration

- (a) A person who intends to supply electricity from one or more *small generating units* to a *transmission or distribution system* may, upon application for registration by that person in accordance with rule 2.9, be registered by *AEMO* as a *Small Generation Aggregator*.
- (b) To be eligible for registration as a *Small Generation Aggregator*, a person must satisfy *AEMO* that the person intends to classify, within a reasonable amount of time, one or more *small generating units* each as a *market generating unit*, with each *market generating unit* having a separate *connection point*.
- (c) A person must not engage in the activity of selling electricity directly to the *market* at any *connection point*, unless that person is registered by *AEMO* as a *Market Participant* and that *connection point* is classified as one of that person's *market connection points*.
- (d) A person must not classify a *small generating unit* as a *market generating unit* for electricity supplied from any *connection point* unless the person satisfies the requirements of the *participating jurisdiction* in which the *connection point* is situated so that (subject to compliance with the *Rules*) the person is permitted to supply electricity in the *spot market* in relation to that *connection point*.
- (e) A *Market Small Generation Aggregator* must classify each *small generating unit* from which it proposes to supply electricity as a *market generating unit*, with each *market generating unit* having a separate *connection point*.
- (f) A *Market Small Generation Aggregator's* activities only relate to *small generating units* it has classified as *market generating units*, and only while it is also registered with *AEMO* as a *Small Generation Aggregator*.
- (g) A *Market Small Generation Aggregator* must sell all *sent out generation* through the *spot market* and accept payments from *AEMO* for all *sent out generation* at the *spot price* applicable at the *connection point* for which it is *financially responsible* as determined for each *trading interval* in accordance with the provisions of Chapter 3.
- (h) A *Market Small Generation Aggregator* must purchase all electricity *supplied* through the *national grid* to the *Market Small Generation Aggregator* at that *connection point* from the *spot market* and make payments to *AEMO* for such electricity *supplied* at the *connection point* for which it is *financially responsible* as determined for each *trading interval* in accordance with the provisions of Chapter 3.

2.3AA Market Ancillary Service Provider

2.3AA.1 Registration

- (a) A person must not engage in the activity of offering and providing *market ancillary services* in accordance with Chapter 3 as a *Market Ancillary Service Provider* unless that person is registered by AEMO as a *Market Ancillary Service Provider*.
- (b) To be eligible for registration as a *Market Ancillary Service Provider*, a person must:
 - (1) obtain the approval of AEMO to classify *load connected* to a *transmission or distribution system* that it wishes to use to provide *market ancillary service* by:
 - (i) identifying units of *load* under its ownership, operation or control;
 - (ii) demonstrating how *load* identified in (i) are under its ownership, operation or control; and
 - (iii) demonstrating that the *load* identified in (i) has the required equipment to be used to provide *market ancillary service*;
 - (2) satisfy AEMO that each *load* referred to in subparagraph (1) will be capable of meeting or exceeding the relevant *performance standards* and specifications to AEMO's satisfaction.
- (c) A *Market Ancillary Service Provider* may classify the *load* referred to in subparagraph (b)(1) as an *ancillary service load* in accordance with clause 2.3.5 where it has obtained the approval of AEMO to do so.
- (d) A *Market Ancillary Service Provider's* activities only relate to *loads* it has classified (in its capacity as a *Market Ancillary Service Provider*) as *ancillary service loads*, and only while it is also registered with AEMO as a *Market Ancillary Service Provider*.

2.4 Market Participant

2.4.1 Registration as a category of Market Participant

- (a) A *Market Participant* is a person registered by AEMO as any one or more of the following categories:
 - (1) *Market Customer*;
 - (1A) *Market Small Generation Aggregator*;
 - (1B) *Market Ancillary Service Provider*;
 - (2) *Market Generator*;

- (3) *Market Network Service Provider.*
- (b) A *Market Participant* may only participate in the *market* in the category in which it has been registered.
- (c) A *Market Participant* may only participate in any of the *markets* or trading activities conducted by *AEMO* if that *Market Participant* satisfies the relevant *prudential requirements* set out in Chapter 3 applicable to the relevant trading activity.

2.4.2 Eligibility

To be eligible to be registered as any category of *Market Participant*, a person must:

- (a) satisfy *AEMO* that it is and will be able to satisfy the *prudential requirements* as set out in rule 3.3 applicable to all *Market Participants* and those applicable to the relevant category of *Market Participant* in which that person wishes to participate in the *market*;
- (b) satisfy *AEMO* that it meets any relevant requirements imposed under relevant *jurisdictional electricity legislation*;
- (c) satisfy *AEMO* that it is also registered:
 - (1) as a *Generator*, for registration as a *Market Generator*;
 - (2) as a *Customer*, for registration as a *Market Customer*;
 - (2A) as a *Small Generation Aggregator*, for registration as a *Market Small Generation Aggregator*; or
 - (3) as a *Network Service Provider*, for registration as a *Market Network Service Provider*;
- (d) satisfy *AEMO* that it is complying and will comply with other relevant obligations set out in the *Rules*; and
- (e) pay the prescribed fees determined in accordance with rule 2.11.

2.4A Metering Coordinator

2.4A.1 Registration as a Metering Coordinator

- (a) A *Metering Coordinator* is a person so registered by *AEMO* who engages in the coordination and provision of *metering* services at a *connection point*.
- (b) *AEMO* may exempt a *Transmission Network Service Provider* from satisfying one or more registration requirements when registering as a *Metering Coordinator* for *transmission network connection points* on its *transmission network*, subject to such conditions as *AEMO* deems

appropriate, where (in *AEMO's* reasonable opinion) the exemption is not inconsistent with the *national electricity objective*.

- (c) Subject to clause 2.4A.2(b), *AEMO* must not register a *Market Customer* as a *Metering Coordinator*.
- (d) A person who is registered with *AEMO* as a *Metering Coordinator* is:
 - (1) except as specified in subparagraph (2), a *Registered Participant* for the purposes of the *Rules*; and
 - (2) not a *Registered Participant* for the purposes of Part A of Chapter 5 of the *Rules*, unless the person is also registered in another category of *Registered Participant*.

2.4A.2 Eligibility

- (a) To be eligible for registration as a *Metering Coordinator*, a person must:
 - (1) subject to paragraph (b), not be a *Market Customer*;
 - (2) satisfy *AEMO* that it is complying with and will comply with the *Rules* and the procedures authorised under the *Rules*;
 - (3) in respect of a *Metering Coordinator* who is appointed, or is proposed to be appointed, as *Metering Coordinator* at a *small customer metering installation*, have appropriate processes in place to determine that a person seeking access to a service listed in the *minimum services specification* is an *access party* in respect of that service;
 - (4) subject to paragraph (c), ensure that there is an appropriate security control management strategy and associated infrastructure and communications systems for the purposes of preventing unauthorised local access or remote access to *metering installations*, services provided by *metering installations* and *energy data* held in *metering installations*;
 - (5) have insurance as considered appropriate by *AEMO*; and
 - (6) pay the prescribed fees determined in accordance with rule 2.11.
- (b) Clause 2.4A.1(c) and subparagraph (a)(1) do not apply to:
 - (1) a person who is only appointed, or is proposed to be only appointed, as *Metering Coordinator* in respect of one or more *connection points* or proposed *connection points* on a *transmission network*; or
 - (2) a *Generator* who is only appointed, or is proposed to be only appointed, as *Metering Coordinator* in respect of one or more *connection points* or proposed *connection points* that *connect* a *Generator's generating unit* to a *distribution network*.

- (c) Subparagraph (a)(4) does not apply to a *Generator* who is only appointed, or is proposed to be only appointed, as *Metering Coordinator* in respect of one or more *connection points* or proposed *connection points* that connect a *Generator's generating unit* to a *distribution network*.

2.5 Network Service Provider

2.5.1 Registration as a Network Service Provider

- (a) Subject to clause 2.5.1(d), a person must not engage in the activity of owning, controlling or operating a *transmission or distribution system* unless that person is registered by *AEMO* as a *Network Service Provider*.
- (b) **[Deleted]**
- (c) **[Deleted]**
- (d) The *AER* may, in accordance with the guidelines issued from time to time by the *AER*, exempt any person or class of persons who is or are required to register as a *Network Service Provider* from:
 - (1) the requirement to register as a *Network Service Provider*; or
 - (2) the operation of Chapter 5,where (in the *AER's* opinion) an exemption is not inconsistent with the *national electricity objective*.
- (d1) An exemption granted by the *AER* under paragraph (d):
 - (1) is, if the exemption relates to a person who owns, controls or operates an *embedded network*, deemed to be subject to the *ENM conditions* unless:
 - (i) the *embedded network* the subject of the exemption is located in a *participating jurisdiction* in which persons *connected*, or proposed to be *connected*, to the *embedded network* are not afforded the right to a choice of *retailer*; or
 - (ii) the *AER* has made a determination under paragraph (d2); and
 - (2) may be subject to such other conditions as the *AER* deems appropriate.
- (d2) If the *AER* considers that the likely costs of complying with *ENM conditions* outweigh the likely benefits to persons *connected*, or proposed to be *connected*, to the *embedded network*, the *AER* may, when granting an exemption under paragraph (d), determine to exempt that person or class of persons from the requirement to comply with the *ENM conditions* until such time as an *ENM conditions trigger* occurs.
- (d3) An exemption granted by the *AER* under paragraph (d) is, if the exemption relates to a person who owns, controls or operates a *large dedicated*

connection asset, deemed to be subject to the condition that the person must comply with clause 5.2A.6(c), clause 5.2A.8 and rule 5.5, as if that person were a *Dedicated Connection Asset Service Provider*.

- (d4) A person granted an exemption under paragraph (d3) must comply with the deemed conditions and any other conditions imposed by the *AER* for that exemption.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (e) The *AER* must develop and issue guidelines for the exemptions described in clause 2.5.1(d) pursuant to the *Rules consultation procedures* and in accordance with those procedures consult with *Registered Participants* and authorities responsible for administering the *jurisdictional electricity legislation*.
- (e1) Without limitation, an exemption may be given which only relates to certain specified *transmission or distribution systems* or classes of *transmission or distribution systems*.
- (f) Prior to granting any exemption under clause 2.5.1(d), the *AER* must consult with the authorities responsible for administering the *jurisdictional electricity legislation* in the *participating jurisdictions* in which any *transmission systems* or *distribution systems* owned, operated or controlled by persons or class of persons under exemption consideration are located.
- (g) Without limitation, an exemption may be given which only relieves a person or class of persons from either or both of the matters described in clause 2.5.1(d)(1) or (2) in relation to certain specified *transmission or distribution systems* or classes of *transmission or distribution systems*.

2.5.1A Dedicated Connection Asset Service Provider

- (a) This clause 2.5.1A has no application to the *declared transmission system* of an *adoptive jurisdiction*.
- (b) A *Transmission Network Service Provider* must classify any parts of its *transmission system* that are *dedicated connection assets* into *large dedicated connection assets* and *small dedicated connection assets*.

Note

A *third party DCA* is defined for the purposes of Chapter 2 to be a *transmission system*.

- (c) A *Transmission Network Service Provider* wishing to classify a *dedicated connection asset* must apply to do so in its application under rule 2.9 or separately by submitting a notice to *AEMO* in the form prescribed for this purpose by *AEMO*. The *Transmission Network Service Provider* must provide sufficient evidence to satisfy *AEMO* that the *dedicated connection*

asset is appropriately classified as a *large dedicated connection asset* or *small dedicated connection asset* (as applicable).

- (d) If AEMO receives an application for classification under paragraph (d), it may approve or reject the application. AEMO must approve the classification of a *dedicated connection asset* if it is satisfied, based on the evidence that it is provided by the *Transmission Network Service Provider*, that the part of the *transmission system* is a *large dedicated connection asset* or *small dedicated connection asset* (as applicable).
- (e) Nothing in paragraph (b) requires the classification of any *dedicated connection asset* which forms part of a *transmission system* in respect of which an exemption under paragraph 2.5.1(d) applies.
- (f) A *Dedicated Connection Asset Service Provider* is:
 - (1) only required to comply with a rule that is expressed to apply to a *Network Service Provider* or a *Transmission Network Service Provider* in those capacities where the rule expressly provides that it applies to a *Dedicated Connection Asset Service Provider*; and
 - (2) required to comply with all rules which are expressed to apply to a *Registered Participant*.
- (g) A *Transmission Network Service Provider* is taken to be a *Dedicated Connection Asset Service Provider* only in so far as its activities relate to any of its *dedicated connection assets*.

2.5.2 Market Network Service

- (a) A *Network Service Provider* may classify a *network service* as a *market network service* if and only if the following conditions are satisfied and continue to be satisfied:
 - (1) the relevant *network service* is to be provided by *network elements* which comprise a *two-terminal link* and do not provide any *transmission service* which is subject to a *revenue determination* or any *direct control service*;
 - (2) the *Network Service Provider* is registered under clause 2.5.1 in respect of the *network elements* which provide the relevant *market network service*;
 - (3) the relevant *network service*:
 - (A) has not ever been a *transmission service* to which a *transmission determination* has applied or a *direct control service*; or
 - (B) is ineligible to be such a service;
 - (4) the *connection points* of the relevant *two-terminal link* are assigned to different *regional reference nodes*; and

- (5) the relevant *two-terminal link* through which the *network service* is provided:
 - (A) does not form part of a *network loop*; or
 - (B) is an *independently controllable two-terminal link*,
and has a registered *power transfer capability* of at least 30 MW.
- (b) A *market network service* is not a prescribed transmission service or a *direct control service* and a *Network Service Provider* is not entitled to impose charges for a *market network service* under Chapter 6 or Chapter 6A.
- (c) If an existing *network service* ceases to be classified as a *market network service*, the *AER* may at its discretion determine the service to be a *prescribed transmission service* or a *direct control service*. In that case, the *AER* may make consequential changes to the relevant transmission determination or distribution determination (as the case requires) to accommodate the service.
- (d) A *Network Service Provider* is taken to be a *Market Network Service Provider* only in so far as its activities relate to the provision of *market network services*.
- (e) For the avoidance of doubt, a *Registered Participant* may apply to the *AEMC* for a *participant derogation* from the conditions specified in clause 2.5.2(a).

2.5.3 Scheduled Network Service

- (a) All *market network services* must be classified as *scheduled network services*.
- (b) A *network service* must not be classified as a *scheduled network service* unless it is also a *market network service*.
- (c) A *Network Service Provider* is taken to be a *Scheduled Network Service Provider* only in so far as its activities relate to the provision of *scheduled network services*.
- (d) *AEMO* may impose on a *Scheduled Network Service Provider* such terms and conditions as *AEMO* considers necessary to ensure that the provisions of the *Rules* applying to *scheduled network services* can be met.
- (e) A *Scheduled Network Service Provider*:
 - (1) must comply with any terms and conditions imposed by *AEMO* under clause 2.5.3(d);

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (2) must ensure that the *scheduled network services* are provided in accordance with the co-ordinated *central dispatch* process operated by *AEMO* under the provisions of Chapter 3;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (3) must ensure that *AEMO* is notified of the availability of the *scheduled network services* in accordance with the provisions of Chapter 3; and

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (4) must submit to *AEMO* a schedule of *dispatch offers* for the *scheduled network services* in accordance with the provisions of Chapter 3.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

2.5A Trader

- (a) A *Trader* is a person so registered by *AEMO* in order to participate in *auctions* under rule 3.18.
- (b) A person who is registered by *AEMO* as a *Trader* is:
 - (1) a *Registered Participant* for the purposes of the *National Electricity Law* and rules 2.9, 2.10, 2.11, 3.18, 8.2, 8.9 and subparagraph (3), and clause 3.13.5A;
 - (2) is to be treated as a *Market Participant* for the purposes of clause 3.3.1 and rule 3.15 (as applied and modified by clause 3.18.4) provided that a person who is registered by *AEMO* as a *Trader* is not to be regarded as a *Market Participant* for the purposes of clauses 3.3.1(a) and 3.15.1(b); and
 - (3) entitled to receive any information which *AEMO* is required to *publish* or otherwise make available to *Registered Participants* (other than *confidential information* in respect of one or more other *Registered Participants*),

but is not otherwise a *Registered Participant* for the purposes of the *Rules* unless they are also registered in another category of *Registered Participant*.

- (c) To be eligible for registration as a *Trader*, a person must:
- (1) have an office in Australia to which all communications and notices may be addressed and at which a representative of the person is present at all times during business hours;
 - (2) where the person is not resident in, or does not have a permanent establishment in, Australia, appoint a person (an **agent**) who is:
 - (i) a natural person or company;
 - (ii) resident in Australia; and
 - (iii) authorised to accept service of process and notices on behalf of that person,and provide *AEMO* with a certified copy of the instrument, executed by the agent, under which the agent is so appointed and which specifies the agent's address;
 - (3) be a "wholesale client", as that term is defined in section 761G(4) of the *Corporations Act 2001* of the Commonwealth; and
 - (4) enter into an *auction participation agreement* and, where the person is required to appoint an agent for the purposes of rule 2.5A(c)(2), the person must ensure that the agent is a party to the *auction participation agreement*.

2.5B Reallocator

- (a) A *Reallocator* is a person so registered by *AEMO* in order to participate in *reallocation transactions* under clause 3.15.11.
- (b) A person who is registered with *AEMO* as a *Reallocator* is:
- (1) a *Registered Participant* for the purposes of rules 2.5B(b)(3), 2.9, 2.10, 2.11, 8.2 and 8.9;
 - (2) taken to be a *Market Participant* for the purposes of rules 3.3 and 3.15 but is not regarded as a *Market Participant* for the purposes of clauses 3.3.2(a) and 3.15.1(b); and
 - (3) entitled to receive any information *AEMO* is required to *publish* or otherwise make available to *Registered Participants* (other than *confidential information* in respect of other *Registered Participants*),

but is not otherwise a *Registered Participant* or a *Market Participant* for the purposes of the *Rules* unless the person is also registered in another category of *Registered Participant* or *Market Participant*.

- (c) To be eligible for registration as a *Reallocator*, a person must be a “wholesale client”, as that term is defined in section 761G(4) of the *Corporations Act 2001* of the Commonwealth.

2.6 Special Participant

- (a) A *Special Participant* is a person who is either of the following:
 - (1) *System Operator*: - an agent engaged, or a delegate appointed, by AEMO under clause 4.3.3 to carry out some or all of AEMO’s rights, functions and obligations under Chapter 4.
 - (2) *Distribution System Operator*: - a person who is responsible, under the *Rules* or otherwise, for controlling or operating any portion of a *distribution system* (including being responsible for directing its operations during *power system* emergencies).
- (b) A person must be registered by AEMO in this category to perform these functions.

2.7 Intention to Commence Activities or Functions

- (a) Any person intending to act in any *Registered Participant* category may, on application for registration by that person in accordance with rule 2.9, be registered by AEMO as an *Intending Participant* if that person can reasonably satisfy AEMO that it intends to carry out an activity in respect of which it must or may be registered as a *Registered Participant*.
- (b) AEMO may from time to time require a person registered by AEMO as an *Intending Participant* to satisfy AEMO that it continues to meet the criteria for registration in rule 2.7(a). If the *Intending Participant* is unable to satisfy AEMO that it continues to meet those criteria then it will cease to be registered as an *Intending Participant* on the date specified by AEMO by written notice to the *Intending Participant* concerned.
- (c) An *Intending Participant* is taken to be an *Intending Participant* only in so far as its activities relate to its intention to commence an activity in respect of which it must or may be registered as a *Registered Participant*.
- (d) As a *Registered Participant*, an *Intending Participant* may exercise such rights and is bound by such obligations under the *Rules* as are specified by AEMO (on the basis of whether the *Intending Participant* intends to become a *Customer*, *Generator*, *Network Service Provider* or *Special Participant*) and approved by the AEMC.

2.8 Registered Participant Rights and Obligations

2.8.1 Rights and obligations

- (a) A *Registered Participant* must not act in any one of the categories listed in rules 2.2 to 2.7 unless the *Registered Participant* is registered by *AEMO* in that category in accordance with the requirements of the *Rules*.
- (a1) A *Registered Participant* must comply with the provisions of the *Rules* applicable to that *Registered Participant*.
- (b) A *Registered Participant* may act in more than one of the categories described in rules 2.2 to 2.7 provided that the *Registered Participant* is registered by *AEMO* in relation to each of the relevant *Registered Participant* categories.

2.9 Application to be Registered as a Registered Participant

2.9.1 Applications for Registration

- (a) Applications to be registered in any category of *Registered Participant* must be submitted to *AEMO* in the form prescribed by *AEMO*.
- (b) *AEMO* must, within 5 *business days* of receiving an application, advise the applicant of any further information or clarification which is required in support of its application if, in *AEMO*'s reasonable opinion, the application:
 - (1) is incomplete; or
 - (2) contains information upon which *AEMO* requires clarification.
- (c) If the further information or clarification required pursuant to clause 2.9.1(b) is not provided to *AEMO*'s satisfaction within 15 *business days* of the request, the person will be deemed to have withdrawn the application.

2.9.2 Registration as a Registered Participant

- (a) In this clause 2.9.2:
receiving date means the later date of *AEMO* receiving:
 - (1) an application for registration referred to in clause 2.9.1;
 - (2) further information or clarification referred to in clause 2.9.1(b); or
 - (3) in relation to an application for registration as a *Generator*, the information requested under clause S5.2.4(b).
- (b) *AEMO* must, within 15 *business days* of the receiving date, determine that an applicant is to be registered in the category of *Registered Participant* applied for if *AEMO* is reasonably satisfied that:

- (1) the applicant meets the eligibility requirements specified for the category of *Registered Participant* to which the application relates;
 - (2) if the application relates to registration in one of the categories of *Market Participant*, the applicant is and will be able to fulfil the applicable financial obligations under Chapter 3 of the *Rules*; and
 - (3) the applicant has demonstrated an ability to comply with the *Rules*.
- (c) If *AEMO* determines that an applicant does not satisfy the requirements referred to in paragraph (b), *AEMO* must determine that the applicant is not qualified to be registered as a *Registered Participant* in the relevant category and provide reasons for that determination.

2.9.3 Registration as an Intermediary

- (a) A person (the "*applicant*") who is required to be registered under the *National Electricity Law* or under the *Rules* as a *Generator* or a *Network Service Provider* may apply to *AEMO* or the *AER* respectively for an exemption from that requirement to register.
- (b) *AEMO* or the *AER* (as the case may be) must allow that exemption if:
 - (1) the applicant notifies *AEMO* or the *AER* (as the case may be) of the identity of a person (an "*intermediary*") to be registered instead of the applicant;
 - (2) the applicant provides *AEMO* or the *AER* (as the case may be) with the written consent of the *intermediary* to act as *intermediary* in a form reasonably acceptable to *AEMO* or the *AER*; and
 - (3) **[Deleted]**
 - (4) *AEMO* or the *AER* (as the case may be) notifies the applicant that it approves of the *intermediary*.
- (c) *AEMO* or the *AER* (as the case may be) must approve an *intermediary* if the applicant establishes to *AEMO*'s reasonable satisfaction that, from a technical perspective, the *intermediary* can be treated for the purpose of the *Rules* as the applicant with respect to the relevant *generating system*, *distribution system* or *transmission system* with which the applicant is associated.
- (d) If the exemption is granted by *AEMO* or the *AER* (as the case may be) then:
 - (1) provided the *intermediary* satisfies all relevant registration requirements that the applicant would have been required to satisfy, *AEMO* must register the *intermediary* as a *Registered Participant* as if it were the applicant;
 - (2) the *intermediary* will be considered for the purposes of the *Rules* to be the applicant;

- (3) all references in the *Rules* to the applicant will be deemed to be references to the *intermediary* (unless the context requires otherwise);
 - (4) all acts, omissions, statements, representations and notices of the *intermediary* in its capacity as a *Registered Participant* under the *Rules* will be deemed to be the acts, omissions, statements, representations and notices of the applicant;
 - (5) the *intermediary* and the applicant will be jointly and severally liable for the acts, omissions, statements, representations and notices of the *intermediary* in its capacity as a *Registered Participant* under the *Rules*; and
 - (6) *AEMO* or any other *Registered Participant* may fulfil any obligations to the applicant under the *Rules* by performing them in favour of the *intermediary*.
- (e) The applicant may revoke the appointment of the *intermediary* by giving notice of such revocation to *AEMO*, whereupon *AEMO* must advise the *AER* that such notice has been given.
 - (f) At 4.30 am, 2 *business days* after *AEMO* receives notice of such revocation, the *intermediary* will cease to be considered the applicant's *intermediary* for the purposes of the *Rules* and the applicant will not be liable under clause 2.9.3(d)(5) for any acts, omissions, statements, representations or notices of the *intermediary* occurring after that time.
 - (g) If the applicant revokes the appointment of an *intermediary*, the exemption granted by *AEMO* or the *AER* (as the case may be) to the applicant as contemplated by clause 2.9.3(b) ceases at the time the *intermediary* ceases to be the applicant's *intermediary* in accordance with clause 2.9.3(f).
 - (h) The applicant may notify *AEMO* or the *AER* (as the case may be) that the *intermediary* is the applicant's *intermediary* for part only of the applicant's business (provided that that part represents one or more discrete *generating systems*, *distribution systems* or *transmission systems*).
 - (i) Nothing in the *Rules* requires the *intermediary* to be the agent of the applicant.

2.9A Transfer of Registration

2.9A.1 Definitions

In this rule 2.9A:

Transferor means a *Registered Participant* wishing to transfer its registration to another person in accordance with rule 2.9A.

Transferee means the person to whom a *Registered Participant* wishes to transfer its registration in accordance with rule 2.9A.

2.9A.2 Applications for Transfer of Registration

- (a) If a Transferor wishes to transfer its registration to the Transferee, then the Transferor and Transferee must apply to *AEMO* for approval to do so.
- (b) An application under clause 2.9A.2(a) must be submitted to *AEMO* by the Transferor and Transferee in the form prescribed by *AEMO*.
- (c) *AEMO* must, within 5 *business days* of receiving an application under clause 2.9A.2(a), advise the Transferor and Transferee of any further information or clarification which is required in support of its application if, in *AEMO*'s reasonable opinion, the application:
 - (1) is incomplete; or
 - (2) contains information upon which *AEMO* requires clarification.
- (d) If the further information or clarification required pursuant to clause 2.9A.2(c) is not provided to *AEMO*'s satisfaction within 15 *business days* of the request, then the Transferor and Transferee will be deemed to have withdrawn the application.

2.9A.3 Approval for Transfer of Registration

- (a) *AEMO* must, within 15 *business days* of receiving an application under clause 2.9A.2(a), determine to transfer the registration if *AEMO* is reasonably satisfied that:
 - (1) the Transferor is not in breach of any of its obligations under the *Rules*;
 - (2) with the exception of any requirements that apply to the classification of *facilities* to which the application relates, the Transferee meets the eligibility requirements specified in the *Rules* for the category of *Registered Participant* to which the application relates;
 - (3) the classification of the *facilities* to which the application relates has previously been approved by *AEMO* in accordance with the *Rules*;
 - (4) the *performance standards* applicable to the *facilities* to which the application relates have previously been registered by *AEMO* in accordance with the *Rules*;
 - (5) if the application relates to the transfer of a registration in one of the categories of *Market Participant*, the Transferee is and will be able to fulfil the applicable financial obligations under Chapter 3 of the *Rules*; and
 - (6) the Transferee has demonstrated an ability to comply with the *Rules*.

- (b) If *AEMO* approves the application, then *AEMO* may impose such terms and conditions as *AEMO* considers appropriate, or vary the terms and conditions of the registration on its transfer.
- (c) If *AEMO* determines that the application does not satisfy any of the requirements referred to in clause 2.9A.3(a), *AEMO* must reject the application and provide reasons in writing to the Transferor and Transferee for that rejection.
- (d) If an application is made for transfer of the registration of a *Market Customer* that is a *retailer*:
 - (1) *AEMO* must, before deciding the application, consult with the *AER* about the application; and
 - (2) the period of 15 *business days* allowed for deciding the application under paragraph (a) is extended by the period reasonably required for the consultation; and
 - (3) *AEMO* must notify the *AER* of its decision on the application.

2.10 Ceasing to be a Registered Participant

2.10.1 Notification of intention

- (a) A person may notify *AEMO* in writing that it wishes to cease to be registered in any category of *Registered Participant* or that it wishes to terminate any of its classifications of *loads*, *generating units* or *network services*.
- (b) A person is not entitled to notify *AEMO* that it wishes to cease to be registered in relation to any category for which that person is required to be registered under the *National Electricity Law* or under the *Rules*.
- (c) In any notice given under clause 2.10.1(a), the *Registered Participant* must specify a date upon which it wishes to cease to be so registered or for an existing classification to be terminated and, in the case of a *Market Participant*, the date upon which it will cease to *supply* or acquire electricity or trade directly in the *market* and whether entirely or in relation to one or more *connection points* or *market network services*.
- (d) *AEMO* may reject a notice from a *Market Customer* that it wishes to terminate its classification of a *connection point* as one of its *market loads* or otherwise cease to be a *Market Customer* in relation to any of its *market loads* unless *AEMO* is satisfied that:
 - (1) another person has classified the *connection point* as one of its *market loads* and is registered as a *Market Customer*;

- (2) the relevant *Local Retailer* has agreed or is otherwise required by laws of the relevant *participating jurisdiction* to assume responsibility for payments to *AEMO* for electricity *supplied* to that *connection point*; or
 - (3) the *load* at that *connection point* will be *disconnected* on and from the date specified and, taking into consideration any relevant guidelines and procedures specified by the relevant *participating jurisdiction* to *AEMO*, that *disconnection* is not inappropriate.
- (d1) *AEMO* may reject a notice from a *Market Small Generation Aggregator* which states that it wishes to terminate its classification of a *small generating unit* as a *market generating unit*, or otherwise cease to be a *Market Small Generation Aggregator* in relation to any of its *market generating units*, unless *AEMO* is satisfied that:
 - (1) another person has classified the *small generating unit* as one of its *market generating units* and that person is registered as a *Small Generation Aggregator* and a *Market Small Generation Aggregator*;
 - (2) the relevant *Local Retailer* has agreed or is otherwise required by laws of the relevant *participating jurisdiction* to assume responsibility for payments with *AEMO* for electricity *supplied* to the *connection points* of the *market generating units*; or
 - (3) the *small generating unit* at that *connection point* will be *disconnected* on and from the date specified in the notice, and, after having regard to any relevant guidelines and procedures specified by the relevant *participating jurisdictions* to *AEMO*, *disconnection* is appropriate.
- (e) Upon receiving a notice which complies with clause 2.10.1 from a person who wishes to cease to be registered in any category of *Market Participant*, or to terminate the classification of any of its *market loads*, *market generating units*, or *market network services*, *AEMO* must deliver a notice to the *AER* and the *AEMC* and notify all *Registered Participants* stating that:
 - (1) *AEMO* has received a notice under clause 2.10.1(a); and
 - (2) the person who gave the notice has stated that, from the date specified in the notice, the person intends to cease *supplying* or acquiring electricity or trading directly in the *market* and whether entirely or in relation to certain *connection points* or *market network services*.
- (f) If a *Market Customer* that is a *retailer* gives a notice under this clause, *AEMO* must, before deciding whether to reject the notice under paragraph (d), consult with the *AER*.

2.10.2 Ceasing Participation

- (a) A *Market Participant* must cease all trading in the *market* as specified in a notice that is properly given under clause 2.10.1(a) and is not rejected under clause 2.10.1(d).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) A person ceases to be a *Registered Participant* for the purposes of the *Rules* when all payments due to be paid to or by it under the *Rules* have been made.
- (c) The fact that a person has ceased to be registered in any category of *Registered Participant* or has terminated any classifications contemplated under this Chapter does not affect any obligation or liability of that person under the *Rules* which arose prior to the cessation of its registration or the termination of the classification.

2.10.3 Liability after cessation

A *Registered Participant* which is subject to a liability under the *Rules* remains subject to that liability after and despite ceasing to be a *Registered Participant* regardless of when the claim is made.

2.11 Participant Fees

2.11.1A Application

For the purposes of rule 2.11 only, *Third Party B2B Participants* (other than *Third Party B2B Participants* who are also *Embedded Network Managers*) who are not otherwise *Registered Participants* are deemed to be *Registered Participants*.

2.11.1 Development of Participant fee structure

- (a) *AEMO* must develop, review and publish, in consultation with *Registered Participants* and *interested parties* and such other persons as *AEMO* thinks appropriate, in accordance with the *Rules consultation procedures*, the structure (including the introduction and determination) of *Participant fees* for such periods as *AEMO* considers appropriate.
- (ab) In determining *Participant fees*, *AEMO* must have regard to the *national electricity objective*.
- (b) The structure of *Participant fees* must, to the extent practicable, be consistent with the following principles:
 - (1) the structure of *Participant fees* should be simple;

- (2) *Participant fees* should recover the budgeted revenue requirements for *AEMO* determined under clause 2.11.3 on a basis where:
 - (i) the following principles are relevant to the recovery of recurrent expenditure:
 - (A) if *AEMO* recovers an excess of revenue over expenditure from the provision of a particular service in a financial year, it may roll over the excess to a later financial year (or later financial years) so as to reduce revenue requirements in the later financial year (or years);
 - (B) *AEMO* may recover a shortfall of revenue as against expenditure for the provision of a particular service in a later financial year or later financial years;
 - (C) *AEMO* may take any other action it considers desirable to smooth the impact of actual or anticipated cost variations on the users of a service provided by *AEMO*;
 - (ii) capital expenditures (incurred after *market commencement*) are recovered through the depreciation or amortisation of the assets acquired by the capital expenditure in a manner that is consistent with generally accepted accounting principles;
 - (iii) costs of transition are recovered over a period of 4 years from the *changeover date*.
 - (iv) notwithstanding clauses 2.11.1(b)(2)(i), (ii) and (iii), expenditure incurred by, and depreciation and amortisation charged to, *AEMO* associated with a *declared NEM project* are recovered from the start date and over the period determined for that *declared NEM project* under clauses 2.11.1(bb) or 2.11.1(bd). Amounts associated with a *declared NEM project* determined in accordance with this clause are to be recovered through an additional *Participant fee* determined in accordance with clauses 2.11.1(bb) or 2.11.1(bd) until the next general determination of all *Participant fees* is made under clause 2.11.1(a);
- (3) the components of *Participant fees* charged to each *Registered Participant* should be reflective of the extent to which the budgeted revenue requirements for *AEMO* involve that *Registered Participant*;
- (4) *Participant fees* should not unreasonably discriminate against a category or categories of *Registered Participants*; and
- (5) the fixed component of *Participant fees* for a *Market Ancillary Services Provider* who is registered with *AEMO* solely for the purpose of providing *market ancillary services*, may be zero.

- (ba) *AEMO* may determine any of the following projects to be a *declared NEM project*:
 - (1) a major reform or development (including an anticipated reform or development) of the *market*; or
 - (2) a major change (including an anticipated change) to a function, responsibility, obligation or power of *AEMO* under the *Rules*; or
 - (3) a major change (including an anticipated change) to any of the computer software or systems that *AEMO* uses in the performance of any of its functions, responsibilities, obligations or powers under the *Rules*.
- (bb) When *AEMO* determines a project to be a *declared NEM project* under clause 2.11.1(ba), it must also determine the start date for recovery and the period or periods over which recovery will occur for the *declared NEM project*. *AEMO* must also determine the structure of an additional *Participant fee* to be used in the recovery of costs associated with a *declared NEM project* until the next general determination of all *Participant fees* is made under clause 2.11.1(a).
- (bc) In making determinations under clauses 2.11.1(ba) and (bb), *AEMO* must comply with the *Rules consultation procedures*.
- (bd) The introduction and facilitation of full retail competition is taken to have been determined to be a *declared NEM project* under clause 2.11.1(ba) and *AEMO* will be entitled to recover through *Participant fees* expenditure incurred by, and depreciation and amortisation charged to, *AEMO* in respect of full retail competition. The period or periods over which recovery will occur for this *declared NEM project* will be determined by *AEMO* using the *Rules consultation procedures*. If any amounts associated with the introduction and facilitation of full retail competition are to be recovered prior to the next general determination of all *Participant fees* under clause 2.11.1(a), such recovery must be through an additional *Participant fee* determined using the *Rules consultation procedures*.
- (c) The components of the *Participant fees* may include, but are not limited to:
 - (1) registration fees, comprising an annual fee payable by each person for each *Registered Participant* category in which they are registered;
 - (2) *ancillary service fees*, to recover *AEMO*'s budgeted revenue requirements in relation to its procurement of *non-market ancillary services*;
 - (3) *power system* operations fees, to recover *AEMO*'s budgeted revenue requirements in relation to its *power system* operation activities described in clause 2.11.3(b)(2);
 - (4) *metering* fees to recover *AEMO*'s budgeted revenue requirements for the collection, storage and processing of *metering data*;

- (5) billing and *settlements* fees, to recover *AEMO*'s budgeted revenue requirements as described in clause 2.11.3(b)(4); and
- (5A) *NTP function* fees to recover *AEMO*'s budgeted revenue requirement as described in clause 2.11.3(b)(4A);
- (5B) *additional advisory function* fees to recover *AEMO*'s budgeted revenue requirement as described in clause 2.11.3(b)(4B);
- (6) administration fees, to recover the remainder of *AEMO*'s budgeted revenue requirements;

and each component of the *Participant fees* may take into account adjustments which may be appropriate in light of the matters described in clauses 2.11.3(b)(7) or (8).

- (d) In undertaking the process described in clause 2.11.1(a) *AEMO* must consider other fee structures in existence which it thinks appropriate for comparison purposes.
- (e) *AEMO* must publish to *Registered Participants* and to such other persons as *AEMO* thinks appropriate, the structure of *Participant fees* determined, the methods used in determining the structure and an assessment of the extent to which the structure complies with the principles set out in clause 2.11.1(b) at least 3 months prior to the implementation of the structure.

2.11.2 Payment of Participant fees

- (a) *AEMO* may charge a *Registered Participant* the relevant components of *Participant fees* in accordance with the structure of *Participant fees* by giving the *Registered Participant* a statement setting out the amount payable by that *Registered Participant* and the date for payment.
- (b) In the case of a *Market Participant*, *AEMO* may, alternatively, include the relevant amount in the statements described in clause 3.15.15.
- (c) A *Registered Participant* must pay to *AEMO* the net amount stated to be payable by that *Registered Participant* in a statement issued under clause 2.11.2(a) or in accordance with clause 2.11.2(b) to meet *AEMO*'s budgeted revenue requirements by the date specified for payment, whether or not the *Registered Participant* disputes the net amount payable.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

2.11.3 Budgeted revenue requirements

- (a) *AEMO* must prepare and *publish* before the beginning of each *financial year* a budget of the revenue requirements for *AEMO* for that *financial year*.

- (b) The budget prepared by *AEMO* under clause 2.11.3(a) must take into account and separately identify projected revenue requirements in respect of:
 - (1) *AEMO's* procurement of *non-market ancillary services*;
 - (2) *AEMO's* expenditures in relation to its *power system* operation activities, including meeting its obligations in terms of *power system security* and the facilitation and operation of the central bidding and dispatch processes in accordance with the *Rules*;
 - (2A) *AEMO's* expenditures in relation to *inter-network tests*;
 - (3) *AEMO's* expenditures in the collection, storage and processing of *metering data*;
 - (4) *AEMO's* expenditures in the facilitation of the billing and *settlement of market transactions*;
 - (4A) *AEMO's* expenditures in carrying out *NTP functions*;
 - (4B) *AEMO's* expenditures in carrying out additional advisory functions;
 - (5) *AEMO's* other expenditure requirements, operating costs and margin so far as they relate to the electricity industry;
 - (5A) the proportion of *AEMO's* residual expenditures allocated to the electricity industry under paragraph (c).
 - (6) *AEMO's* consumer advocacy funding obligation under rule 8.10;
 - (7) any revenue shortfall or excess from each of the requirements specified under clause 2.11.3(b)(1)-(5) from the previous *financial year*; and
 - 7A *AEMO's* expenditure in relation to *B2B costs*;
 - (8) the funding requirements of the *Participant compensation fund* in accordance with rule 3.16 (which requirements must only be recovered from *Scheduled Generators*, *Semi-Scheduled Generators* and *Scheduled Network Service Providers*).
- (c) *AEMO* must allocate expenditures that cannot be specifically related to electricity activities or gas activities (**residual expenditures**) between the electricity and gas industries in a manner that:
 - (1) ensures that the total amount of the residual expenditures is allocated appropriately between the electricity and the gas industries; and
 - (2) ensures that each industry bears an allocation at least equal to the amount by which residual expenditures would be reduced if services were no longer provided to that industry; and

- (3) promotes the efficient use of electricity and gas services.
- (d) AEMO's expenditures in carrying out *declared network functions* are to be recovered through fees charged as a *Transmission Network Service Provider* and not through *participant fees*.

2.12 Interpretation of References to Various Registered Participants

- (a) A person may register in more than one of the categories of *Registered Participant*.
- (b) Notwithstanding anything else in the *Rules*, a reference to:
 - (1) a "*Generator*" applies to a person registered as a *Generator* only in so far as it is applicable to matters connected with the person's *scheduled generating units, semi-scheduled generating units, non-scheduled generating units, market generating units or non-market generating units*;
 - (1A) a "*Small Generation Aggregator*" applies to a person registered as a "*Small Generation Aggregator*" only in so far as it is applicable to matters connected with the person's *small generating units or market generating units*;
 - (1B) a "*Market Ancillary Service Provider*" applies to a person registered as a "*Market Ancillary Service Provider*" only in so far as it is applicable to matters connected with the person's *ancillary service load*;
 - (2) a "*Scheduled Generator*", "*Semi-Scheduled Generator*", "*Non-Scheduled Generator*", "*Market Generator*" or "*Non-Market Generator*" applies to a person only in so far as it is applicable to matters connected with the person's *scheduled generating units, semi-scheduled generating units, non-scheduled generating units, market generating units or non-market generating units* respectively;
 - (3) a "*Customer*" applies to a person registered as a *Customer* only in so far as it is applicable to matters connected with the person's *first-tier loads, second-tier loads or market loads*;
 - (4) a "*First Tier Customer*", "*Second Tier Customer*" or "*Market Customer*" applies to a person only in so far as it is applicable to matters connected with the person's *first-tier loads, second-tier loads or market loads* respectively;
 - (4A) a "*Trader*" applies to a person only in so far as it is applicable to matters connected with the person's activities as a *Trader*;
 - (4B) a "*Reallocator*" applies to a person only in so far as it is applicable to matters connected with the person's activities as a *Reallocator*;

- (5) subject to clause 2.5.1A(f), a "*Network Service Provider*" applies to a person registered as a *Network Service Provider* only in so far as it is applicable to matters connected with the person's *network services*, including *market network services* and *scheduled network services*;
- (5A) a "*Dedicated Connection Asset Service Provider*" applies to a person only in so far as it is applicable to matters connected with the person's *dedicated connection assets*;
- (6) a "*Market Network Service Provider*" or "*Scheduled Network Service Provider*" applies to a person only in so far as it is applicable to matters connected with the person's *market network services* or *scheduled network services* respectively;
- (7) a "*Market Participant*" applies to a person who is a *Market Participant* and:
 - (i) where that person is registered as a *Market Generator*, in so far as it is applicable to matters connected with the person's *market generating units* or *ancillary services generating units*; and
 - (i1) where that person is registered as a *Market Small Generation Aggregator*, in so far as it is applicable to matters connected with the person's *market generating units*; and
 - (i2) where that person is registered as a *Market Ancillary Service Provider*, in so far as it is applicable to matters connected with the person's *ancillary service load*; and
 - (ii) where that person is registered as a *Market Customer*, in so far as it is applicable to matters connected with the person's *market loads* or *market ancillary service loads*; and
 - (iii) where that person is registered as a *Market Network Service Provider*, in so far as it is applicable to matters connected with the person's *market network services*; and
 - (iv) where that person is registered in any category of *Market Participant* additional to a *Market Generator* and/or a *Market Customer* and/or a *Market Network Service Provider*, to the extent to which the reference would otherwise apply to the person if it were not taken to be a *Market Generator*, *Market Customer* or *Market Network Service Provider*; and
- (8) a "*Registered Participant*" applies to a person who is registered under Chapter 2 and:
 - (i) where that person is registered as a *Generator*, in so far as it is applicable to matters connected with any of the *Generator's scheduled generating units*, *semi-scheduled generating units*, *non-scheduled generating units*, *market generating units* and *non-market generating units*;

- (ii) where that person is registered as a *Customer*, in so far as it is applicable to matters connected with any of the *Customer's first-tier loads, second-tier loads or market loads*; and
 - (iii) where that person is registered in any other *Registered Participant* category, to the extent to which the reference would apply to the person if it were not registered in another *Registered Participant* category.
- (c) In rule 2.12, "*matter*" includes any assets, liabilities, acts, omissions or operations (whether past, present or future).

CHAPTER 2A

2A. Regional Structure

Part A Region change applications and region determinations by AEMC

2A.1 Introduction to Chapter 2A

2A.1.1 Definitions

Expressions in Chapter 2A are defined in Schedule 2A.1.

2A.1.2 AEMC determination of regions

- (a) For the purpose of conducting the *spot market*, the *market* is to be divided into regions determined by the *AEMC* in accordance with the *Rules*.
- (b) A *region* change may only be made by a region change application to the *AEMC* in accordance with this Chapter 2A.
- (c) Until the *AEMC* makes a *region* change in accordance with this Chapter 2A, for the purposes of the *Rules*, the *regions* are taken to be the *regions* defined in the *Regions Publication* published under clause 2A.1.3

2A.1.3 Publication of regions by AEMO

AEMO must maintain, review and, by 1 April each year, *publish* a list of all *regions*, *regional reference nodes* and the *region* to which each *market connection point* is assigned as determined or approved by the *AEMC* for alteration, under this Chapter 2A and rule 3.6 (the *Regions Publication*).

2A.2 Region change applications

2A.2.1 A complete region change application

- (a) Subject to and in accordance with this Chapter 2A, a *Registered Participant* or *AEMO* ("an **applicant**") may make a region change application to the *AEMC*.
- (b) In order to be accepted by the *AEMC*, a region change application must comply with the requirements under this rule 2A.2 ("a **complete application**").
- (c) In order to be a complete application, a region change application must:
 - (1) identify a congestion problem – see clause 2A.2.2;
 - (2) present a preliminary case as to the economic efficiency of a proposed *region* solution – see clause 2A.2.3;

- (3) propose a *region* solution to the congestion problem that is technically competent – see clause 2A.2.4;
- (4) demonstrate that the proposed *region* solution is appropriate having regard to alternative means for managing the congestion problem – see clause 2A.2.5;
- (5) if the congestion problem has been considered within 5 years of the date of the region change application, demonstrate why it should be re-considered – see clause 2A.2.6; and
- (6) propose an implementation period.

2A.2.2 Identifying a congestion problem

A region change application must demonstrate, with supporting economic analysis:

- (1) that there is a problem with the existing *region* configuration;
- (2) that the problem is attributable to the presence of material and enduring *network* congestion; and
- (3) that the problem has or will detract materially from economic efficiency, where economic efficiency includes (but is not limited to):
 - (i) efficiency in relation to the impact on efficiency of *dispatch*, including in respect of bidding incentives and *dispatch* outcomes;
 - (ii) efficiency in relation to the management of risk and the facilitation of forward contracting through contracts in the financial markets and the *spot market*; and
 - (iii) long term dynamic efficiency – including in relation to making investment decisions,

(a **congestion problem**).

2A.2.3 Explanation of economic efficiency of proposed region solution

- (a) A region change application must explain how the proposed *region* solution would or would be likely to materially improve economic efficiency.
- (b) For the purposes of paragraph (a), economic efficiency includes (but is not limited to):
 - (1) efficiency in relation to the impact on efficiency of *dispatch*, including in respect of bidding incentives and *dispatch* outcomes;
 - (2) efficiency in relation to the management of risk and the facilitation of forward contracting through contracts in the financial markets and the *spot market*; and

- (3) long term dynamic efficiency – including in relation to making investment decisions.

2A.2.4 Region change application must be technically competent

A region change application must:

- (1) demonstrate that the proposed *region* solution identified in the application satisfies the following technical requirements:
 - (i) each *region* must have a single *regional reference node* which is to be deemed to be a notional *busbar* at:
 - (A) a nominated major *transmission substation* located at or close to the largest *load centre* within the *region*; or
 - (B) where a *region* has no major *load centre* or there is some other reasonable cause for not defining a *regional reference node* at a particular major *load centre*, a nominated major *transmission substation* located at or close to the largest *generation centre* within the *region*;
 - (ii) all *transmission connection points* affected by a proposed *region* solution must be identified;
 - (iii) a *transmission connection point* may only be assigned to a single *region*;
 - (iv) the boundary of a *region* must be closed and must enclose at least one significant *load centre* and/or *generation centre*;
 - (v) the physical *transmission elements* that form the *interconnection* with adjacent *regions* must be described, including the points at which the boundary cuts through the *transmission elements*; and
 - (vi) the availability of revenue metering to measure the *energy* flow across each physical *transmission element* that forms the *interconnection* with other *regions*; and
- (2) where the application proposes an implementation period that is more or less than 3 years, specify the proposed implementation period and provide reasons why a different time period should be determined by the AEMC,

(a **technically competent application**).

2A.2.5 Alternative congestion management options

- (a) A region change application must demonstrate that the *region* solution proposed in the application is an appropriate and timely course of action in all the circumstances, having regard to alternative means of managing the congestion problem (the **alternative congestion management options**).

- (b) The alternative congestion management options include:
 - (1) changes to the geographic distribution of *generation* and *load* over time;
 - (2) changes in the configuration of the *transmission network* such as a change which is a consequence of the application of the *last resort planning power* regime; or
 - (3) changes in capability of the *transmission network* arising under other arrangements for the provision of *network support and control ancillary services*.

2A.2.6 Previous application relating to congestion problem

Where a region change application ("a **subsequent application**") addresses the same or substantially the same congestion problem as a previous region change application accepted by the *AEMC* within the previous 5 year period, the subsequent application must demonstrate, with supporting evidence, why it is appropriate for the *AEMC* to accept a subsequent application having regard to:

- (1) any material changes in circumstances since the previous region change application;
- (2) the general desirability of a stable *region* structure for the making of contracting and investment decisions:
 - (i) in the *NEM*; and
 - (ii) in financial markets;
- (3) the adequacy of the previous application; and
- (4) any other relevant consideration in the particular circumstances of the case.

2A.2.7 AEMO to provide information to intending applicants

- (a) An intending applicant (other than *AEMO*) or an alternative proponent may request information from *AEMO* in order to prepare a technically competent application.
- (b) A person making a request to *AEMO* under paragraph (b) must include in the request details of the information sufficient for *AEMO* to identify the information sought.
- (c) Subject to paragraph (d), *AEMO* must on request from an intending applicant or an alternative proponent, as soon as practicable after receiving the request, furnish to the relevant person, such information that is:
 - (1) requested in accordance with paragraphs (a) and (b); and
 - (2) in *AEMO*'s possession or provided to *AEMO* under paragraph (c).

- (d) For the purpose of furnishing information under paragraph (c), *AEMO* may direct a *Transmission Network Service Provider* to provide information to *AEMO* and the *Transmission Network Service Provider* must provide that information to *AEMO* as soon as reasonably practicable.
- (e) Information that *AEMO* is required to furnish under paragraph (c) does not include information that *AEMO* may be directed to provide under clause 2A.5.2.
- (f) *AEMO* must *publish*:
 - (1) requests made to *AEMO* under paragraph (a);
 - (2) information (excluding *confidential information*) provided by *AEMO* in accordance with paragraph (b); and
 - (3) details of the circumstances where *AEMO* has not provided information in accordance with paragraph (d),as soon as practicable.

2A.2.8 AEMC may refuse to accept incomplete applications

If the *AEMC* considers that a region change application is not a complete application under this rule 2A.2, the *AEMC*:

- (1) must notify the applicant, including written reasons that set out the respects in which the application is not complete; and
- (2) is not required to further consider the application until it is satisfied that the application is a complete application.

2A.3 Acceptance of region change application by AEMC

2A.3.1 Acceptance of a region change application by AEMC

- (a) The *AEMC* must not accept a region change application unless it is satisfied that the application is a complete application in accordance with rule 2A.2.
- (b) Where the *AEMC*:
 - (1) is not satisfied that a region change application is a complete application in accordance with rule 2A.2; or
 - (2) considers, whether as a result of submissions received in preliminary consultation under clause 2A.3.2 or otherwise, that a region change application should not proceed,

it may make a decision not to accept the region change application, setting out the reasons for that decision.

- (c) The *AEMC* must, without delay, notify the applicant of a decision not to accept a region change application, and publish that decision (including the reasons) on the *AEMC*'s website.
- (d) Where the *AEMC* is satisfied that a region change application:
 - (1) is a complete application in accordance with rule 2A.2;
 - (2) satisfactorily addresses any issues raised by preliminary consultation under clause 2A.3.2; and
 - (3) should, in all the circumstances, be the subject of consultation and considered under this Chapter 2A,the *AEMC* must make a decision to accept a region change application and must take action in relation to the application in accordance with this Chapter 2A.
- (e) An applicant may not withdraw a region change application after the *AEMC* has accepted that application and has published a first round consultation notice under clause 2A.4.1.

2A.3.2 Preliminary consultation prior to acceptance of a region change application

- (a) After the *AEMC* decides that a region change application is a complete application in accordance with rule 2A.2, but prior to making a decision whether or not to accept the application under clause 2A.3.1, the *AEMC* must publish the proposed region change application (including all supporting evidence) on its website and invite written submissions from any person within 21 *business days* of the date of that publication.
- (b) The *AEMC* is not required to publish *confidential information* provided to it under this clause.
- (c) Where the *AEMC* considers that submissions received under paragraph (a) raise issues that should be addressed in the region change application, it may:
 - (1) request the applicant to amend the region change application to address those issues; or
 - (2) decide not to accept the region change application under clause 2A.3.1.

2A.4 First round consultation on region change application

2A.4.1 Notice of first round consultation

- (a) As soon as practicable after accepting a region change application under clause 2A.3.1(d), the *AEMC* must publish on its website notice of the application ("the **first round consultation notice**").
- (b) Subject to clause 2A.3.2(b), the first round consultation notice must:
 - (1) contain the region change application and supporting evidence provided by the applicant;
 - (2) invite written submissions from any person within 75 *business days* of the date of the first round consultation notice ("the **first round consultation period**");
 - (3) specify that a person may put forward an alternative *region* solution in a written submission either:
 - (i) as an informal alternative *region* solution; or
 - (ii) as a formal alternative region solution under clause 2A.4.3,and (in the case referred to in subparagraph (ii)), the notice must further specify that the person may be required to provide to the *AEMC* supplementary economic analysis to support the formal alternative region solution; and
 - (4) include a statement to the effect that any interested party may request, in writing within one week after the publication of the notice, the *AEMC* to hold a consultation meeting in accordance with clause 2A.9.2.

2A.4.2 Right to make written submissions during first round consultation period

Any person may, within the first round consultation period, make a written submission in relation to a region change application ("a **first round submission**").

2A.4.3 Alternative region solution put forward by third parties

- (a) A person who makes a first round submission may propose an alternative *region* solution to the solution proposed in the region change application ("a **proposed alternative region solution**").
- (b) A *Registered Participant* or *AEMO* ("an **alternative proponent**") who submits a proposed alternative region solution under paragraph (a) may request the *AEMC* to treat the solution as a formal alternative region solution by expressly requesting the *AEMC* to do so in the first round submission.

- (c) A proposed alternative region solution submitted by an alternative proponent under paragraph (b) must:
 - (1) demonstrate that the proposed alternative region solution relates to the congestion problem identified in the region change application and accepted by the *AEMC* under clause 2A.3.1;
 - (2) meet the requirements of a technically competent application in accordance under clause 2A.2.4; and
 - (3) explain how the proposed alternative region solution would or would be likely to materially improve economic efficiency in accordance with the requirements for a region change application under clause 2A.2.3,("a **complete alternative region solution**").

2A.4.4 Acceptance as a formal alternative region solution by AEMC

- (a) The *AEMC* is not obliged to treat a proposed alternative region solution as a formal alternative region solution unless the *AEMC* is satisfied that it is a complete alternative region solution.
- (b) Where the *AEMC* is not satisfied that a proposed alternative region solution is a complete alternative region solution, the *AEMC* must decide not to treat it as a formal alternative region solution and must:
 - (1) set out the reasons for that decision;
 - (2) without delay, notify the alternative proponent of the decision;
 - (3) publish the decision (including the reasons) on the *AEMC*'s website; and
 - (4) treat the proposed alternative region solution as an informal alternative *region* solution.
- (c) Where the *AEMC* is satisfied that a proposed alternative region solution is a complete alternative region solution, the *AEMC* must:
 - (1) publish the proposed alternative region solution as a formal alternative region solution on its website as soon as practicable after accepting the solution as a formal alternative region solution; and
 - (2) treat the proposed alternative region solution as a formal alternative region solution.
- (d) An alternative proponent may not withdraw a proposed alternative region solution after the *AEMC* has published it as a formal alternative region solution under paragraph (c)(1).

2A.5 Provision of supplementary economic analysis

2A.5.1 AEMC may direct provision of supplementary analysis

- (a) The *AEMC* may, in respect of a region change application accepted under rule 2A.3, direct an applicant to provide to the *AEMC* supplementary economic analysis to support the applicant's proposed *region* solution within a specified time.
- (b) The *AEMC* may, in respect of a formal alternative region solution, direct an alternative proponent to provide to the *AEMC* supplementary economic analysis to support the alternative *region* solution within a specified time.
- (c) An applicant or an alternative proponent directed under paragraphs (a) or (b) must provide the supplementary economic analysis to the *AEMC* within the period of time specified by the *AEMC* in the direction.
- (d) A direction under paragraphs (a) or (b) may be given at any time after the start of the first round consultation period.
- (e) Despite paragraphs (a) to (c), the *AEMC* or its *representative* may prepare supplementary economic analysis in respect of a *region* solution, whether proposed in a region change application, or in a formal alternative region solution or otherwise.

2A.5.2 AEMC may direct AEMO to provide information

- (a) Where the *AEMC*:
 - (1) directs an applicant or an alternative proponent to provide supplementary economic analysis under clause 2A.5.1; or
 - (2) decides that it or its *representative* will prepare supplementary economic analysis under clause 2A.5.1(e),

the *AEMC* may request *AEMO* to provide information (including *constraint* equations) to the applicant or to the alternative proponent, or directly to the *AEMC* (as the case may be), but only where such information is necessary to facilitate the provision of supplementary economic analysis to those persons or to the *AEMC*.
- (b) Where the *AEMC* requests *AEMO* to provide information under paragraph (a), *AEMO* must provide the information to the applicant, to the alternative proponent, or directly to the *AEMC* (as the case may be), as soon as practicable in all the circumstances.
- (c) *AEMO* may, in respect of a *constraint* on a *network*, direct the *Transmission Network Service Provider* who owns, controls or operates the relevant *network* to provide information to *AEMO* for the purpose referred to in paragraph (a) and the *Transmission Network Service Provider* must provide that information to *AEMO* as soon as reasonably practicable.

- (d) *AEMO* must *publish*:
 - (1) requests made to *AEMO* under paragraph (a); and
 - (2) information (excluding *confidential information*) provided by *AEMO* in accordance with paragraph (b),as soon as practicable.
- (e) The *AEMC* is not required to publish information provided to the *AEMC* under this clause 2A.5.2 that has been obtained by the applicant or alternative proponent in accordance with clause 8.6.2(o).

2A.6 Region determinations

2A.6.1 AEMC powers to make a region determination

- (a) In making a region determination in respect of a region change application, the *AEMC* may:
 - (1) accept or reject the *region* solution proposed in the application;
 - (2) accept or reject a formal alternative region solution;
 - (3) determine that no *region* change should be made;
 - (4) determine a *region* solution that is different (including materially different) from the *region* solution proposed in the application; or
 - (5) determine a *region* solution that is different (including materially different) from a formal alternative region solution.
- (b) In making a decision under paragraph (a), the *AEMC* may, subject to this rule 2A.6, adopt the *region* solution that it considers provides the best available solution to the congestion problem identified in the region change application in all the circumstances.

2A.6.2 Matters for consideration in making region determination

In making a region determination to adopt a *region* solution, the *AEMC* must be satisfied:

- (1) that there is a problem with the existing *region* configuration which is attributable to the presence of material and enduring *network* congestion ("a **congestion problem**");
- (2) that the *region* solution is technically competent in accordance with the requirements of clause 2A.2.4;
- (3) that:

- (i) the congestion problem will detract materially from economic efficiency; and
 - (ii) the *region* solution will materially improve economic efficiency, where economic efficiency includes (but is not limited to):
 - (iii) efficiency in relation to the impact on efficiency of *dispatch*, including in respect of bidding incentives and *dispatch* outcomes;
 - (iv) efficiency in relation to the management of risk and the facilitation of forward contracting in the financial markets and the *spot market*; and
 - (v) long term dynamic efficiency – including in relation to making investment decisions;
- (4) that the *region* solution is an appropriate and timely course of action in all the circumstances, having regard to the alternative congestion management options;
- (5) that the *region* solution is consistent with *power system security* and *reliability*; and
- (6) where the proposed implementation is greater than or less than 3 years, that the implementation period is reasonable in all the circumstances of the region determination.

2A.7 Draft region determination and second round consultation

2A.7.1 Publishing of draft region determination

- (a) Before making a final region determination, but within 60 *business days* of the end of the first round consultation period, the *AEMC* must publish a draft region determination in relation to an application.
- (b) A draft region determination must contain:
 - (1) the reasons of the *AEMC* as to its decision, with reference to the matters set out in rule 2A.6; and
 - (2) a proposed implementation period.

2A.7.2 Second round consultation

- (a) The *AEMC* must publish a notice on its website of a draft region determination on a complete application ("the **second round consultation notice**").
- (b) A second round consultation notice must:
 - (1) contain the draft region determination;

- (2) invite written submissions from any person within 60 *business days* of the date of the second round consultation notice ("the **second round consultation period**"); and
- (3) include a statement to the effect that any interested party may request, in writing within one week after the publication of the notice, the *AEMC* to hold a consultation meeting in accordance with clause 2A.9.2.

2A.7.3 Right to make written submissions during second round consultation

Any person, within the second round consultation period, may make a written submission in relation to a draft region determination (**second round submission**).

2A.8 Final region determination

2A.8.1 Final determination for region change

- (a) The *AEMC* must publish on its website a final region determination in relation to a region change application within 40 *business days* of the end of the second round consultation period.
- (b) A final region determination must contain:
 - (1) the reasons of the *AEMC* as to its decision with reference to the matters set out in rule 2A.6; and
 - (2) the implementation period.

2A.8.2 Formal publication of region determination

- (a) If the *AEMC* in a final region determination determines to make a *region* change, the *AEMC* must publish a notice of the making of the *region* change in the South Australian Government Gazette and on its website.
- (b) A notice referred to in paragraph (a) must include:
 - (1) the date of publication of the final region determination under clause 2A.8.1;
 - (2) the implementation period; and
 - (3) the start date.

2A.9 Miscellaneous matters for region change process

2A.9.1 AEMC may extend periods of time specified in Chapter 2A

- (a) Despite anything to the contrary in this Chapter 2A, the *AEMC* may, by notice published on its website, extend a period of time specified in Chapter

2A, if the *AEMC* considers that a region change application raises issues of sufficient complexity or difficulty or there is a material change in circumstances such that it is necessary that the relevant period of time specified in Chapter 2A be extended.

- (b) A notice under paragraph (a) must identify the period of time under Chapter 2A to be extended, and specify the new time that is to apply.
- (c) The *AEMC* may only extend a period of time in accordance with this clause 2A.9.1 before the expiry of that time.

2A.9.2 Consultation meeting in relation to region change application

- (a) Any person may request, in writing, within one week of the publication of a first round consultation notice or second round consultation notice (as the case may be), the *AEMC* to hold a consultation meeting in relation to a region change application or a draft region determination.
- (b) Despite paragraph (a), the *AEMC* may decide not to hold a consultation meeting, and if so, must give the person who made the request its reasons, in writing, for declining to hold a consultation meeting.
- (c) The *AEMC* may on its own initiative hold a consultation meeting.
- (d) If the *AEMC* decides to hold a consultation meeting under this clause 2A.9.2, it must:
 - (1) appoint a date (being not later than the close of the first round consultation period or the second round consultation period (as the case may be), time and place for the meeting; and
 - (2) publish on its website a notice advising of:
 - (i) the intention to hold such a meeting; and
 - (ii) the date, time and place for the holding of the meeting.

Part B Implementation of region determination

2A.10 Purpose and application of Part B

2A.10.1 Purpose of Part B

The purpose of this Part B of Chapter 2A is to enable the efficient and effective implementation of a region determination made by the *AEMC* under Part A of Chapter 2A during an implementation period, and to support a smooth market transition from old *region* boundaries to new *region* boundaries.

2A.10.2 Application of Part B

Part B of Chapter 2A applies despite any other provision of the *Rules* (including any guideline or procedure made under the *Rules*), and to the extent of any inconsistency prevails during an implementation period for the purpose of the implementation functions described in rule 2A.12.

2A.11 Region Change Implementation Procedure

2A.11.1 Submission of draft Region Change Implementation Procedure

- (a) If the *AEMC* in a draft region determination, determines to make a *region* change, *AEMO* must prepare a draft Region Change Implementation Procedure in respect of the *region* solution adopted by the *AEMC* in that draft region determination.
- (b) A draft Region Change Implementation Procedure must set out:
 - (1) the proposed implementation period as included in the draft region determination under clause 2A.7.1(b);
 - (2) an implementation plan that identifies the key implementation steps to be taken during the implementation period; and
 - (3) the implementation functions referred to in rule 2A.12 that *AEMO* proposes to exercise to implement the *region* solution proposed by the draft region determination.
- (c) *AEMO* must submit the draft Region Change Implementation Procedure to the *AEMC* no later than the close of the second round consultation period.
- (d) *AEMO* may in consultation with the *AEMC*, make amendments to the draft Region Change Implementation Procedure submitted under paragraph (c) that are necessary to implement a final region determination.
- (e) The *AEMC* must approve a Region Change Implementation Procedure submitted under paragraph (c) and amended in accordance with paragraph (d) (as the case may be), in respect of a final region determination that determines to make a *region* change.

2A.11.2 Approved Region Change Implementation Procedure

- (a) *AEMO* must, as soon as practicable after the date of the final region determination *publish* the approved Region Change Implementation Procedure.
- (b) *AEMO* may, during the implementation period, amend the approved Region Change Implementation Procedure as necessary, and must *publish* any such amended procedure, giving reasons why the amendment is necessary.

2A.12 AEMO region change implementation functions

2A.12.1 General implementation functions

Subject to other functions *AEMO* is required to exercise in accordance with this Chapter 2A, *AEMO* may, during the implementation period, make a decision or take action (including the power to refrain from making a decision or taking action) that is necessary for the implementation of a final region determination.

2A.12.2 Implementation functions referable to published implementation procedure

The exercise of the region change implementation functions by *AEMO* referred to in clause 2A.12.1 must be referable to and consistent with, the key implementation steps set out in the current *published* Region Change Implementation Procedure.

2A.12.3 Amendment of current or subsequent Regions and Loss Factors Publication

- (a) *AEMO* must, as an implementation function, in respect of the current or subsequent *Regions Publication* or Loss Factors Publication, amend those publications as necessary for the effective implementation of a final region determination that determines to make a *region* change.
- (b) For the avoidance of doubt, in relation to the publications referred to in paragraph (a), nothing prevents *AEMO*:
 - (1) amending those publications to:
 - (i) implement future region determinations under the *Rules*; or
 - (ii) deal with future physical changes to the *network*; or
 - (2) publishing the annual *Regions Publication* and the Loss Factors Publication in a single document.

2A.13 Continuity of regions

On and from a start date:

- (1) the unmodified regions continue and are taken to be *regions* for all purposes under the *Rules*; and
- (2) the modified regions continue and are taken to be *regions* for all purposes under the *Rules*.

Schedule 2A.1 Glossary for Chapter 2A

alternative congestion management options

The alternative means of managing the congestion problem identified in clause 2A.2.2 as referred to in clause 2A.2.5.

alternative proponent

A *Registered Participant* or *AEMO* who requests the *AEMC* in a first round submission, to treat a proposed alternative region solution as a formal alternative region solution in accordance with clause 2A.4.3(b).

applicant

A *Registered Participant* or *AEMO* who makes a region change application to the *AEMC* under rule 2A.2

complete alternative region solution

A proposed alternative region solution that satisfies the requirements of clause 2A.4.3(c).

complete application

A region change application that meets the requirements of rule 2A.2.

congestion problem

The problem identified in clause 2A.2.2.

first round consultation notice

The notice published by the *AEMC* in accordance with clause 2A.4.1.

first round consultation period

The period of time referred to in clause 2A.4.1(b)(2) that is within 75 *business days* of the date of the first round consultation notice.

first round submission

A written submission made within the first round consultation period in accordance with clause 2A.4.2.

formal alternative region solution

A proposed alternative region solution that the *AEMC* is satisfied is a complete alternative region solution under clause 2A.4.4(c).

implementation period

The period commencing on the date of a final region determination made in accordance with clause 2A.8.1 and ending on the start date.

Loss Factors Publication

The document *published* by *AEMO* from time to time under clauses 3.6.1(f) and 3.6.2(f1) that sets out *marginal loss factors*.

modified regions

The *regions* identified in the current *Regions Publication* modified as a result of a region determination taking effect that determines to make a change to existing *regions*.

new regions

The unmodified *regions* and the modified *regions*.

old regions

The *regions* identified in the current *Regions Publication* immediately prior to the start date.

proposed alternative region solution

An alternative *region* solution proposed by an alternative proponent in a first round submission as an alternative to the solution proposed in the region change application.

region change application

An application for a *region* change made under rule 2A.2.

region change implementation function

A function referred to in rule 2A.12.

region change implementation procedure

A procedure referred to in rule 2A.11 approved by the *AEMC* in a region determination, as amended from time to time in accordance with Part B of Chapter 2A.

region determination

A determination made by the *AEMC* under Chapter 2A and includes a draft region determination or a final region determination as the context requires.

second round consultation notice

The notice published by the *AEMC* in accordance with clause 2A.7.2.

second round consultation period

The period of time referred to in clause 2A.7.2(b)(2) that is within 60 *business days* of the date of the second round consultation notice.

second round submission

A written submission made within the second round consultation period in accordance with clause 2A.7.3.

start date

The date nominated by the *AEMC* in a final region determination on which a change to the existing *regions* comes into effect.

technically competent application

A region change application that meets the technical requirements in clause 2A.2.4.

unmodified regions

The *regions* whose boundaries are not affected by a region determination.

CHAPTER 3

3. Market Rules

3.1 Introduction to Market Rules

3.1.1 Purpose

This Chapter sets out the procedures which govern the operation of the *market* relating to the wholesale trading of electricity and the provision of *ancillary services* and includes provisions relating to:

- (a) *prudential requirements* to be met for participation in the *market*;
- (b) the operation of the *spot market*;
- (c) bidding and *dispatch*;
- (d) *spot price* determination;
- (d1) the determination of *ancillary service prices*;
- (e) *AEMO* clearing house and trading functions;
- (f) *market* information requirements and obligations;
- (g) the conditions and procedures for *market suspension*; and
- (h) *settlements*.

3.1.1A Definitions

In this Chapter:

credit limit procedures means the procedures developed, *published* and maintained by *AEMO* under clause 3.3.8.

credit period means the sum of the payment period and the reaction period as determined by *AEMO*.

maximum credit limit means the minimum amount of *credit support* a *Market Participant* must provide to *AEMO* for the relevant credit period, as determined by *AEMO* in accordance with clause 3.3.8.

outstandings limit means *AEMO's* estimate of the maximum value that a *Market Participant's outstandings* can reach over the payment period if the *Market Participant* has lodged *credit support* equal to the maximum credit limit.

payment period means the number of days in a *billing period* plus the number of days until payment is due with respect to transactions for that *billing period*.

prudential margin means the allowance made by *AEMO* in determining a *Market Participant's* maximum credit limit for the accrual of the *Market Participant's outstandings* during the reaction period.

prudential probability of exceedance means the probability of the *Market Participant's* maximum credit limit being exceeded by its *outstandings* at the end of the reaction period following the *Market Participant* exceeding its outstandings limit on any day, and failing to rectify this breach.

prudential settings means the maximum credit limit, outstandings limit and prudential margin as determined by *AEMO* in accordance with clause 3.3.8.

prudential standard means the value of the prudential probability of exceedance, expressed as a percentage, and as specified under clause 3.3.4A, to be used by *AEMO* to determine the prudential settings to apply to *Market Participants*.

reaction period means a period of 7 days. It represents, for the purpose of calculating the prudential settings, the time from the day that a *Market Participant's outstandings* exceeds its *trading limit* to when the *Market Participant* is suspended from trading under clause 3.15.21(c) if the exceedance is not rectified.

3.1.2 [Deleted]

3.1.3 [Deleted]

3.1.4 Market design principles

(a) This Chapter is intended to give effect to the following market design principles:

- (1) minimisation of *AEMO* decision-making to allow *Market Participants* the greatest amount of commercial freedom to decide how they will operate in the *market*;
- (2) maximum level of *market* transparency in the interests of achieving a very high degree of *market* efficiency, including by providing accurate, reliable and timely forecast information to *Market Participants*, in order to allow for responses that reflect underlying conditions of supply and demand;
- (3) avoidance of any special treatment in respect of different technologies used by *Market Participants*;
- (4) consistency between *central dispatch* and pricing;
- (5) equal access to the market for existing and prospective *Market Participants*;
- (6) *market ancillary services* should, to the extent that it is efficient, be acquired through competitive market arrangements and as far as

practicable determined on a dynamic basis. Where dynamic determination is not practicable, competitive commercial contracts between *AEMO* and service providers should be used in preference to bilaterally negotiated arrangements;

- (7) the relevant action under section 116 of the *National Electricity Law* or direction under clause 4.8.9 must not be affected by competitive market arrangements;
- (8) where arrangements require participants to pay a proportion of *AEMO* costs for *ancillary services*, charges should where possible be allocated to provide incentives to lower overall costs of the *NEM*. Costs unable to be reasonably allocated this way should be apportioned as broadly as possible whilst minimising distortions to production, consumption and investment decisions; and
- (9) where arrangements provide for *AEMO* to acquire an *ancillary service*, *AEMO* should be responsible for settlement of the service.

(a1) **[Deleted]**

(a2) **[Deleted]**

- (b) This Chapter is not intended to regulate anti-competitive behaviour by *Market Participants* which, as in all other markets, is subject to the relevant provisions of the *Competition and Consumer Act 2010* (Cth) and the Competition Codes of *participating jurisdictions*.

3.1.5 Time for undertaking action

The provisions of clause 1.7.1(l) do not apply to this Chapter and, under the provisions of this Chapter, an event which is required to occur on or by a stipulated *day* must occur on or by that *day* whether or not a *business day*.

3.2 AEMO's Market Responsibilities

3.2.1 Market functions of AEMO

- (a) *AEMO* must operate and administer the *market* in accordance with this Chapter.
- (b) *AEMO* must establish, maintain and *publish* a register of all current *Market Participants*.
- (c) *AEMO* must:
 - (1) establish procedures for consultation with *Registered Participants* in respect of the manner in which *AEMO* fulfils its functions and obligations under the *Rules*; and

- (2) *publish* annually performance indicators to monitor *AEMO's* performance in respect of its *market* management functions.

3.2.2 Spot market

AEMO must do all things necessary to operate and administer a *spot market* for the sale and purchase of electricity and *market ancillary services* in accordance with this Chapter including:

- (a) the provision of facilities for the receipt and processing of *dispatch bids*, *dispatch offers* and *market ancillary service offers* for the *spot market*;
- (b) the management of a centralised national *dispatch* process, including the publication of *pre-dispatch schedules* and *spot price forecasts*;
- (c) the determination and publication of *spot prices* at each *regional reference node* for each *trading interval*;
- (c1) the determination and publication of *ancillary service prices* at each *regional reference node* for each *dispatch interval*;
- (d) the compilation and publication of *spot market* trading statistics;
- (e) the identification of *regions* and *regional reference nodes* for *spot price* and *ancillary service price* determination;
- (f) the determination and publication of *inter-regional loss factors* and *intra-regional loss factors*;
- (g) the suspension of the *spot market* under conditions prescribed in rule 3.14; and
- (h) the collection and dissemination of information necessary to enable the *market* to operate efficiently.

3.2.3 Power system operations

- (a) Subject to Chapter 4, *AEMO* must manage the day to day operation of the *power system*, using its reasonable endeavours to maintain *power system security* in accordance with this Chapter.
- (b) *AEMO* must perform *projected assessment of system adequacy processes (PASA)* in accordance with rule 3.7, *publish* the details of these assessments in accordance with rule 3.13 and implement an escalating series of *market interventions* in accordance with this Chapter to maintain *power system security*.

3.2.4 Non-market ancillary services function

- (a) *AEMO* must determine the *market's* requirements for *non-market ancillary services* in accordance with rule 3.11.

- (b) *AEMO* must use reasonable endeavours to acquire *non-market ancillary services* in accordance with rule 3.11.

3.2.5 [Deleted]

3.2.6 Settlements

AEMO must provide a financial *settlements* service in accordance with rule 3.15, including billing and clearance for all *market* trading.

3.3 Prudential Requirements

3.3.1 Market Participant criteria

Each *Market Participant* must whilst participating in the *market*:

- (a) be resident in, or have a permanent establishment in, Australia;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) [Deleted].
- (c) not be immune from suit in respect of the obligations of the *Market Participant* under the *Rules*; and
- (d) be capable of being sued in its own name in a court of Australia.

3.3.2 Credit support

Where at any time a *Market Participant* does not meet the *acceptable credit criteria*, the *Market Participant* must procure that *AEMO* holds the benefit of *credit support* in respect of that *Market Participant*. A *credit support* is an obligation in writing which:

- (a) is from an entity (the *Credit Support Provider*) which meets the *acceptable credit criteria* and which is not itself a *Market Participant*;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) is a guarantee or bank letter of credit in a form prescribed by *AEMO*;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) is duly executed by the *Credit Support Provider* and delivered unconditionally to *AEMO*;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) constitutes valid and binding unsubordinated obligations of the *Credit Support Provider* to pay to *AEMO* amounts in accordance with its terms which relate to obligations of the relevant *Market Participant* under the *Rules*; and

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (e) permits drawings or claims by *AEMO* to a stated certain amount.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

3.3.3 Acceptable credit criteria

Where the *Rules* require that an entity meet the *acceptable credit criteria*, this means that the entity must:

- (a) be either:
 - (1) any entity under the prudential supervision of the Australian Prudential Regulation Authority; or
 - (2) a central borrowing authority of an Australian State or Territory which has been established by an Act of Parliament of that State or Territory;
- (b) be resident in, or have a permanent establishment in, Australia;
- (c) not be an externally administered body corporate (as defined in the Corporations Act) or under a similar form of administration under any laws applicable to it in any jurisdiction;
- (d) not be immune from suit;
- (e) be capable of being sued in its own name in a court of Australia; and
- (f) have an *acceptable credit rating*.

3.3.4 Acceptable credit rating

- (a) *AEMO* may from time to time, after complying with the *Rules consultation procedures*, determine what constitutes an *acceptable credit rating* for the purposes of the *Rules*, including (without limitation) determining which organisations publishing ratings will be used for this purpose, which of the type of ratings issued will be used for this purpose, and which level of rating is to be acceptable.
- (b) Until varied by determination of *AEMO*, an *acceptable credit rating* is either:
 - (1) a rating of A-1 or higher for short term unsecured counterparty obligations of the entity, as rated by Standard and Poor's (Australia) Pty. Limited; or
 - (2) a rating of P-1 or higher for short term unsecured counterparty obligations of the entity, as rated by Moodys Investor Service Pty. Limited.
- (c) Any determination of *AEMO* which varies what constitutes an *acceptable credit rating* will take effect from such date (not being earlier than 30 *business days* after the date of notification of the determination to *Market Participants*) as *AEMO* specifies by notice to the *Market Participants*.

3.3.4A Prudential standard

The prudential standard is 2%.

3.3.5 Amount of credit support

A *Market Participant* which does not meet the *acceptable credit criteria* must procure that at all times the aggregate undrawn or unclaimed amounts of then current and valid *credit support* held by *AEMO* in respect of the *Market Participant* is not less than the current maximum credit limit for that *Market Participant*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

3.3.6 Changes to credit support

- (a) If:
 - (1) a *credit support* provided to *AEMO* by a *Market Participant* under this rule 3.3 (called the **existing credit support**), is due to expire or terminate; and

- (2) after that *credit support* expires or terminates the total *credit support* held by AEMO in respect of that *Market Participant* will be less than the *Market Participant's* maximum credit limit,

then at least 10 *business days* prior to the time at which the existing *credit support* is due to expire or terminate the *Market Participant* must procure a replacement *credit support* which will become effective upon expiry of the existing *credit support* such that it complies with the requirements of this rule 3.3.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) Where a *credit support* otherwise ceases to be current or valid, whether by reason of the *Credit Support Provider* ceasing to meet the *acceptable credit criteria* or any other reason, the *Market Participant* must procure the replacement of that *credit support* so as to comply with its obligation to maintain aggregate undrawn current and valid *credit support* of not less than the current maximum credit limit for that *Market Participant*. The *Market Participant* must procure that the replacement *credit support* is issued to AEMO within 24 hours after the *Market Participant* first becomes aware that the *credit support* has ceased to be current or valid (whether by reason of the *Market Participant's* own knowledge or a notification by AEMO).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

3.3.7 Drawings on credit support

- (a) If AEMO exercises its rights under a *credit support* provided by a *Market Participant* under this rule 3.3 in accordance with clause 3.15.21(b)(2), then AEMO must notify the *Market Participant*.
- (b) If, as a result of AEMO exercising its rights under a *credit support* provided by a *Market Participant* under this rule 3.3 in accordance with clause 3.15.21(b)(2), the remaining *credit support* held by AEMO in respect of that *Market Participant* is less than the *Market Participant's* maximum credit limit then, within 24 hours of receiving a notice under clause 3.3.7(a), the *Market Participant* must procure for AEMO additional *credit support* complying with the requirements of this rule 3.3, such that the aggregate undrawn and valid *credit support* held by AEMO in respect of the *Market Participant* is not less than the amount of *credit support* which that *Market Participant* is required to provide under this rule 3.3.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

3.3.8 Credit limit procedures and prudential settings

Credit limit procedures

- (a) This clause sets out the framework for the establishment and determination of the prudential settings for *Market Participants* in the *NEM*.
- (b) The objective of the credit limit procedures is to establish the process by which *AEMO* will determine the prudential settings for each *Market Participant* so that the prudential standard is met for the *NEM*.
- (c) *AEMO* must develop, and, at all times, *publish* and maintain the credit limit procedures that details the methodology to be used by it to determine the prudential settings to apply to *Market Participants*.
- (d) In developing the methodology to be used by *AEMO* to determine the prudential settings to apply to *Market Participants*, *AEMO* must take into consideration the following factors:
 - (1) the *regional reference price* for the *region* for which the prudential settings are being calculated;
 - (2) the time of year;
 - (3) the volatility of *load* and *regional reference price* for the *regions*;
 - (4) *AEMO's* estimate of the *generation* and *load* for each *Market Participant*;
 - (5) the relationship between average *load* and *peak load* for each *Market Participant*;
 - (6) any *prospective reallocations* for the period being assessed;
 - (7) the correlation between *energy*, *reallocations* and the *regional reference price*;
 - (8) the statistical distribution of any accrued amounts that may be owed to *AEMO*;
 - (9) the relevant time period for which the prudential settings are being calculated; and
 - (10) any other factors *AEMO* considers relevant having regard to the objective of the credit limit procedures under paragraph (b).
- (e) **[Deleted]**

- (f) At least once a year, *AEMO* must review, prepare and *publish* a report on the effectiveness of the methodology developed under this clause in achieving the objective of the credit limit procedures under paragraph (b), with any recommendations for the enhancement of the methodology.
- (g) Subject to paragraph (h), *AEMO* must comply with the *Rules consultation procedures* when making or amending the credit limit procedures.
- (h) *AEMO* may make minor or administrative amendments to the credit limit procedures without complying with the *Rules consultation procedures*.

Prudential settings

- (i) *AEMO* must determine the prudential settings to apply to *Market Participants* in accordance with:
 - (1) the objective of the credit limit procedures under paragraph (b); and
 - (2) the credit limit procedures.
- (j) The outstandings limit and prudential margin are interdependent, and *AEMO* must determine these simultaneously to meet the prudential standard for the *NEM*.
- (k) The maximum credit limit for a *Market Participant* is the dollar amount determined by *AEMO* using the following formula:

$$MCL = OSL + PM$$

where:

MCL is the maximum credit limit;

OSL is the outstandings limit; and

PM is the prudential margin.

- (k1) The prudential margin for a *Market Participant* must not be a negative amount.
- (l) *AEMO* must review the prudential settings that apply to each *Market Participant* no later than a year after the last determination or review of the *Market Participant's* prudential settings.
- (m) At any time, and for any reason that is consistent with objective of the credit limit procedures under paragraph (b), *AEMO* may change the prudential settings that apply to a *Market Participant*, provided that any change to the *Market Participant's* prudential settings applies no earlier than one *business day* after the date *AEMO* notifies the *Market Participant* of changes to its prudential settings.

- (n) *AEMO* must notify, in writing, the *Market Participant* of any determination or change of a *Market Participant*'s prudential settings, and provide reasons for that determination or change.

3.3.8A Security Deposits

At any time, a *Market Participant* may provide a security deposit to *AEMO* to secure payment of any amount which may become payable in respect of a *billing period*.

3.3.9 Outstandings

At any time the *outstandings* of a *Market Participant* is the dollar amount determined by the formula:

$$OS = - (A + B + SDA)$$

where:

OS is the amount of the *outstandings* of the *Market Participant*;

A is the aggregate of the net *settlement amounts* payable in respect of *billing periods* prior to the current *billing period* which remain unpaid by, or to, the *Market Participant* whether or not the *payment date* has yet been reached;

B is the net *settlement amount* payable by, or to, the *Market Participant* in respect of *transactions* for *trading intervals* that have already occurred in the current *billing period*; and

SDA is the balance (if any) of the *Market Participant* in the security deposit fund, in which case a credit balance will be a positive amount and a debit balance will be a negative amount.

The amounts to be used in this calculation will be the actual *settlement amounts* for *billing periods* where *final statements* have been issued by *AEMO* or *AEMO*'s reasonable estimate of the *settlement amounts* for *billing periods* (where *final statements* have not been issued by *AEMO*).

Note:

Where the value of *outstandings* of a *Market Participant* is a negative amount the absolute value of the *outstandings* amount will, for the purposes of rule 3.3, be treated as if it were an amount payable by *AEMO* to the *Market Participant*.

3.3.10 Trading limit

The *trading limit* for a *Market Participant* is the dollar amount determined by *AEMO* using the following formula

$$TL = CS - PM$$

where:

TL is the *trading limit*;

CS is the *credit support* provided by the *Market Participant*; and

PM is the prudential margin determined by AEMO in accordance with clause 3.3.8

Note:

If the prudential margin exceeds the *credit support*, the *trading limit* will have a negative value.

3.3.11 Call notices

(a) If at any time the *outstandings* of a *Market Participant* is greater than the *trading limit* for that *Market Participant*, AEMO may do either or both of the following:

- (1) give the *Market Participant* an “*interim statement*” covering any *transactions* for *trading intervals* not already the subject of issued *preliminary statements* or *final statements* or another *interim statement*, notwithstanding that the usual time for the issue of a *preliminary statement* or *final statement* for those *trading intervals* has not been reached; and
- (2) give the *Market Participant* a notice (a *call notice*) that specifies an *invoiced amount*, the current maximum credit limit for the *Market Participant*, the current *trading limit* for the *Market Participant*, and the *call amount*, where:

Call Amount = the higher of:

(OS – TypA); and

(OS – TL)

except where the formula produces a negative result, in which case the *call amount* is zero,

where:

OS is the *outstandings* for the *Market Participant* as at the date of the issue of the *call notice*; and

TypA is the *typical accrual* for the *Market Participant* as at the date of the issue of the *call notice*; and

TL is the *trading limit* for the *Market Participant* as at the date of the issue of the *call notice*.

Note:

If the value of *outstandings* of a *Market Participant* has a negative value and the *trading limit* also has a negative value, the *outstandings* will be greater than the *trading limit* if the absolute value of the *trading limit* is greater than the absolute value of the *outstandings*, in

which case *AEMO* may exercise its powers under either or both of clauses 3.3.11(a)(1) or 3.3.11(a)(2).

- (b) *AEMO* may, in its absolute discretion, cancel a *call notice* or *interim statement* issued under this clause at any time. The cancellation of a *call notice* or *interim statement* does not affect *AEMO*'s rights to issue a further *call notice* or *interim statement* on the same grounds that gave rise to *AEMO* issuing the cancelled *call notice* or *interim statement*.

3.3.12 Typical accrual

- (a) The *typical accrual* for a *Market Participant* at any time is the amount which *AEMO* determines would have been the *outstandings* of the *Market Participant* at that time had the *spot prices* and *ancillary service prices* and the *trading amounts* of the *Market Participant* been at the level of the average *spot price* and *ancillary service prices* and average *trading amounts* of the *Market Participant* used by *AEMO* for the purposes of the most recent determination of the maximum credit limit of the *Market Participant*.

Note:

The value of the *typical accrual* of a *Market Participant* will be a negative amount if the average *settlement amount* of the *Market Participant* is a positive amount.

- (b) *AEMO* must, on request from a *Market Participant*, provide that *Market Participant* with details of any *typical accrual* for that *Market Participant*.

3.3.13 Response to Call Notices

- (a) Subject to clause 3.3.13(b), where *AEMO* has given a *call notice* to a *Market Participant*, the *Market Participant* must before 11.00 am (Sydney time) on the next *business day* following the issue of the *call notice* either:
 - (1) agree with *AEMO* to an increase in the *Market Participant's* maximum credit limit by an amount not less than the *call amount*, and provide to *AEMO* additional *credit support* where, by virtue of the increase in the maximum credit limit, the *Market Participant* no longer complies with its obligations under clause 3.3.5;
 - (2) (where clause 3.3.13(a)(1) is not satisfied) pay to *AEMO* in cleared funds a security deposit of an amount not less than the *call amount*;
 - (3) lodge a *reallocation request* of an amount which is not less than the *call amount* and which is accepted by *AEMO*; or
 - (4) provide to *AEMO* any combination of clauses 3.3.13(a)(1), (2) and (3) such that the aggregate of the amount which can be drawn under the additional *credit support* provided and the amount of the security deposit paid and the amount of the *reallocation request* accepted by *AEMO* is not less than the *call amount*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) If *AEMO* gives a *call notice* to a *Market Participant* after 1:00 pm (Sydney time), then *AEMO* is deemed to have given that *call notice* on the next *business day* for the purposes of this clause.

3.3.13A Application of monies in the security deposit fund

- (a) Subject to clauses 3.3.13A(b) and (e), *AEMO* may apply money from the security deposit fund recorded as a credit balance in the name of a *Market Participant* in payment of monies owing by that *Market Participant* to *AEMO*:

- (1) in respect of any *final statement* previously given to that *Market Participant* which has not been fully paid by the appointed time on the due date and remains unpaid; or
 - (2) at the time of issuing any *final statement*,

in which case *AEMO* may set off all, or part of, any amount by which a *Market Participant* is in credit in the security deposit fund at that time against any amounts owing to *AEMO* under the *final statement*.

- (b) Subject to clause 3.3.13A(c):
 - (1) a *Market Participant* may, by giving notice at least one *business day* prior to the due time for the issue of a *final statement*, seek agreement with *AEMO* on the arrangements to apply to the application of security deposits paid by that *Market Participant* under clause 3.3.8A against amounts owing to *AEMO* under a particular *final statement* or *final statements*; and
 - (2) *AEMO* must apply the security deposits in accordance with an agreement reached under clause 3.3.13A(b)(1).

If agreement is not reached between *AEMO* and the *Market Participant* under this clause, then *AEMO* has a discretion to apply the security deposit funds of that *Market Participant* in payment of moneys that the *Market Participant* owes *AEMO* as set out in clauses 3.3.13A(a)(1) and (2).

- (c) Despite any agreement under clause 3.3.13A(b), if a *default event* occurs in relation to a *Market Participant*, then *AEMO* has a discretion as to which amounts owing to *AEMO* under *final statements* it applies or partially applies security deposits paid by that *Market Participant* under clause 3.3.8A.
- (d) In the case of security deposits paid by a *Market Participant* in the security deposit fund under clause 3.3.13, *AEMO* has a discretion as to which *final statements* it applies or partially applies those monies against.

- (e) However, in exercising its discretion in clauses 3.3.13A(b), (c) or (d), if a *Market Participant* pays *AEMO* a security deposit, then *AEMO* must apply any remaining portion of the security deposit (taking into account deductions for any liabilities or expenses of the security deposit fund) against the longest outstanding amounts owing to *AEMO* under *final statements* issued not later than the *final statement* for the *billing period* in which the security deposit was paid to *AEMO*. If, for any reason, *AEMO* has not fully applied such security deposit within this time, then *AEMO* must apply the remainder to amounts owing to *AEMO* under the next *final statement* or *statements* until it has been fully applied.
- (f) If:
 - (1) a *Market Participant* has a credit balance in the security deposit fund and ceases, or intends to cease, being a *Market Participant*; and
 - (2) that *Market Participant* has paid all money owing to *AEMO* and *AEMO* reasonably considers that the *Market Participant* will not owe any money to *AEMO* in the future arising from that person's activities as a *Market Participant*,then *AEMO* must return any credit balance for that *Market Participant* in the security deposit fund to that *Market Participant* (subject to deduction for any liabilities and expenses of the security deposit fund).
- (g) If, for any reason, there is a debit balance in the security deposit fund for a *Market Participant*, then the *Market Participant* must pay that amount to *AEMO*. For this purpose, *AEMO* may:
 - (1) include that amount in the next *final statement*; or
 - (2) issue an account to that *Market Participant* for payment of that debit balance and the *Market Participant* must pay that amount within 2 *business days*.

3.3.14 Potential value of a transaction

At any time, the *potential value* of a *transaction*, or of any bid or offer by a *Market Participant* to effect a *transaction*, under which the *trading amount* payable to *AEMO* is determined by reference to one or more specified *regional reference prices* or *ancillary service prices*, is the dollar amount determined by this procedure:

- (a) the *transaction* is first tested to determine the *trading amount* which would result for the *Market Participant* if the *regional reference price* or *ancillary service price* applicable to the *transaction* was equal to the *scheduled high price*;
- (b) the *transaction* is then tested to determine the *trading amount* which would result for the *Market Participant* if the *regional reference price* or *ancillary*

service price applicable to the *transaction* was equal to the *scheduled low price*;

- (c) if the *trading amount* resulting for both tests is a positive amount or zero, then the *potential value* of the *transaction* is zero;
- (d) if the *trading amount* resulting for either test is a negative amount, then the *potential value* of the *transaction* is the absolute value of the negative amount (or, where both tests produce a negative amount, the *potential value* of the *transaction* is the absolute value of the most negative amount).

3.3.15 Trading margin

At any time, the *trading margin* for a *Market Participant* is a dollar amount equal to the amount by which its *trading limit* exceeds its current *outstandings* due to AEMO and if the *outstandings* are equal to or exceed the *trading limit*, the *trading margin* is zero.

3.3.16 Limitation on entry of transactions

- (a) A *Market Participant* must not submit any bid or offer to effect any *transaction* with AEMO where the *potential value* of that *transaction*, plus the *potential value* of all other *uncompleted transactions*, exceeds the *trading margin* for the *Market Participant*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) A *transaction* is an *uncompleted transaction* if some or all of the *trading intervals* to which that *transaction* relates have not yet occurred.

3.3.17 Scheduled prices

- (a) The *scheduled high price* and the *scheduled low price* are amounts determined by AEMO in its absolute discretion from time to time as a basis upon which to determine the *potential value* of a *transaction* in accordance with clause 3.3.14.
- (b) AEMO may determine different *scheduled high prices* and *scheduled low prices* for each *region*.
- (c) The *scheduled high price* for *energy* and *market ancillary services* cannot be greater than the *market price cap* and the *scheduled low price* for:
 - (i) *energy*, cannot be less than the *market floor price*; and
 - (ii) *market ancillary services*, cannot be less than zero.
- (d) AEMO must notify all *Market Participants* without delay of any determination of *scheduled high prices* and *scheduled low prices*.

- (e) For *Market Participants* who do not trade in the *spot market*, the *scheduled high price* shall be the *market price cap* and the *scheduled low price* shall be zero.

3.3.18 Additional credit support

- (a) Where at any time the aggregate *potential value* of a *Market Participant's* *uncompleted transactions* exceeds the *trading margin* for the *Market Participant* (including without limitation where this is a result of a redetermination of *scheduled high prices* or *scheduled low prices*) the *Market Participant* must provide to AEMO additional *credit support* satisfying the criteria in clause 3.3.2 for an amount not less than the amount by which the *trading margin* is exceeded. The *Market Participant* must procure that the additional *credit support* is provided to AEMO within 24 hours after AEMO has notified the *Market Participant* that additional *credit support* is required.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) *Credit support* required pursuant to this clause 3.3.18 is in addition to and not inclusive of the *credit support* which a *Market Participant* is required to procure pursuant to other provisions of the *Rules*.

3.3.19 Consideration of other Market Participant transactions

- (a) For the purposes of determining the *prudential requirements* to be satisfied by *Market Participants* in accordance with this rule 3.3, AEMO must consult with *Market Participants* and any other person AEMO considers appropriate.
- (b) AEMO is not required to meet its obligations under clause 3.3.19(a) in any way which increases AEMO's risks in the collection of moneys owed to it in accordance with any of the provisions of the *Rules*.

3.4 Spot Market

3.4.1 Establishment of spot market

- (a) AEMO must establish and operate a *spot market* as a mechanism for:
 - (1) balancing electricity *supply* and demand;
 - (2) acquiring *market ancillary services*; and
 - (3) setting a *spot price* for electricity at each *regional reference node* and *market connection point* for each *trading interval* and *ancillary service prices* at each *regional reference node* for each *dispatch interval*.

- (b) *AEMO* must determine and *publish* in accordance with rule 3.9:
 - (1) a *spot price* for *energy* to apply at each *regional reference node* in each *trading interval*; and
 - (2) *ancillary service prices* to apply at each *regional reference node* for each *dispatch interval*.

3.4.2 Trading day and trading interval

- (a) A *trading interval* is a 30 minute period ending on the hour or on the half hour.
- (b) A *trading interval* is identified by the *time* at which it ends.
- (c) The *trading day* in the *spot market* will be the 24 hour period commencing at 4.00 am *Eastern Standard Time*.

3.4.3 Spot market operations timetable

- (a) *AEMO* must operate the *spot market* according to the *timetable* which must be approved by the *AEMC* and *published* by *AEMO* following compliance with the *Rules consultation procedures*.
- (b) If *AEMO* wishes to change the *timetable* at any time, it may do so following compliance with the *Rules consultation procedures*.
- (c) If *AEMO* amends the *timetable* in accordance with paragraph (b), *AEMO* must:
 - (1) *publish* the amended *timetable*; and
 - (2) operate the *spot market* according to the *timetable* as amended.

3.5 Regions

3.5.1 [Deleted]

3.5.2 [Deleted]

3.5.3 [Deleted]

3.5.4 [Deleted]

3.5.5 [Deleted]

3.5.6 [Deleted]

3.6 Network Losses and Constraints

3.6.1 Inter-regional losses

- (a) *Inter-regional losses* are electrical energy losses due to a notional transfer of electricity through *regulated interconnectors* from the *regional reference node* in one *region* to the *regional reference node* in an adjacent *region*.
- (b) *Inter-regional loss factors*:
 - (1) describe the *marginal electrical energy losses* for electricity transmitted through *regulated interconnectors* from a *regional reference node* in one *region* to the *regional reference node* in an adjacent *region* for a particular time period and a defined range of operating conditions;
 - (2) to apply between each pair of adjacent *regional reference nodes* are to be determined as part of the *central dispatch* process using *inter-regional loss factor* equations derived in accordance with the methodology determined by AEMO pursuant to clause 3.6.1(c); and
 - (3) are to be used in the *central dispatch* process as a notional adjustment to relate the prices of electricity at *regional reference nodes* in adjacent *regions* so as to reflect the cost of *inter-regional losses*.
- (c) AEMO must determine, *publish* and maintain, in accordance with the *Rules consultation procedures*, a methodology for the determination of *inter-regional loss factor* equations for a *financial year*, describing *inter-regional loss factors* between each pair of adjacent *regional reference nodes* in terms of significant variables.
- (d) In preparing the methodology for the determination of *inter-regional loss factor* equations referred to in clause 3.6.1(c), AEMO must implement the following principles:
 - (1) *Inter-regional loss factor* equations are to apply for a *financial year*.

- (2) *Inter-regional loss factor* equations must be suitable for use in *central dispatch*.
- (3) *Inter-regional loss factors* are determined as part of the *central dispatch* process using *inter-regional loss factor* equations. The *inter-regional loss factors* must:
 - (i) as closely as is reasonably practicable, describe the *marginal electrical energy losses* for electricity transmitted through the relevant *regulated interconnector* between the 2 relevant *regional reference nodes* in adjacent *regions* for each *trading interval* of the *financial year* in respect of which the relevant *inter-regional loss factor* equations apply; and
 - (ii) aim to minimise the impact on the *central dispatch* process of *generation* and *scheduled load* as compared to the *dispatch* of *generation* and *scheduled load* which would result from a fully optimised dispatch process taking into account the effect of losses.
- (4) *Inter-regional loss factor* equations are determined using forecast *load* and *generation* data and, if required, modelled *load* and *generation* data for the *financial year* in which the *inter-regional loss factor* equations are to apply. The forecast *load* and *generation* data and modelled *load* and *generation* data, if any, used must be that *load* and *generation* data prepared by AEMO pursuant to clause 3.6.2A.
- (5) *Inter-regional loss factor* equations are determined by applying regression analysis to the *load* and *generation* data referred to in clause 3.6.1(d)(4) to determine:
 - (i) the variables which have a significant effect on the *marginal electrical energy losses* for electricity transmitted through each *regulated interconnector* for both directions of flow on those *regulated interconnectors*; and
 - (ii) the parameters that represent the relationship between each of those variables and the *marginal electrical energy losses*.
- (e) AEMO must determine the *inter-regional loss factor* equations used to calculate *inter-regional loss factors* in each *financial year* in accordance with the methodology prepared and *published* by AEMO under clause 3.6.1(c).
- (f) AEMO must *publish* the *inter-regional loss factor* equations determined under clause 3.6.1(e) by 1 April prior to the *financial year* in which they are to apply.

3.6.2 Intra-regional losses

- (a) *Intra-regional losses* are *electrical energy losses* that occur due to the transfer of electricity between a *regional reference node* and *transmission network connection points* in the same *region*.
- (b) *Intra-regional loss factors*:
 - (1) notionally describe the *marginal electrical energy losses* for electricity transmitted between a *regional reference node* and a *transmission network connection point* in the same *region* for a defined time period and associated set of operating conditions;
 - (2) will be either:
 - (i) two *intra-regional loss factors* where *AEMO* determines, in accordance with the methodology determined under clause 3.6.2(d), that one *intra-regional loss factor* does not, as closely as is reasonably practicable, describe the average of the *marginal electrical energy losses* for electricity transmitted between a *transmission network connection point* and the *regional reference node* for the *active energy* generation and consumption at that *transmission network connection point*; or
 - (ii) one static *intra-regional loss factor* in all other circumstances;
 - (2A) must be determined in accordance with the methodology determined by *AEMO* under clause 3.6.2(d) for each *transmission network connection point*;
 - (2B) apply for a *financial year*; and
 - (3) may, with the agreement of the *AER*, be averaged over an adjacent group of *transmission network connection points* within a single *region*. If averaging is used, the relevant *transmission network connection points* will be collectively defined as a *virtual transmission node* with a *loss factor* calculated as the volume weighted average of the *transmission loss factors* of the constituent *transmission network connection points*.
- (b1) If *AEMO* determines two *intra-regional loss factors* for a *transmission network connection point* under clause 3.6.2(b)(2), *AEMO* must apply the *intra-regional loss factors* in *central dispatch* and *spot market transactions* in accordance with the procedure determined by *AEMO* under clause 3.6.2(d1).
- (c) An *intra-regional loss factor* is to be used as a price multiplier that can be applied to the *regional reference price* to determine the *local spot price* at each *transmission network connection point* and *virtual transmission node*.
- (d) *AEMO* must determine, *publish* and maintain, in accordance with *Rules consultation procedures*, a methodology for the determination of

intra-regional loss factors to apply for a *financial year* for each *transmission network connection point*.

- (d1) AEMO must determine, *publish* and maintain, in consultation with *Registered Participants*, a procedure that includes a description of the manner in which AEMO will, if two *intra-regional loss factors* apply to a *transmission network connection point*, apply two *intra-regional loss factors* in *central dispatch* and *spot market transactions*. The procedure determined under this paragraph (d1) must describe how AEMO will identify and measure the *generation* and *load* at each *transmission network connection point* and apply the relevant *intra-regional loss factor* against that *generation* or *load*.
- (e) In preparing the methodology referred to in clause 3.6.2(d), AEMO must implement the following principles:
 - (1) *Intra-regional loss factors* are to apply for a *financial year*.
 - (2) An *intra-regional loss factor* must, as closely as is reasonably practicable, describe the average of the *marginal electrical energy losses* for electricity transmitted between a *transmission network connection point* and the *regional reference node* in the same *region* for each *trading interval* of the *financial year* in which the *intra-regional loss factor* applies.
 - (2A) *Intra-regional loss factors* must aim to minimise the impact on the *central dispatch* process of *generation* and *scheduled load* compared to that which would result from a fully optimised dispatch process taking into account the effect of losses.
 - (3) Forecast *load* and *generation* data for the *financial year* for which the *intra-regional loss factor* is to apply must be used. The forecast *load* and *generation* data used must be that *load* and *generation* data prepared by AEMO pursuant to clause 3.6.2A.
 - (4) The *load* and *generation* data referred to in clause 3.6.2(e)(3) must be used to determine *marginal loss factors* for each *transmission network connection point* for each *trading interval* in the *financial year* to which the *load* and *generation* data relates.
 - (5) An *intra-regional loss factor* for a *transmission network connection point* is determined using a volume weighted average of the *marginal loss factors* for the *transmission network connection point*.
 - (6) In determining an *intra-regional loss factor* for a *transmission network connection point*, flows in *network elements* that solely or principally provide *market network services* will be treated as invariant, as the methodology is not seeking to calculate the marginal losses within such *network elements*.

- (f) *AEMO must calculate intra-regional loss factors for each transmission network connection point for each financial year in accordance with the methodology prepared and published by AEMO under clause 3.6.2(d).*
- (f1) *By 1 April in each year, AEMO must publish the intra-regional loss factors revised under clause 3.6.2(f) and to apply for the next financial year.*
- (g) *AEMO must, in accordance with the Rules consultation procedures, determine, publish and maintain the methodology which is to apply to the calculation of average transmission loss factors, determined in accordance with clause 3.6.2(b)(3), for each virtual transmission node proposed by a Distribution Network Service Provider.*
- (h) *As soon as practicable after the publication of the methodology referred to in clause 3.6.2(g), and thereafter by 1 April in each year, AEMO must calculate and publish the transmission loss factors for each virtual transmission node, determined in accordance with clause 3.6.2(b)(3), that are to apply for the next financial year.*
- (i) *Notwithstanding clauses 3.6.2(a) to (f1), AEMO must:*
 - (1) *determine an intra-regional loss factor in the financial year in which an intra-regional loss factor is to apply for a transmission network connection point which is established in that financial year in accordance with the procedure for establishing connection set out in rule 5.3, provided that AEMO did not determine an intra-regional loss factor for the transmission network connection point pursuant to clause 3.6.2(f1) in the financial year preceding that in which the connection point is established; or*
 - (2) *revise an intra-regional loss factor in the financial year in which an intra-regional loss factor is to apply for a transmission network connection point which is modified in that financial year in accordance with the procedure for modifying connection set out in rule 5.3, provided that, in AEMO's reasonable opinion, the modification to that connection point results in a material change in the capacity of the connection point.*
- (j) *AEMO must, where required to determine an intra-regional loss factor for an established or modified transmission network connection point under clause 3.6.2(i), do so as far as practicable in accordance with the methodology published by AEMO pursuant to clause 3.6.2(d).*
- (k) *For the purposes of clause 3.6.2(j), the forecast load and generation data used to calculate an intra-regional loss factor for the transmission network connection point must be determined using the forecast load and generation data determined by AEMO under clause 3.6.2A for other transmission network connection points in the same region for that financial year adjusted to take into account the effect of the established or modified connection point. Notwithstanding this clause 3.6.2(k), Registered Participants must comply with their obligations with respect to the*

provision of information to *AEMO*, for the purpose of determining new or revised *intra-regional loss factors* for *connection points* that are established or modified during the *financial year* in which the *intra-regional loss factors* are to apply, specified by the methodology developed and *published* by *AEMO* under clause 3.6.2A.

- (l) In the case of a *connection point* that is established in the *financial year* in which an *intra-regional loss factor* is to apply:
 - (1) an *intra-regional loss factor* determined by *AEMO* in accordance with clause 3.6.2(i) will apply from the time an *intra-regional loss factor* is determined and *published* by *AEMO*; and
 - (2) *AEMO* must use reasonable endeavours to determine and *publish* an *intra-regional loss factor* at least 45 *business days* prior to the commencement of operation of the established *connection point*, where the relevant *Registered Participants* comply with any applicable requirements and deadlines for the provision of information to *AEMO* specified by the methodology *published* by *AEMO* under clause 3.6.2A.
- (m) In the case of a *connection point* that is modified in the *financial year* in which an *intra-regional loss factor* is to apply:
 - (1) an *intra-regional loss factor* determined by *AEMO* in accordance with clause 3.6.2(i) will apply from the date when the modification to the *connection point* takes effect; and
 - (2) *AEMO* must use reasonable endeavours to *publish* an *intra-regional loss factor* at least 45 *business days* prior to the date when the modification to the *connection point* takes effect, where the relevant *Registered Participants* comply with any applicable requirements and deadlines for the provision of information to *AEMO* specified by the methodology *published* by *AEMO* under clause 3.6.2A.
- (n) For the avoidance of doubt, where *AEMO* determines an *intra-regional loss factor* for a *transmission network connection point* under clause 3.6.2(i), which is to apply in the *financial year* in which the *transmission network connection point* is established or modified, the *intra-regional loss factors* for all other *transmission network connection points* for that *financial year*, determined in accordance with clauses 3.6.2(a) to (g), must remain unchanged.

3.6.2A Load and generation data used to determine inter-regional loss factor equations and intra-regional loss factors

- (a) *AEMO* must prepare *load* and *generation* data for each *financial year* to be used in both the determination of *inter-regional loss factor* equations under clause 3.6.1 and *intra-regional loss factors* under clause 3.6.2 in accordance with the methodology determined, *published* and maintained by *AEMO* for this purpose, under clause 3.6.2A(b).

- (b) *AEMO* must determine, *publish* and maintain, in accordance with the *Rules consultation procedures*, a methodology for:
 - (1) forecasting the *load* and *generation* data to be used in both the determination of *inter-regional loss factor* equations and *intra-regional loss factors*, including new or revised *intra-regional loss factors* for *connection points* that are established or modified, respectively, during the *financial year* in which the *intra-regional loss factors* are to apply;
 - (2) modelling additional *load* and *generation* data, where required, to be used in determining *inter-regional loss factor* equations; and
 - (3) the collection of relevant data from *Registered Participants*, including without limitation deadlines for the provision of that data by *Registered Participants*.
- (c) The methodology developed and *published* by *AEMO* under clause 3.6.2A(b) must specify information reasonably required by *AEMO* to fulfil its obligations under clause 3.6.2A, including without limitation historic *load* and *generation* data, forecast *energy* and *maximum demand* data for a *connection point* and forecast data for any new *loads*. In particular, the methodology must specify information to be provided by *Registered Participants* that is in addition to the information provided by those *Registered Participants* under other provisions of the *Rules*.
- (d) In preparing the methodology for forecasting and modelling *load* and *generation* data under clause 3.6.2A(b), *AEMO* must implement the following principles:
 - (1) The forecast *load* and *generation* data must be representative of expected *load* and *generation* in the *financial year* in which the *inter-regional loss factor* equations or *intra-regional loss factors* are to apply having regard to:
 - (i) actual *load* and *generation* data available for a 12 month period defined by the methodology with the objective to use the most recent *load* and *generation* data practicable;
 - (ii) projected *load* growth between each calendar month to which the actual *load* and *generation* data referred to in clause 3.6.2A(d)(1)(i) relates and the same calendar month in the *financial year* for which the forecast *load* and *generation* data is determined; and
 - (iii) the projected *network* configuration and projected *network* performance for the *financial year* in which the *inter-regional loss factor* equation or *intra-regional loss factor*, as the case may be, is to apply.
 - (2) Additional modelled *load* and *generation* data sets must only be used:

- (i) in the determination of *inter-regional loss factor* equations under clause 3.6.1; and
 - (ii) where the range of forecast *load* and *generation* data is not sufficient to derive *inter-regional loss factor* equations to apply over the full range of transfer capability of the *regulated interconnector*.
- (e) *Registered Participants* must comply with the obligations to provide information set out in the methodology developed and *published* by AEMO under this clause 3.6.2A, including the deadlines for the provision of that information and any other obligations with respect to the provision of that information set out in the methodology.

3.6.3 Distribution losses

- (a) *Distribution losses* are *electrical energy losses* incurred in the conveyance of electricity over a *distribution network*.
- (b) *Distribution loss factors*:
 - (1) notionally describe the *average electrical energy losses* for electricity transmitted on a *distribution network* between a *distribution network connection point* and a *transmission network connection point* or *virtual transmission node* for the financial year in which they apply;
 - (2) will be either:
 - (i) a site specific *distribution loss factor* derived in accordance with the methodology determined by the AER or the *Distribution Network Service Provider* pursuant to clause 3.6.3(h), for each *distribution network connection point* of the following types:
 - (A) a *connection point* for an *embedded generating unit* with actual *generation* of more than 10MW, based on the most recent data available for a consecutive 12 month period at the time of determining the *distribution loss factor*. Where relevant data is not available for a consecutive 12 month period as a *distribution network connection point* is newly established or has been modified, a *Network Service Provider* may determine whether an *embedded generating unit* has *generation* of more than 10MW, based on its best projection of *generation* in the *financial year* in which the *distribution loss factor* is to apply, taking into account the terms of the relevant *connection agreement*;
 - (B) a *connection point* for an end-user with actual or forecast *load* of more than 40GWh or an electrical demand of more than 10MW, based on the most recent data available for a consecutive 12 month period at the time of determining the *distribution loss factor*. Where relevant data is not

available for a consecutive 12 month period as a *distribution network connection point* is newly established or has been modified, a *Network Service Provider* may determine whether an end-user has *load* of more than 40GWh or forecast *peak load* of more than 10MW, based on its best projection of *load* in the *financial year* in which the *distribution loss factor* is to apply, taking into account the terms of the relevant *connection agreement*;

- (C) a *connection point* for a *Market Network Service Provider*; and
 - (D) a *connection point* between two or more *distribution networks*; or
- (ii) derived, in accordance with the methodology determined by the *AER* or the *Distribution Network Service Provider* pursuant to clause 3.6.3(h), using the volume weighted average of the *average electrical energy loss* between the *transmission network connection point* or *virtual transmission node* to which it is assigned and each *distribution network connection point* in the relevant *voltage class* (determined in accordance with clause 3.6.3(d)(2)) assigned to that *transmission network connection point* or *virtual transmission node*, for all *connection points* on a *distribution network* not of a type described in clause 3.6.3(b)(2)(i);

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (3) are to be used in the settlement process as a notional adjustment to the electrical *energy*, expressed in MWh, flowing at a *distribution network connection point* in a *trading interval* to determine the *adjusted gross energy* amount for that *connection point* in that *trading interval*, in accordance with clause 3.15.4.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b1) Where a *Generator*, or a *Small Generation Aggregator*, meets the reasonable cost of the *Distribution Network Service Provider* in performing the necessary calculation in respect of a *generating unit* of up to 10MW or 40GWh per annum capacity, the *Distribution Network Service Provider* must calculate a site specific *distribution loss factor* that, notwithstanding any other provision of the *Rules* to the contrary, for the purposes of the *Rules* is to apply in respect of that *generating unit* on the same basis as applies for a *generating unit* of more than 10MW or 40GWh per annum

capacity as though the *generating unit* were a unit of more than 10MW or 40GWh per annum capacity.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) Each *Distribution Network Service Provider* must assign each *connection point* on its *distribution network*, of a type described in clause 3.6.3(b)(2)(i), to a single *transmission network connection point* taking into account normal *network* configurations and predominant *load* flows.
- (d) Each *Distribution Network Service Provider* must assign each *connection point* on its *distribution network*, not of a type described in clause 3.6.3(b)(2)(i):
 - (1) where practicable, to a single *transmission network connection point* or otherwise, to a *virtual transmission node*, taking into account normal *network* configurations and predominant *load* flows; and
 - (2) to a class of *distribution network connection points* based on the location of, *voltage* of and pattern of electrical *energy* flows at the *distribution network connection point*.
- (e) So far as practicable, the assignment of *connection points* on the *distribution network* to:
 - (1) *transmission network connection points* under clause 3.6.3(c); or
 - (2) *transmission network connection points* or *virtual transmission nodes* and a class of *distribution network connection points* under clause 3.6.3(d),

must be consistent with the geographic boundaries of the *pricing zones* for use in *distribution service* pricing, and the *voltage* levels incorporated within those *pricing zones*.

- (f) The assignment of *connection points* on a *distribution network*:
 - (1) to a single *transmission network connection point* under clause 3.6.3(c); or

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (2) to a *transmission network connection point* or *virtual transmission node* and a class of *distribution network connection points* under clause 3.6.3(d),

is subject to the approval of the *AER* and the *Distribution Network Service Provider* must inform *AEMO* of such approved assignments.

- (g) *Distribution loss factors* must be determined by a *Distribution Network Service Provider* for all *connection points* on its *distribution network* either individually, for all connection points assigned to a single *transmission network connection point* under clause 3.6.3(c), or collectively, for all *connection points* assigned to a *transmission network connection point* or a *virtual transmission node* and a particular *distribution network connection point* class under clause 3.6.3(d), in accordance with:
 - (1) the methodology developed, *published* and maintained by the *AER* for the determination of *distribution loss factors*; or
 - (2) where the *AER* has not *published* a methodology under clause 3.6.3(g)(1), the methodology developed, *published* and maintained by the *Distribution Network Service Provider* for the determination of *distribution loss factors*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (h) The methodology for the determination of *distribution loss factors* referred to in clause 3.6.3(g) must be developed having regard to the following principles:
 - (1) The aggregate of the *adjusted gross energy* amounts for a *distribution network*, determined in accordance with clause 3.15.4 using the *distribution loss factors* for the *financial year* in which the *distribution loss factors* are to apply should equal, as closely as is reasonably practicable, the sum of:
 - A. the amount of electrical *energy*, expressed in MWh, flowing at all *connection points* in the *distribution network* in the *financial year* in which the *distribution loss factors* are to apply; and
 - B. the total *electrical energy losses* incurred on the *distribution network* in the *financial year* in which the *distribution loss factors* are to apply.
 - (2) The methodology used to determine *distribution loss factors* for a *financial year* should incorporate provisions requiring a *Distribution Network Service Provider* to undertake a reconciliation between the aggregate of the *adjusted gross energy* amounts for its *distribution network* for the previous *financial year* determined in accordance with clause 3.15.4 using the *distribution loss factors* that applied for *connection points* in that *distribution network* in the previous *financial year* and the sum of:

- (i) the amount of electrical *energy*, expressed in MWh flowing, at all *connection points* in its *distribution network* in the previous *financial year*; and
 - (ii) the total *electrical energy losses* incurred on its *distribution network* in the previous *financial year*.
- (3) The *distribution loss factor* for a *distribution network connection point*, other than those described in clause 3.6.3(b)(2)(i), is determined using a volume weighted average of the *average electrical energy loss* between the *transmission network connection point* or *virtual transmission node* to which it is assigned and each *distribution network connection point* in the relevant class of *distribution network connection points* assigned to that *transmission network connection point* or *virtual transmission node* for the *financial year* in which the *distribution loss factor* is to apply.
- (4) The *distribution loss factor* for a *distribution network connection point* described in clause 3.6.3(b)(2)(i) is determined using the *average electrical energy loss* between the *distribution network connection point* and the *transmission network connection point* to which it is assigned in the *financial year* in which the *distribution loss factor* is to apply.
- (5) In determining the *average electrical energy losses* referred to in clauses 3.6.3(h)(3) and (4), the *Distribution Network Service Provider* must use the most recent actual *load* and *generation* data available for a consecutive 12 month period but may adjust this *load* and *generation* data to take into account projected *load* and / or *generation* growth in the *financial year* in which the *distribution loss factors* are to apply.
- (6) In determining *distribution loss factors*, flows in *network elements* that solely or principally provide *market network services* will be treated as invariant, as the methodology is not seeking to calculate the *marginal losses* within such *network elements*.
- (i) Each year the *Distribution Network Service Provider* must determine the *distribution loss factors* to apply in the next *financial year* in accordance with clause 3.6.3(g) and provide these to AEMO for *publication* by 1 April. Before providing the *distribution loss factors* to AEMO for *publication*, the *Distribution Network Service Provider* must obtain the approval of the AER for the *distribution loss factors* it has determined for the next *financial year*.

3.6.4 Network constraints

- (a) Conveyance of electricity between *regions* through a *regulated interconnector* is *constrained* when for operational reasons it is not acceptable for the *regulated interconnector* to transfer the level of electricity between *regions* that would be transferred if the limitation was removed and

the condition impacts on the *dispatch* of other *regulated interconnectors*, *generation*, *scheduled network services* or *loads*.

- (a1) Conveyance of electricity between *regions* by means of a *scheduled network service* is *constrained* when the *dispatch* of the relevant *scheduled network service* is limited by the notified available capacity or *ramp rate* and the limitation impacts on the *dispatch* of *generation*, *regulated interconnectors*, other *scheduled network services* or *loads*.
- (b) Conveyance of electricity within a *region* is *constrained* when for operational reasons it is not acceptable for a *network* to transfer the level of electricity between different parts of the *region* that would be transferred if the limitation was removed and the condition impacts on the *dispatch* of *generation*, *scheduled network services* or *loads*.
- (c) For every *trading interval* AEMO must record any *constraints* including a description and the duration of the *constraint*.
- (d) Any *constraints* which occur within a *region* or between *regions* must be taken into account in the *dispatch* process under clause 3.8.10.

3.6.5 Settlements residue due to network losses and constraints

- (a) *Settlements residue* will be allocated, and distributed or recovered by AEMO in accordance with the following principles:
 - (1) full effect is to be given to the *jurisdictional derogations* contained in Chapter 9 relating to *settlements residue*;
 - (2) the portion of the *settlements residue* attributable to *regulated interconnectors* (as adjusted to take into account the effect of any applicable *jurisdictional derogations* referred to in subparagraph (1)) will be distributed or recovered in accordance with rule 3.18;
 - (3) the remaining *settlements residue*, including the portion of *settlements residue* due to *intra-regional loss factors*, will be distributed to or recovered from the appropriate *Transmission Network Service Providers* (which will not include *Market Network Service Providers*);
 - (3A) **[Deleted]**
 - (4) if the *settlements residue* arising in respect of a *trading interval*, after taking into account any relevant adjustment in accordance with clauses 5.7.7(aa)(3) or (ab), is a negative amount then, in respect of the *billing period* in which the negative *settlements residue* arises then:
 - (i) AEMO must recover the amount from the appropriate *Transmission Network Service Provider* at a payment time, interval, and by a method, determined by AEMO following consultation with *Transmission Network Service Providers*. AEMO may determine that the appropriate *Transmission*

Network Service Provider is to pay the negative *settlements residue* amount by a date prior to the date for payment of *final statements* under clause 3.15.16;

- (ii) the appropriate *Transmission Network Service Provider* must pay the negative *settlements residue* amount in accordance with *AEMO's* determination under subparagraph (4)(i);
- (4A) if interest costs are incurred by *AEMO* in relation to any unrecovered negative *settlements residue* amount referred to in subparagraph (4), then, in respect of the *billing period* in which the negative *settlements residue* arises then:
- (i) *AEMO* must recover the interest costs from the appropriate *Transmission Network Service Provider* at a payment time, interval, and by a method, determined by *AEMO* following consultation with *Transmission Network Service Providers*. *AEMO* may determine that the appropriate *Transmission Network Service Provider* is to pay the interest cost amount by a date prior to the date for payment of *final statements* under clause 3.15.16; and
 - (ii) the appropriate *Transmission Network Service Provider* must pay the interest cost amount in accordance with *AEMO's* determination under subparagraph (4A)(i);
- (4B) for the purposes of subparagraphs (3), (4) and (4A), the appropriate *Transmission Network Service Provider* is:
- (i) in the case of *inter-regional settlements residue*:
 - (A) if there is more than one *Transmission Network Service Provider* in the importing region, the *Co-ordinating Network Service Provider*; or
 - (B) if there is no *Co-ordinating Network Service Provider* in the importing region, the *Transmission Network Service Provider* to which a *transmission determination* currently applies in that *region*;
 - (ii) in the case of *intra-regional settlements residue*:
 - (A) if there is more than one *Transmission Network Service Provider* in the *region*, the *Co-ordinating Network Service Provider*; or
 - (B) if there is no *Co-ordinating Network Service Provider* in the *region*, the *Transmission Network Service Provider* to which a *transmission determination* currently applies in that *region*;

(4C) **[Deleted]**

- (4D) for the purposes of paragraph (4B), **importing region** means the *region* to which electricity is transferred during the relevant *trading interval* from another *region* through *regulated interconnectors*; and
- (5) **[Deleted]**
- (6) any portion of *settlements residue* distributed to a *Network Service Provider* or amount paid on that portion under clause 3.15.10A (if any), or rule 3.18 to a *Network Service Provider*, including any such payments as adjusted by a *routine revised statement* or *special revised statement* issued under rule 3.15, net of any portion of *settlements residue* recovered from the *Network Service Provider* in accordance with clause 3.6.5(a)(4), will be used to offset *network service* charges.
- (b) A *Transmission Network Service Provider* or its jurisdictional delegate is a *Market Participant* for the purposes of clause 3.3.1 and rule 3.15 (excluding clause 3.15.1(b)) but not otherwise.
- (c) **[Deleted]**

3.7 Projected Assessment of System Adequacy

3.7.1 Administration of PASA

- (a) AEMO must administer medium term and short term *projected assessment of system adequacy processes* to be known as PASA.
- (b) The PASA is a comprehensive program of information collection, analysis, and disclosure of medium term and short term *power system security* and reliability of *supply* prospects so that *Registered Participants* are properly informed to enable them to make decisions about *supply*, demand and *outages of transmission networks* in respect of periods up to 2 years in advance.
- (c) On a weekly basis AEMO must:
 - (1) collect and analyse information from all *Scheduled Generators*, *Market Customers*, *Transmission Network Service Providers* and *Market Network Service Providers* about their intentions for:
 - (i) *generation, transmission and market network service maintenance scheduling*;
 - (ii) *intended plant availabilities*;
 - (iii) *energy constraints*;
 - (iv) other *plant* conditions which could materially impact upon *power system security* and reliability of *supply*; and
 - (v) significant changes to *load* forecasts previously notified to AEMO,

for the following 24 months;

- (2) prepare the *unconstrained intermittent generation forecasts* for the following 24 months; and
- (3) following analysis and assessment of the information referred to in subparagraphs (1) and (2), *publish* information that will inform the *market* regarding forecasts of *supply* and *demand*.
- (d) *AEMO* must use its reasonable endeavours to ensure that it publishes sufficient information to allow the *market* to operate effectively with a minimal amount of intervention by *AEMO*.

3.7.2 Medium term PASA

- (a) The *medium term PASA* covers the 24 month period commencing from the Sunday after the *day* of publication with a daily resolution. Every week, *AEMO* must review and *publish* the outputs of the *medium term PASA* in accordance with the *timetable*.
- (b) *AEMO* may publish additional updated versions of the *medium term PASA* in the event of *changes* which, in the judgment of *AEMO*, are materially significant.
- (c) The following *medium term PASA inputs* are to be prepared by *AEMO*:
 - (1) forecast *load* information for each *region* which is:
 - (i) the 10% probability of exceedence daily *peak load*, most probable daily *peak load* and time of the peak on the basis of past trends, day type and special events including all forecast *scheduled load* and other *load* except for pumped storage *loads*;
 - (ii) subsequently to be adjusted by an amount anticipated in the forecast as *scheduled load* by *load* bidders; and
 - (iii) an indicative half hourly *load* profile for each day type for each *region* for each month of the year;
 - (2) **[Deleted]**
 - (3) forecast *network constraints* known to *AEMO* at the time;
 - (4) an *unconstrained intermittent generation forecast* for each *semi-scheduled generating unit* for each *day*.
- (d) The following *medium term PASA inputs* must be submitted by each relevant *Scheduled Generator* or *Market Participant* in accordance with the *timetable*:
 - (1) *PASA availability* of each *scheduled generating unit*, *scheduled load* or *scheduled network service* for each *day* taking into account the

ambient weather conditions forecast at the time of the 10% probability of exceedence *peak load* (in the manner described in the procedure prepared under paragraph (g)); and

- (2) weekly *energy constraints* applying to each *scheduled generating unit* or *scheduled load*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (e) *Network Service Providers* must provide to *AEMO* an outline of planned *network outages* in accordance with the *timetable* and provide to *AEMO* any other information on planned *network outages* that is reasonably requested by *AEMO* to assist *AEMO* to meet its obligations under paragraph (f)(6).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (f) *AEMO* must prepare and *publish* the following information in respect of each *day* (unless otherwise specified in subparagraphs (1) to (6)) covered by the *medium term PASA* in accordance with clause 3.13.4(a):

- (1) forecasts of the 10% probability of exceedence *peak load*, and most probable *peak load*, excluding the relevant aggregated MW allowance referred to in subparagraph (2), and adjusted to make allowance for *scheduled load*;

(1A) **[Deleted]**

- (2) the aggregated MW allowance (if any) to be made by *AEMO* for *generation* from *non-scheduled generating systems* in each of the forecasts of the 10% probability of exceedence *peak load* and most probable *peak load* referred to in subparagraph (1);
- (3) in respect of each of the forecasts of the 10% probability of exceedence *peak load* and most probable *peak load* referred to in subparagraph (1), a value that is the sum of that forecast and the relevant aggregated MW allowance referred to in subparagraph (2);
- (4) forecasts of the most probable weekly *energy* for each *region*;
- (5) aggregate *generating unit PASA availability* for each *region*;
- (5A) aggregate capacity for each *region* that can be *generated* continuously, calculated by adding the following categories:
 - (i) the capacity of *scheduled generating units* in the *region* that are able to operate at the *PASA availability*; and

- (ii) the forecast *generation* of *semi-scheduled generating units* in the *region* as provided by the *unconstrained intermittent generation forecasts*;
- (5B) aggregate capacity for each *region* that cannot be *generated* continuously at the *PASA availability* of the *scheduled generating units* in the *region* due to specified weekly *energy constraints*; and
- (6) identification and quantification of:
 - (i) any projected *violations* of *power system security*;
 - (ii) any projected failure to meet the *reliability standard* as assessed in accordance with the *reliability standard implementation guidelines*;
 - (iii) **[Deleted]**
 - (iv) forecast *interconnector* transfer capabilities and the discrepancy between forecast *interconnector* transfer capabilities and the forecast capacity of the relevant *interconnector* in the absence of *outages* on the relevant *interconnector* only; and
 - (v) when and where *network constraints* may become binding on the *dispatch* of *generation* or *load*.
- (g) *AEMO* must publish the procedure it uses for preparation of the *medium term PASA*.

3.7.3 Short term PASA

- (a) The *short term PASA* must be *published* at least daily by *AEMO* in accordance with the *timetable*.
- (b) The *short term PASA* covers the period of six *trading days* starting from the end of the *trading day* covered by the most recently *published pre-dispatch schedule* with a *trading interval* resolution.
- (c) *AEMO* may *publish* additional updated versions of the *short term PASA* in the event of *changes* which, in the judgement of *AEMO*, are materially significant.
- (d) The following *short term PASA inputs* are to be prepared by *AEMO*:
 - (1) forecast *load* information for each *region* which is to include:
 - (i) the 10% probability of exceedence half-hourly *load* and most probable half hourly *load* on the basis of past trends, day type, and special events; and
 - (ii) all *scheduled load* and other *load* except for pumped storage loads,

which must subsequently be adjusted in accordance with *dispatch bids* for *scheduled load*;

- (2) **[Deleted]**
 - (3) forecast *network constraints* known to *AEMO* at the time; and
 - (4) an *unconstrained intermittent generation forecast* for each *semi-scheduled generating unit* for each *trading interval*.
- (e) The following *short term PASA inputs* must be submitted by each relevant *Scheduled Generator* and *Market Participant* in accordance with the *timetable* and must represent the *Scheduled Generator's* or *Market Participant's* current intentions and best estimates:
- (1) *available capacity* of each *scheduled generating unit*, *scheduled load* or *scheduled network service* for each *trading interval* under expected market conditions;
 - (2) *PASA availability* of each *scheduled generating unit*, *scheduled load* or *scheduled network service* for each *trading interval*; and
 - (3) **[Deleted]**
 - (4) projected daily *energy* availability for *energy constrained scheduled generating units* and *energy constrained scheduled loads*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (f) If *AEMO* considers it reasonably necessary for adequate *power system* operation and the maintenance of *power system security* and reliability of supply, *Registered Participants* who may otherwise be exempted from providing inputs for the *PASA* process must do so to the extent specified by *AEMO*.
- (g) *Network Service Providers* must provide to *AEMO* an outline of planned *network outages* in accordance with the *timetable* and provide to *AEMO* any other information on planned *network outages* that is reasonably requested by *AEMO* to assist *AEMO* to meet its obligations under clause 3.7.3(h)(5).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (h) *AEMO* must prepare and *publish* the following information for each *trading interval* (unless otherwise specified in subparagraphs (1) to (5)) in the period covered by the *short term PASA* in accordance with clause 3.13.4(c):

- (1) forecasts of the most probable *load* (excluding the relevant aggregated MW allowance referred to in subparagraph (4B)) plus *reserve* requirement (as determined under clause 3.7.3(d)(2)), adjusted to make allowance for *scheduled load*, for each *region*;
- (2) forecasts of *load* (excluding the relevant aggregated MW allowance referred to in subparagraph (4B)) for each *region* with 10% and 90% probability of exceedence;
- (3) forecasts of the most probable *energy* (excluding the relevant aggregated MW allowance referred to in subparagraph (4B)) for each *region* and *trading day*;
- (4) aggregate *generating unit* availability (excluding the relevant aggregated MW allowance referred to in subparagraph (4B)) for each *region*;
- (4AA) aggregate capacity (excluding the relevant aggregated MW allowance referred to in subparagraph (4B)) for each *region*, after allowing for the impact of *network constraints*, that can be *generated* continuously, calculated by adding the following categories:
 - (i) the *available capacity* of *scheduled generating units* that are able to operate at the availability as notified to AEMO under paragraph (e)(1); and
 - (ii) the forecast *generation* of *semi-scheduled generating units* as provided by the *unconstrained intermittent generation forecasts*;
- (4AB) aggregate capacity (excluding the relevant aggregated MW allowance referred to in subparagraph (4B)) for each *region*, after allowing for the impact of *network constraints*, that cannot be *generated* continuously at the *available capacity* referred to in subparagraph (4AA)(i) due to specified daily *energy constraints*; and
- (4A) aggregate *generating unit PASA availability* (excluding the relevant aggregated MW allowance referred to in subparagraph (4B)) for each *region*;
- (4B) the aggregated MW allowance (if any) to be made by AEMO for generation from *non-scheduled generating systems* in each forecast:
 - (i) of the most probable *load* referred to in clause 3.7.3(h)(1); and
 - (ii) referred to in clauses 3.7.3(h)(2), (3), (4), (4A), (4AA) and (4AB);
- (4C) in respect of each forecast:
 - (i) of the most probable *load* referred to in clause 3.7.3(h)(1);

- (ii) referred to in clauses 3.7.3(h)(2), (3), (4) , (4A), (4AA) and (4AB),

a value that is the sum of that forecast and the relevant aggregated MW allowance (if any) referred to in clause 3.7.3(4B); and
- (5) identification and quantification of:
 - (i) any projected *violations* of *power system security*;
 - (ii) any projected failure to meet the *reliability standard* as assessed in accordance with the *reliability standard implementation guidelines*;
 - (iii) **[Deleted]**
 - (iv) forecast *interconnector* transfer capabilities and the discrepancy between forecast *interconnector* transfer capabilities and the forecast capacity of the relevant *interconnector* in the absence of outages on the relevant *interconnector* only; and
 - (v) when and where *network constraints* may become binding on the *dispatch* of *generation* or *load*.
- (i) If in performing the *short term PASA* AEMO identifies any projected failure to meet the *reliability standard* in respect of a *region* as assessed in accordance with the *reliability standard implementation guidelines*, then AEMO must use its reasonable endeavours to advise the *Jurisdictional System Security Coordinator* who represents a *participating jurisdiction* in that *region* of any potential requirements during such conditions to shed *sensitive loads*.
- (j) AEMO must publish the procedure it uses for preparation of the *short term PASA*.

3.7A Congestion information resource

- (a) The objective of the *congestion information resource* is to provide information in a cost effective manner to *Registered Participants* to enable them to understand patterns of *network* congestion and make projections of *market* outcomes in the presence of *network* congestion (the *congestion information resource objective*).

Development of congestion information resource

- (b) To implement the *congestion information resource objective*, AEMO must develop and *publish*, in accordance with this rule 3.7A, an information resource comprising:
 - (1) information on *planned network events* that are likely to materially affect *network constraints* in relation to a *transmission system*;

- (2) historical data on *mis-pricing* at *transmission network* nodes in the *national electricity market*; and
 - (3) any other information that *AEMO*, in its reasonable opinion, considers relevant to implement the *congestion information resource objective*,

which is to be known as the *congestion information resource*.
- (c) The *congestion information resource* must contain at least the same level of detail as is required to be included in the interim congestion information resource *published* under clause 11.30.2
- (d) *AEMO* must develop, and amend from time to time, the *congestion information resource*:
 - (1) consistently with the *congestion information resource objective*;
 - (2) in accordance with the *congestion information resource guidelines*; and
 - (3) to incorporate any new, or amend any existing, aspect of the *congestion information resource* where *AEMO* forms the view that such an amendment will improve the implementation of the *congestion information resource objective*
- (e) Subject to paragraph (f), *AEMO* must update and *publish* the information contained in the *congestion information resource* (whether in whole or in part) at intervals to be determined by *AEMO* in accordance with the *congestion information resource guidelines*.
- (f) The intervals determined by *AEMO* for updating and *publishing* the *congestion information resource* must be included in the *timetable*.
- (g) If there has been a material change to the information contained in the *congestion information resource* and *AEMO* considers *Registered Participants* require the new information prior to the next periodic update of the *congestion information resource* in accordance with paragraph (e), *AEMO* may provide *Market Participants* with the new information in accordance with the *congestion information resource guidelines*.
- (h) *AEMO* must *publish* the first *congestion information resource* by 1 September 2011 and there must be a *congestion information resource* available at all times after that date.
- (i) For the purpose of *publishing* the first *congestion information resource* under paragraph (b), *AEMO* may, subject to paragraph (d), *publish* the interim *congestion information resource* referred to in clause 11.30.2, as the first *congestion information resource*, in whole or in part.
- (j) *AEMO* must not *publish confidential information* as part of, or in connection with, the *congestion information resource*

Congestion information resource guidelines

- (k) *AEMO* must develop and *publish* guidelines (the *congestion information resource guidelines*) in relation to:
 - (1) the categories of information to be contained in the *congestion information resource* including the source of that information;
 - (2) the scope and type of information to be provided by *Transmission Network Service Providers* in accordance with paragraphs (n) and (o);
 - (3) the processes to be implemented by *AEMO* to obtain the information from *Transmission Network Service Providers* in accordance with paragraphs (n) and (o);
 - (4) the determination of the intervals for updating and *publishing* the *congestion information resource* under paragraph (e); and
 - (5) the processes to be implemented by *AEMO* for providing *Registered Participants* with information under paragraph (g).
- (l) *AEMO* must develop and *publish* the first *congestion information resource guidelines* in accordance with the *Rules consultation procedures* by 1 September 2010 and there must be a set of *congestion information resource guidelines* available and up to date at all times after that date.
- (m) *AEMO* must amend the *congestion information resource guidelines* in accordance with the *Rules consultation procedures*.

Information of Transmission Network Service Providers

- (n) In addition to the obligations imposed on *Transmission Network Service Providers* by rule 3.7, *Transmission Network Service Providers* must provide *AEMO* with the information specified in the *congestion information resource guidelines* as information that is to be provided by them:
 - (1) in a form which clearly identifies *confidential information*; and
 - (2) in accordance with the *congestion information resource guidelines*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (o) If there has been a material change to the information provided by a *Transmission Network Service Provider* under paragraph (n), the *Transmission Network Service Provider* must provide *AEMO* with the revised information as soon as practicable.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (p) Information contained in the *congestion information resource* which has been provided by, or has been derived from information provided by, a *Transmission Network Service Provider* under this rule 3.7A:
- (1) must represent the *Transmission Network Service Provider's* current intentions and best estimates regarding *planned network events* at the time the information is made available;
 - (2) does not bind the *Transmission Network Service Provider* to comply with an advised *outage* program; and
 - (3) may be subject to change due to unforeseen circumstances outside the control of the *Transmission Network Service Provider*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

3.7B Unconstrained intermittent generation forecast

- (a) *AEMO* must prepare a forecast of the *available capacity* of each *semi-scheduled generating unit* (to be known as an *unconstrained intermittent generation forecast*) in accordance with this rule 3.7B for the purposes of:
- (1) the *projected assessment of system adequacy process*;
 - (2) *dispatch*; and
 - (3) *pre-dispatch*.
- (b) A *Semi-Scheduled Generator* must:
- (1) submit to *AEMO*, in accordance with the *timetable*, the *plant availability* for each *semi-scheduled generating unit* for the purpose of paragraph (a) as soon as the *Semi-Scheduled Generator* becomes aware that the *plant availability* of the unit is at least 6MW below or above the *nameplate rating* of the unit; and
 - (2) where the *Semi-Scheduled Generator* has submitted *plant availability* in accordance with subparagraph (1), notify *AEMO* in accordance with the *timetable* as soon as the *Semi-Scheduled Generator* becomes aware of any changes to the *plant availability* of that *semi-scheduled generating unit* until such time as the *plant availability* of that *semi-scheduled generating unit* is no longer at least 6MW below or above the *nameplate rating* of the unit.

Note

This rule is classified as a civil penalty provision under the National Electricity (South Australia) Regulations.

- (c) When preparing an *unconstrained intermittent generation forecast* for the purposes referred to in paragraph (a), AEMO must take into account:
- (1) the maximum *generation* of the *semi-scheduled generating unit* provided by the *Semi-Scheduled Generator* as part of its *bid and offer validation data*;
 - (2) the *plant availability* of the *semi-scheduled generating unit* submitted by the *Semi-Scheduled Generator* under paragraph (b);
 - (3) the information obtained for the *semi-scheduled generating unit* from the *remote monitoring equipment* specified in clause S5.2.6.1;
 - (4) the forecasts of the energy available for input into the electrical power conversion process for each *semi-scheduled generating unit*;
 - (5) the *energy conversion model* for each *semi-scheduled generating unit*;
 - (6) the assumption that there are no *network constraints* otherwise affecting the *generation* from that *semi-scheduled generating unit*; and
 - (7) the timeframes of:
 - (i) *pre-dispatch*;
 - (ii) *dispatch*,
 - (iii) *medium term PASA*; and
 - (iv) *short term PASA*.
- (d) NEMMCO must prepare the first *unconstrained intermittent generation forecast* for each *semi-scheduled generating unit* by 31 March 2009 and there must be an *unconstrained intermittent generation forecast* for each *semi-scheduled generating unit* available at all times after that date.

3.7C Energy Adequacy Assessment Projection

Purpose of EAAP

- (a) The purpose of the *energy adequacy assessment projection* (or *EAAP*) is to make available to *Market Participants* and other interested persons an analysis that quantifies the impact of *energy constraints* on *energy availability* over a 24 month period under a range of scenarios.

EAAP principles

- (b) The *EAAP* must:

- (1) cover a 24 month period; ;
 - (2) be *published* at least once in every 12 month period and more frequently if required under paragraph (d);
 - (3) provide a probabilistic assessment of projected *energy* availability for each *region*;
 - (4) provide projected *unserved energy* levels for each *region* with a monthly resolution;
 - (5) provide aggregated information on the adequacy of *energy* availability for each scenario that *AEMO* defines for the purposes of the *EAAP*, based on information received from *Registered Participants* and on anticipated *power system* constraints;
 - (6) take into account:
 - (A) where relevant, the information and *medium term PASA* inputs referred to in clauses 3.7.1 and 3.7.2;
 - (B) where relevant, the matters *AEMO* considers in, and for the purposes of, preparing the *NTNDP*;
 - (C) *Generator Energy Limitation Frameworks* provided in accordance with paragraph (g), including *GELFs* that apply to more than one *scheduled generating unit* under clause 3.7C(k)(6) where those *GELFs* adequately represent the relevant *generating units*; and
 - (D) *GELF parameters* for each *GELF* which are provided in accordance with the *EAAP guidelines* and are updated in accordance with the *timetable*.
- (c) *AEMO* must comply with the *EAAP principles* in preparing the *EAAP*.

Administration of EAAP

- (d) *AEMO* must *publish* the *EAAP*:
- (1) at least once in every 12 month period in accordance with the *timetable*; and
 - (2) as soon as practicable after becoming aware of any new information that may materially alter the most recently published *EAAP*.
- (e) For the purposes of preparing the *EAAP*, a *Scheduled Generator* must provide *AEMO* with the following information in accordance with the *timetable*:
- (1) updated *GELF parameters* for each *GELF* provided by it in accordance with paragraph (g); and

- (2) other information that supplements the data provided under subparagraph (1) that is reasonably required by *AEMO* to study the scenarios defined in the *EAAP guidelines*.
- (f) In considering whether information referred to in subparagraph (e)(2) is reasonably required, *AEMO* must have regard to the likely costs that may be incurred by the *Scheduled Generator* in preparing and providing that information compared to the likely benefits from the use of that information for the purposes of the *EAAP*.

Generator Energy Limitation Framework

- (g) A *Scheduled Generator* must prepare and submit to *AEMO*, in accordance with the *EAAP guidelines* and for the purposes of the *EAAP*, a description of the *energy constraints* that affect the ability of each of its *scheduled generating units* to generate electricity (*GELF* or *Generator Energy Limitation Framework*). The *GELF* must be in a form that adequately represents that *generating unit* sufficient for *AEMO* to include the *GELF* in the *EAAP*.
- (h) A *GELF* submitted under paragraph (g) must be supplemented by *GELF parameters* for that *GELF* as defined in the *EAAP guidelines*, and those parameters must be updated:
 - (1) at least every 12 months in accordance with the *timetable*; and
 - (2) in accordance with the *EAAP guidelines*, if *AEMO* is required to publish an *EAAP* under paragraph (d)(2).
- (i) Without limiting paragraph (h), if a *Scheduled Generator* has submitted a *GELF* under paragraph (g) and there has been a material *change* to any of its *scheduled generating units* which has an impact on the *energy constraints* associated with that *GELF*, the *Scheduled Generator* must revise and re-submit the *GELF* in accordance with that paragraph.
- (j) Subject to paragraph (r), a *GELF* or information provided in relation to a *GELF* to *AEMO* must be treated by *AEMO* as *confidential information*.

EAAP guidelines

- (k) *AEMO* must develop and publish guidelines (the *EAAP guidelines*) that:
 - (1) define scenarios that *AEMO* must study in preparing the *EAAP*;
 - (2) define modelling assumptions for the *EAAP*;
 - (3) define the components of a *GELF* that a *Scheduled Generator* must include in a *GELF* submitted under paragraph (g);
 - (4) provide detail on the forms of the *GELF* sufficient for a *Scheduled Generator* to meet the requirements of paragraph (g);

- (5) define variable parameters specific to a *GELF* (*GELF parameters*) that are likely to have a material impact on the *GELF* and therefore the *EAAP*, and which may include, but are not limited to, parameters in relation to:
 - (i) hydro storage including pump storage;
 - (ii) thermal generation fuel;
 - (iii) cooling water availability; and
 - (iv) gas supply limitations;
- (6) define circumstances where a *GELF* submitted under paragraph (g) can apply to a collection of *scheduled generating units* that face common *energy constraints* due to their geographic location, access to fuel source or another similar reason;
- (7) define the form of information to be submitted by each *Scheduled Generator* in accordance with paragraph (e);
- (8) define arrangements for managing the confidentiality of information submitted to *AEMO* under this rule 3.7C; and
- (9) specify when a *Scheduled Generator* is required to update a *GELF* under paragraph (h)(2).
- (l) The scenarios that are defined for the purposes of subparagraph (k)(1) may include, but are not limited to:
 - (1) water conditions such as normal rainfall and drought;
 - (2) material restrictions on the supply of a significant fuel source;
 - (3) other limits on a fuel source for a major form of generation; and
 - (4) any other scenario that *AEMO* reasonably considers will have a material impact on the *EAAP*.
- (m) *AEMO* must comply with the *EAAP principles* in preparing the *EAAP guidelines*.
- (n) *AEMO* must comply with the *EAAP guidelines* in preparing the *EAAP*.
- (o) *AEMO* must develop and *publish* the *EAAP guidelines* in accordance with the *Rules consultation procedures*.
- (p) **[Deleted]**
- (q) *AEMO* may from time to time in accordance with the *Rules consultation procedures* amend or replace the *EAAP guidelines*.

Provision of information to Scheduled Generators

- (r) *AEMO* must provide to each *Scheduled Generator*, based on the relevant *GELF*, an estimate of the total *energy* production of the *scheduled generating units* of that *Scheduled Generator* for the period of the *EAAP*.

Review

- (s) [Deleted].

3.7D Demand side participation information

Definitions

- (a) In this rule:

contracted demand side participation means, in relation to a *Registered Participant*, a contractual arrangement under which a person and the *Registered Participant* agree to the curtailment of *non-scheduled load* or the provision of unscheduled generation in certain specified circumstances.

demand side participation information means the information referred to in subparagraph (e)(1).

demand side participation information guidelines means the guidelines as made and amended by *AEMO* in accordance with paragraphs (e) to (i).

unscheduled generation means *generation* from a *generating system* connected to a *transmission system* or *distribution system* which is not a *scheduled generating system* or *semi-scheduled generating system*.

Registered Participants to provide demand side participation information to AEMO

- (b) *Registered Participants* must provide demand side participation information to *AEMO* in accordance with the demand side participation information guidelines.

AEMO to take into account demand side participation information

- (c) *AEMO* must take into account the demand side participation information it receives under this rule 3.7D when developing or using *load* forecasts for the purposes of the exercise of its functions under the *Rules*.
- (d) *AEMO* must *publish* details, no less than annually, on the extent to which, in general terms, demand side participation information received under this rule 3.7D has informed *AEMO*'s development or use of *load* forecasts for the purposes of the exercise of its functions under the *Rules*.

Demand side participation information guidelines

- (e) *AEMO* must develop, maintain and *publish* guidelines that specify:

- (1) the information *Registered Participants* must provide to *AEMO* in relation to:
 - (i) contracted demand side participation; and
 - (ii) to the extent not covered by subparagraph (1)(i), the curtailment of *non-scheduled load* or the provision of unscheduled generation in response to the demand for, or price of, electricity, which may include, but is not limited to:
 - (iii) the circumstances under which *non-scheduled load* may be curtailed or unscheduled generation may be provided;
 - (iv) the location at which *non-scheduled load* may be curtailed or unscheduled generation may be provided;
 - (v) the quantity of *non-scheduled load* that may be curtailed or unscheduled generation that may be provided; and
 - (vi) historic or current information;
- (2) when *Registered Participants* must provide and update demand side participation information;
- (3) how demand side participation information is to be provided, including, for example:
 - (i) the format in which the information must be provided; and
 - (ii) any information *AEMO* requires to assess the accuracy of the information;
- (4) *AEMO's* methodology for assessing the accuracy of demand side participation information provided to it under this rule 3.7D; and
- (5) the manner and form in which *AEMO* will *publish* details, in accordance with paragraph (d), on the extent to which demand side participation information has informed its *load* forecasts.
- (f) In developing and amending the demand side participation information guidelines, *AEMO* must:
 - (1) have regard to the reasonable costs of efficient compliance by *Registered Participants* with the guidelines compared to the likely benefits from the use of demand side participation information provided under this rule 3.7D in forecasting *load* for the purposes of the exercise of its functions under the *Rules*; and
 - (2) subject to paragraph (g), consult with:
 - (i) *Registered Participants*; and

- (ii) such other persons who, in *AEMO's* reasonable opinion, have, or have identified themselves to *AEMO* as having, an interest in the demand side participation information guidelines,

in accordance with the *Rules consultation procedures*.

- (g) *AEMO* is not required to comply with the *Rules consultation procedures* when making minor or administrative amendments to the demand side participation information guidelines.
- (h) The demand side participation information guidelines must include a minimum period of 3 months between the date of *publication* and the date when the guidelines commence other than when the guidelines are amended under paragraph (g), in which case the guidelines may commence on the date of *publication*.
- (i) There must be demand side participation information guidelines in place at all times after the first demand side participation information guidelines are published by *AEMO* under these *Rules*.

3.8 Central Dispatch and Spot Market Operation

3.8.1 Central Dispatch

- (a) *AEMO* must operate a *central dispatch* process to *dispatch scheduled generating units, semi-scheduled generating units, scheduled loads, scheduled network services* and *market ancillary services* in order to balance *power system supply* and demand, using its reasonable endeavours to maintain *power system security* in accordance with Chapter 4 and to maximise the value of *spot market* trading on the basis of *dispatch offers* and *dispatch bids*.
- (b) The *central dispatch* process should aim to maximise the value of *spot market* trading i.e. to maximise the value of *dispatched load* based on *dispatch bids* less the combined cost of *dispatched generation* based on *generation dispatch offers, dispatched network services* based on *network dispatch offers*, and *dispatched market ancillary services* based on *market ancillary service offers* subject to:
 - (1) *dispatch offers, dispatch bids* and *market ancillary service offers*;
 - (2) *constraints*:
 - (i) due to availability and *commitment*; or
 - (ii) in the case of *semi-scheduling generating units*, identified by the *unconstrained intermittent generation forecast*;
 - (3) *non-scheduled load* requirements in each *region*;
 - (4) *power system security* requirements determined as described in Chapter 4 and the *power system security standards*;

- (5) *network constraints*;
 - (6) *intra-regional losses and inter-regional losses*;
 - (7) *constraints consistent with dispatch bid and dispatch offer data*;
 - (8) *current levels of dispatched generation, load and market network services*;
 - (9) *constraints imposed by ancillary services requirements*;
 - (10) *arrangements designed to ensure pro-rata loading of tied dispatch bid and dispatch offer data*;
 - (11) *ensuring that as far as reasonably practical, in relation to a AEMO intervention event:*
 - (A) *the number of Affected Participants*; and
 - (B) *the effect on interconnector flows,*
is minimised; and
 - (12) *the management of negative settlements residue, in accordance with clause 3.8.10 and any guidelines issued by AEMO under clause 3.8.10(c).*
- (c) *AEMO must establish procedures to allow relaxation of power system constraints listed in clause 3.8.1(b) in order to resolve infeasible dispatch solutions, subject to the following principles:*
- (1) *the procedures are developed in consultation with Registered Participants to achieve a reasonable dispatch outcome while maintaining consistency with AEMO's obligations to maintain power system security and the pricing principles listed in clause 3.9.1; and*
 - (2) *AEMO must report to Registered Participants any events requiring the relaxation of these constraints.*
- (d) *AEMO must develop and publish a dispatch algorithm to be used by AEMO for the purpose of central dispatch and pricing in accordance with rules 3.8 and 3.9.*
- (e) *AEMO must use the dispatch algorithm to determine the loading level in MW for each scheduled generating unit, semi-scheduled generating unit, scheduled network service or scheduled load in each dispatch interval in accordance with the principles set out in clause 3.8.1(b).*
- (e1) *AEMO must use the dispatch algorithm to determine the quantity of each market ancillary service which will be enabled for each ancillary service generating unit or ancillary service load.*

- (e2) When *AEMO* determines the quantity of each *market ancillary service* which will be *enabled*, *AEMO* must determine:
 - (1) the required quantity of each *market ancillary service* that may be sourced from any *region* (referred to as the *global market ancillary service requirement*); and
 - (2) any required quantity of such *market ancillary service* which must only be sourced from one or more nominated *regions* (referred to as a *local market ancillary service requirement*).
- (f) *AEMO* may investigate from time to time:
 - (1) the scope for further development of the *dispatch algorithm* beyond the minimum requirements specified in clause 3.8.1(b); and
 - (2) the sufficiency of the *dispatch algorithm* in meeting the minimum requirements specified in clause 3.8.1(b),and following compliance with the *Rules consultation procedures*, *publish* a report setting out its recommendations.

3.8.2 Participation in central dispatch

- (a) A *Generator* must submit *generation dispatch offers* in respect of its *scheduled generating units* or *semi-scheduled generating units* (as the case may be) for each *trading day* in accordance with clause 3.8.6.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) *Generation dispatch offers* for a *scheduled generating unit* must include a specified *self-dispatch level* and may include prices and MW quantities for increased or decreased levels of *generation* above or below this *self-dispatch level*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b1) A *Scheduled Network Service Provider* must submit *network dispatch offers* in respect of each of its *scheduled network services* for each *trading day* in accordance with clause 3.8.6A.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) Subject to clause 3.8.2(d), *dispatch bids* may be submitted by *Market Participants* in respect of *scheduled loads*, in accordance with clause 3.8.7, and may specify prices and MW quantities for any *trading interval* either for reductions or increases in *load*.
- (c1) *Market ancillary service offers* may be submitted by *Ancillary Service Providers* in respect of *market ancillary services* in accordance with clause 3.8.7A.
- (d) *Dispatch bids* and *market ancillary service offers* will only be included in the *central dispatch* process by *AEMO* if it is satisfied that adequate communication and/or telemetry is available to support the issuing of *dispatch instructions* and the audit of responses.
- (e) If *AEMO* considers it reasonably necessary for adequate system operation and the maintenance of *power system security*, *Registered Participants* who may otherwise be exempted from participating in the *central dispatch* process must do so to the extent and in the capacity specified by *AEMO*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

3.8.3 Bid and offer aggregation guidelines

- (a) *Scheduled Generators*, *Semi-Scheduled Generators* or *Market Participants* who wish to aggregate their relevant *generating units*, *scheduled network services* or *scheduled loads* for the purpose of *central dispatch* must apply to *AEMO* to do so.
- (a1) *Market Customers* or *Market Ancillary Service Providers* (as applicable) who wish to aggregate two or more *loads* so they are treated as one *ancillary service load* for the purpose of *central dispatch*, must apply to *AEMO* to do so.
- (b) *AEMO* must approve applications for aggregation made under paragraph (a) if the following conditions are fulfilled:
 - (1) aggregated *generating units* or *loads* must be:
 - (i) *connected* at a single site with the same *intra-regional loss factor* or, if two *intra-regional loss factors* are determined for the site under clause 3.6.2(b)(2), the same two *intra-regional loss factors*; and
 - (ii) operated by a single *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant*;
 - (2) aggregated *scheduled network services* must be *connected* at the same two sites, have the same *intra-regional loss factors*, have the same

- distribution loss factors* where applicable and be operated by the same *Generator* or *Market Participant*;
- (3) *power system security* must not be materially affected by the proposed aggregation; and
 - (4) *control systems* such as *automatic generation control systems* must satisfy the *Rules* after aggregating.
- (b1) *AEMO* must approve applications for aggregation made under paragraph (a1) if the following conditions are fulfilled:
- (1) aggregated *ancillary services loads* must be *connected* within a single *region* and be operated by a single person (whether in its capacity as a *Market Customer*, *Market Ancillary Service Provider* or both);
 - (2) *power system security* must not be materially affected by the proposed aggregation; and
 - (3) *control systems* must satisfy the requirements of clause 2.3.5(e)(1) and (2) after aggregating.
- (c) Notwithstanding that one or more of the conditions set out in paragraph (b) may not have been fulfilled by the *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant*, *AEMO* may approve an application for aggregation provided that such aggregation would not materially distort *central dispatch*.
- (d) Subject to paragraph (f), for the purposes of Chapter 3 (except rule 3.7B) and rule 4.9, a reference to a *generating unit*, *scheduled load* and *scheduled network service* is only taken as a reference to aggregated *generating units*, aggregated *scheduled network services* and aggregated *scheduled loads* aggregated in accordance with this clause 3.8.3.
- (e) *AEMO* must evaluate applications for aggregation and reply within 20 *business days* of receipt of the application setting out whether the application is to be approved and the conditions that apply to the proposed approval.
- (f) *Scheduled Generators* and *Market Participants* that have been granted aggregated status must, if required by *AEMO*, declare individual *scheduled generating unit*, *scheduled network service* or *scheduled load* availability and operating status to *AEMO* in the *PASA* process under rule 3.7 to allow *power system security* to be effectively monitored.
- (g) If a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant*'s application for aggregation is denied by *AEMO*, *AEMO* must provide that applicant with reasons for that denial.
- (h) *AEMO* must maintain a database of aggregated *scheduled generating units*, *semi-scheduled generating units*, *scheduled network services*, *scheduled loads* and *ancillary services loads* and their components.

- (i) For the avoidance of doubt, *semi-scheduled generating units* which are registered as a single *semi-scheduled generating unit* under clause 2.2.7 are not aggregated *semi-scheduled generating units* for the purposes of Chapter 3 and rule 4.9.

3.8.3A Ramp rates

- (a) This clause 3.8.3A applies to a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* with *generating units*, *scheduled network services* and/or *scheduled loads* providing *ramp rates* to AEMO in accordance with the following clauses:
 - (1) with respect to notification of scheduled capacity prior to *dispatch*:
 - (i) clause 3.8.4(c);
 - (ii) clause 3.8.4(e);
 - (iii) clause 3.8.4(d);
 - (2) with respect to offers for *dispatch*:
 - (i) clause 3.8.6(a)(2);
 - (ii) clause 3.8.6(g);
 - (iii) clause 3.8.6A(b);
 - (iv) clause 3.8.7(c); and
 - (3) with respect to *rebids*, clause 3.8.22(b)
- (b) Subject to clauses 3.8.3A(c) and 3.8.3A(i), a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* to which this clause 3.8.3A applies must provide an *up ramp rate* and a *down ramp rate* to AEMO for each *generating unit*, *scheduled network service* and/or *scheduled load* that is:
 - (1) at least:
 - (i) in the case of a *scheduled network service* or *scheduled load* that is not aggregated in accordance with clause 3.8.3, 3MW/minute; or
 - (ii) in the case of a *scheduled network service* or *scheduled load* that is aggregated in accordance with clause 3.8.3, the amount equal to the product of 3MW/minute and the number of individual *scheduled network services* or individual *scheduled loads* (and for the avoidance of doubt clause 3.8.3 does not apply to this paragraph (b)(1)(ii)); or

- (iii) in the case of a *scheduled generating unit*, or *semi-scheduled generating unit* that is not aggregated in accordance with clause 3.8.3, the *generating unit minimum ramp rate requirement*; or
 - (iv) in the case of a *scheduled generating unit*, or *semi-scheduled generating unit* that is aggregated in accordance with clause 3.8.3, the sum of the *generating unit minimum ramp rate requirements* for each individual *generating unit* (and for the avoidance of doubt clause 3.8.3 does not apply to this paragraph (b)(1)(iv)); and
- (2) at most the relevant *maximum ramp rate* provided in accordance with clause 3.13.3(b).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) A *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* to which this clause 3.8.3A applies may provide a *ramp rate* to AEMO that is less than that specified in clause 3.8.3A(b)(1) if the *ramp rate* is affected by an event or other occurrence that:
 - (1) physically prevents the relevant *generating unit*, *scheduled load* or *scheduled network service* from attaining a *ramp rate* of at least that specified in clause 3.8.3A(b)(1); or
 - (2) makes it unsafe for the relevant *generating unit*, *scheduled load* or *scheduled network service* to operate at a *ramp rate* of at least that specified in clause 3.8.3A(b)(1),

for the period of time in which the *ramp rate* is so affected by that event or other occurrence.

- (d) If a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* to which this clause 3.8.3A applies provides a *ramp rate* that is less than that specified in clause 3.8.3A(b)(1), it must provide a *ramp rate* to AEMO that is the maximum the relevant *generating unit*, *scheduled load* or *scheduled network service* can safely attain at that time.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (e) If a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* to which this clause 3.8.3A applies provides a *ramp rate* that is less than that specified in clause 3.8.3A(b)(1), it must simultaneously provide AEMO with a brief, verifiable and specific reason why the *ramp rate* is below that specified in clause 3.8.3A(b)(1).

- (f) The *AER* may require, upon written request, the *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* to provide such additional information as it may require from time to time to substantiate and verify the reason provided in clause 3.8.3A(e).
- (g) The *AER* must exercise its powers under clause 3.8.3A(f) in accordance with any guidelines issued by the *AER* from time to time in accordance with the *Rules consultation procedures*.
- (h) If a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* to which this clause 3.8.3A applies provides a *maximum ramp rate* in accordance with clause 3.13.3(b) of less than that specified in clause 3.8.3A(b)(1), it must provide *AEMO* with a brief, verifiable and specific reason why the *ramp rate* is below that specified in clause 3.8.3A(b)(1).
- (i) Clauses 3.8.3A(b), 3.8.3A(c) and 3.8.3A(e) do not apply to a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* to which this clause 3.8.3A applies if:
 - (1) it has provided a *maximum ramp rate* in accordance with clause 3.13.3(b) which is less than that specified in clause 3.8.3A(b)(1); and
 - (2) it has notified *AEMO* of this in accordance with clause 3.8.3A(h).
- (j) In addition to the obligations in clause 3.8.3A(d), if clause 3.8.3A(i) applies, the *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* must only provide *ramp rates* that are, at most, the *maximum ramp rate* for the relevant *generating unit*, *scheduled load* or *scheduled network service* in accordance with clause 3.13.3(b).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

3.8.4 Notification of scheduled capacity

All *Scheduled Generators* and *Market Participants* with *scheduled generating units*, *scheduled network services* and/or *scheduled loads* must inform *AEMO* of their available capacity as follows in accordance with the *timetable*:

- (a) *Scheduled Generators* and *Market Participants* must notify *AEMO* of the available capacity of each *scheduled generating unit*, *scheduled network service* and/or *scheduled load* for each *trading interval* of the *trading day*;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) subsequent *changes* may only be made to the information provided under clause 3.8.4(c), (d) and (e) in accordance with clause 3.8.22;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) for *Scheduled Generators*, two days ahead of each *trading day*:
- (1) a MW capacity profile that specifies the MW available for each of the 48 *trading intervals* in the *trading day*;
 - (2) estimated *commitment* or *decommitment* times;
 - (3) daily *energy* availability for *energy constrained generating units*; and
 - (4) an up *ramp rate* and a down *ramp rate*;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) for *scheduled loads*, two days ahead of each *trading day*:
- (1) a MW capacity profile that specifies the MW available for *dispatch* for each of the 48 *trading intervals* in the *trading day*;
 - (2) daily *energy* availability for *energy constrained scheduled load*; and
 - (3) an up *ramp rate* and a down *ramp rate*;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (e) for *scheduled network services*, two days ahead of each *trading day*:
- (1) a MW capacity profile that specifies the *power transfer capability* in each direction available for each of the 48 *trading intervals* in the *trading day*; and
 - (2) an up *ramp rate* and a down *ramp rate*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

3.8.5 Submission timing

- (a) To be valid for inclusion in the *central dispatch* process, a *dispatch bid* or *dispatch offer* or *market ancillary service offer* must be submitted according to the *timetable*.
- (b) Subject to clause 3.8.22, changes to the:
 - (1) MW quantities in the *dispatch bids*;
 - (2) MW quantities and *off-loading prices* in the *generation dispatch offers*; and
 - (3) MW quantities in the *network dispatch offers*,may be made after the relevant deadline in the *timetable*.
- (c) The submission of *dispatch bids*, *dispatch offers* and *market ancillary service offers* to AEMO must be made using the *electronic communication system* unless otherwise approved by AEMO.

3.8.6 Generating unit offers for dispatch

Scheduled Generator

- (a) A *Scheduled Generator's dispatch offer* must:
 - (1) contain its intended *self-dispatch level* for each *trading interval*, and may contain up to 10 *price bands* which may be for:
 - (i) possible *dispatch* above the intended *self-dispatch level*; or
 - (ii) possible *off-loading* below the intended *self-dispatch level*,
by *dispatch instruction*;
 - (2) specify for each of the 48 *trading intervals* in the *trading day*:
 - (i) a MW capacity for the intended *self-dispatch level*;
 - (ii) an incremental MW amount for each *price band* specified in the *dispatch offer*; and
 - (iii) an up *ramp rate* and a down *ramp rate*;
 - (3) where the offer specifies a *self-dispatch level* of more than zero, specify at least one *price band* for *off-loading* below the intended *self-dispatch level* and the total MW quantity in *price bands* specified for *off-loading* in each *trading interval* must equal the MW quantity of the *self-dispatch level* for that *trading interval* to enable possible *off-loading* to a zero *dispatch level*; and

- (4) specify a *loading price* or an *off-loading price* for each *price band* specified in the *dispatch offer*, in dollars and whole cents per MWh, and this price is to apply to the *price band* throughout the *trading day*.
- (b) A *Scheduled Generator's dispatch offer* may specify the daily *energy* available for *energy constrained scheduled generating units*.
- (c) A *Scheduled Generator's loading prices* offered must be equal to or greater than \$0/MWh and may not exceed the product of the *market price cap* multiplied by the relevant *intra-regional loss factor* at the *Scheduled Generator's transmission network connection point* for the *scheduled generating unit*.
- (d) A *loading price* of a *Scheduled Generator* specified for a *price band* is to be interpreted as the minimum price at which up to the specified MW increment is to be loaded in the *central dispatch* process.
- (e) A *Scheduled Generator's off-loading prices* must be less than \$0/MWh, that is, negative in sign and may not be less than the product of the *market floor price* multiplied by the relevant *intra-regional loss factor* at the *Scheduled Generator's transmission network connection point* for the *scheduled generating unit*.
- (f) An *off-loading price* of a *Scheduled Generator* specified for a *price band* is to be interpreted as the maximum price payable to AEMO by the *Scheduled Generator* in respect of the *generating unit's sent out generation* with the *generating unit's* output reduced below its specified *self-dispatch level* in the *central dispatch* process by an amount less than the specified MW increment.

Semi-Scheduled Generator

- (g) A *Semi-Scheduled Generator's dispatch offer* may contain up to 10 *price bands* and must specify for each of the 48 *trading intervals* in the *trading day*:
 - (1) an incremental MW amount for each *price band* specified in the *dispatch offer*; and
 - (2) an up *ramp rate* and a down *ramp rate*.

Semi-Scheduled and Scheduled Generators

- (h) A *dispatch offer* of a *Semi-Scheduled Generator* or *Scheduled Generator* must meet the following requirements:
 - (1) the MW quantities specified are to apply at the terminals of the *semi-scheduled generating unit* or *scheduled generating unit* or, with AEMO's agreement, at any other point in the relevant *Generator's* electrical installation or on the *network*;

- (2) prices specified for each *price band* specified in the *dispatch offer* must increase monotonically with an increase in available MWs;
- (3) prices specified are to apply at the *connection point* of the *semi-scheduled generating unit* or the *scheduled generating unit* (as the case may be) and for the purposes of *central dispatch* shall be referred to the *regional reference node* to which that *connection point* is assigned as follows:

$$RP = DOP \div LF$$

where

RP is the price specified in the *dispatch offer* when referred to the appropriate *regional reference node* and must not be greater than the *market price cap* or less than the *market floor price*;

DOP is the price as specified in the *dispatch offer*; and

LF where the *connection point*:

- (i) is a *transmission network connection point*, is the relevant *intra-regional loss factor* at that *connection point*; or
 - (ii) is a *distribution network connection point*, is the product of the *distribution loss factor* at that *connection point* multiplied by the relevant *intra-regional loss factor* at the *transmission network connection point* to which it is assigned; and
- (4) the MW quantity specified in each *price band* in each *trading interval* must be specified in whole MW.

Note

Where two *intra-regional loss factors* are determined for a *transmission network connection point* under clause 3.6.2(b)(2), AEMO will determine the relevant *intra-regional loss factor* for use under this clause in accordance with the procedure determined under clause 3.6.2(d1).

3.8.6A Scheduled network service offers for dispatch

The following requirements apply to a *network dispatch offer* to provide *scheduled network services*:

- (a) the *network dispatch offer* may contain up to a maximum of ten *price bands* for each direction of power flow for the *scheduled network service*;
- (b) the *network dispatch offer* must specify for each of the 48 *trading intervals* in the *trading day*:
 - (1) an incremental power delivery range for each *price band* specified in the *network dispatch offer*; and
 - (2) an up *ramp rate* and a down *ramp rate*;

- (c) the *network dispatch offer* must specify a price for each *price band* in dollars and whole cents per MWh and this price is to apply to the *price band* throughout the *trading day*;
- (d) within the set of *price bands* applying to a particular direction of power flow, prices specified for each *price band* specified in the *network dispatch offer* must increase monotonically with an increase in available MWs;
- (e) if negative prices are employed, the absolute value of the most negative price in one direction cannot exceed the price for the first *price band* in the opposite direction, after adjustment for losses;
- (f) the price specified in a *price band* for power transfer from the *scheduled network service's connection point A* to *connection point B* is to be interpreted in the *central dispatch* process as meaning that the *Scheduled Network Service Provider* is willing to deliver an increment of power to *connection point B*, within the power delivery range of the power band, provided that the net revenue which is expected to be derived from that increment per MWh delivered to *connection point B* is not less than the specified price;
- (g) for the purposes of this clause 3.8.6A, the net revenue that a *Scheduled Network Service Provider* expects to receive for energy delivered by the *scheduled network service* to *connection point B* is to be determined as follows:

$$\text{net revenue} = \text{PB} \times \text{FB} - \text{PA} \times \text{FA}$$

where

PA and PB are the prices at the *scheduled network service's connection points A* and *B*, which are assumed not to change as a result of the incremental transfer;

FA and FB are the energy transfers scheduled by *central dispatch* for receipt by the *scheduled network service* at *connection point A* and delivery at *connection point B* respectively; and

FA and FB are deemed to be related by the loss vs flow relationship published by AEMO;

- (h) for the purposes of this clause 3.8.6A, the price at a *connection point* will be deemed to be related as follows to the price at the *regional reference node* to which that *connection point* is assigned:

$$P = \text{RP} \times \text{LF}$$

where

P is the price at the *connection point*;

RP is the price at the appropriate *regional reference node*; and

LF where the *scheduled network service's connection point* is a *transmission network connection point*, is the relevant *intra-regional loss factor* at that *connection point*, or where the *scheduled network service's connection point* is a *distribution network connection point*, is the product of the *distribution loss factor* at that *connection point* multiplied by the relevant *intra-regional loss factor* at the *transmission network connection point* to which it is assigned;

- (i) prices specified in the *network dispatch offer* must not exceed the *market price cap* or be less than the *market floor price*; and
- (j) the power delivery range specified in each *price band* in each *trading interval* must be specified in whole MW.

Note

Where two *intra-regional loss factors* are determined for a *transmission network connection point* under clause 3.6.2(b)(2), AEMO will determine the relevant *intra-regional loss factor* for use under this clause in accordance with the procedure determined under clause 3.6.2(d1).

3.8.7 Bids for scheduled load

The following requirements apply to a *dispatch bid* for *scheduled loads*:

- (a) the *dispatch bid* must specify whether the *scheduled load* is to be considered as *normally on* or *normally off*;
- (b) the *dispatch bid* may contain up to a maximum of ten *price bands*;
- (c) the *dispatch bid* must specify for each of the 48 *trading intervals* in the *trading day*:
 - (1) an incremental MW amount for each *price band* specified in the *dispatch bid*; and
 - (2) an up *ramp rate* and a down *ramp rate*;
- (d) the *dispatch bid* must specify a price for each *price band* in dollars and whole cents per MWh and this price is to apply to the *price band* throughout the *trading day*;
- (e) prices specified for each *price band* specified in the *dispatch bid* must increase monotonically with an increase in available MWs;
- (f) prices specified are to apply at the *scheduled load's connection point* and for the purposes of *central dispatch* shall be referred to the *regional reference node* to which that *connection point* is assigned as follows:

$$RP = DOP \div LF$$

where

RP is the price specified in the *dispatch bid* when referred to the appropriate *regional reference node*;

DOP is the price as specified in the *dispatch bid*; and

LF where the *scheduled load's connection point* is a *transmission network connection point*, is the relevant *intra-regional loss factor* at that *connection point*, or where the *scheduled load's connection point* is a *distribution network connection point*, is the product of the *distribution loss factor* at that *connection point* multiplied by the relevant *intra-regional loss factor* at the *transmission network connection point* to which it is assigned;

- (g) MW quantities specified for a *price band* are to apply at the *scheduled load's connection point* or at any other point in the *Market Participant's* electrical installation or on the *network* as agreed to by AEMO;
- (h) prices specified must be:
 - (1) more than the product of the *market floor price* multiplied by the relevant *intra-regional loss factor* at the *scheduled load's transmission network connection point*; and
 - (2) less than the product of the *market price cap* multiplied by the relevant *intra-regional loss factor* at the *scheduled load's transmission network connection point*;
- (i) for a *scheduled load* specified in the *dispatch bid* as being *normally on*, the price specified for a *price band* is to be interpreted in the *central dispatch* process as the price at or above which the *scheduled load* will reduce electricity consumed by up to the MW increment specified in that *price band*;
- (j) for a *scheduled load* specified in the *dispatch bid* as being *normally off*, the price specified for a *price band* is to be interpreted in the *central dispatch* process as the price at or below which the *scheduled load* will increase electricity consumed by up to the MW increment specified in that *price band*;
- (k) the MW capacity quantity specified in each *price band* in each *trading interval* must be specified in whole MW;
- (l) the sum of the MW quantities specified in each *price band* in any *trading interval* must not exceed the maximum capacity of the *scheduled load*; and
- (m) the *dispatch bid* may specify the daily *energy* available for *energy constrained scheduled loads*.

Note

Where two *intra-regional loss factors* are determined for a *transmission network connection point* under clause 3.6.2(b)(2), AEMO will determine the relevant *intra-regional loss factor* for use under this clause in accordance with the procedure determined under clause 3.6.2(d1).

3.8.7A Market ancillary services offers

The following requirements apply to all *market ancillary service offers* for each type of *market ancillary service*:

- (a) the *market ancillary service offer* may contain up to 10 *price bands*;
- (b) the *market ancillary service offer* must specify for each of the 48 *trading intervals* in the *trading day* an incremental MW amount for each *price band* specified in the *market ancillary service offer*;
- (c) the MW quantities specified are to apply at the nominated *connection point* or, with AEMO's agreement, at any other point in the relevant electrical installation or on the *network*;
- (d) the *ancillary service offer* must specify a price for each *price band* specified in the *market ancillary service offer*, in dollars and whole cents per MW per hour (an *enabling price*), and this price is to apply to the *price band* throughout the *trading day*;
- (e) *enabling prices* for each *price band* specified in the *market ancillary service offer* must increase monotonically with an increase in available MWs;
- (f) *enabling prices* are to apply at the nominated *connection point* or, with AEMO's agreement, at any other point in the relevant electrical installation or on the *network*;
- (g) *enabling prices* offered must be equal to or greater than \$0 per MW per hour and may not exceed the *market price cap*;
- (h) the *enabling price* for a *price band* is to be interpreted as the minimum price at which up to the specified MW response is to be enabled in the *central dispatch* process;
- (i) the MW quantity in each *price band* in each *trading interval* must be specified in whole MW;
- (j) the *market ancillary service offer* must include the following values:
 - (1) the *response breakpoint*;
 - (2) the upper and lower *enablement limits*; and
 - (3) the *response capability*;
- (k) an *Ancillary Service Provider* that submits a *market ancillary service offer* must ensure that the *ancillary service generating unit* or *ancillary service load*, as the case may be, is at all times capable of responding in the manner contemplated by the *market ancillary service specification*;
- (l) the values associated with a *market ancillary service offer* referred to in clause 3.8.7A(j) must represent technical characteristics of the *ancillary service generating unit* or *ancillary service load*; and

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (m) rebids made under clause 3.8.22 of the values associated with the *market ancillary service offer* referred to in clause 3.8.7A(j) must represent technical characteristics at the time of *dispatch* of the *ancillary service generating unit* or *ancillary service load*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

3.8.8 Validation of dispatch bids and offers

- (a) If a *dispatch offer*, *dispatch bid* or *market ancillary service offer* is made in accordance with clauses 3.8.6, 3.8.6A, 3.8.7 or 3.8.7A (whichever is applicable), *AEMO* must make available to the *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* who submitted the *dispatch offer*, *dispatch bid* or *market ancillary service offer* the following information without delay:
 - (1) acknowledgement of receipt of a valid *dispatch offer*, *dispatch bid* or *market ancillary service offer*; and
 - (2) the data contained in the *dispatch offer*, *dispatch bid* or *market ancillary service offer* as it will be used by *AEMO* in the *central dispatch* process.
- (b) It is the responsibility of each *Scheduled Generator*, *Semi-Scheduled Generator* and *Market Participant* to check that the data contained in its *dispatch offer*, *dispatch bid* or *market ancillary service offer* as received and to be used by *AEMO* in the *central dispatch* process is correct.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) If a *dispatch offer*, *dispatch bid* or *market ancillary service offer* is not made in accordance with clauses 3.8.6, 3.8.6A, 3.8.7 or 3.8.7A (whichever is applicable), *AEMO* must not include that *dispatch offer*, *dispatch bid* or *market ancillary service offer* in the *central dispatch* process and must without delay notify the *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* submitting the *dispatch offer*, *dispatch bid* or *market ancillary service offer* of its invalidity and provide to that *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* details of the invalid data .

- (d) If any details contained within a *dispatch offer*, *dispatch bid* or *market ancillary service offer* are inconsistent with the *bid and offer validation data* provided by the relevant *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* then AEMO has the right to treat that *dispatch offer*, *dispatch bid* or *market ancillary service offer* as invalid and if it does so must notify the *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* without delay.

3.8.9 Default offers and bids

- (a) A *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* may, at any time, submit a *dispatch offer*, a *dispatch bid* or a *market ancillary service offer* in respect of a *scheduled generating unit*, *semi-scheduled generating unit*, *scheduled load*, *scheduled network service*, *ancillary service generating unit* or *ancillary service load* to apply from a specified future *trading day*.
- (b) A *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* may vary or withdraw a *default dispatch bid*, *default dispatch offer* or *market ancillary service offer* at any time prior to the deadline for submissions of *dispatch offers*, *dispatch bids* and *market ancillary service offers* for a *trading day* in accordance with the *timetable*.
- (c) Subject to any procedures *published* in accordance with clause 3.8.9(d), *default dispatch offer*, *default dispatch bid* or *market ancillary service offer* applicable to a *trading day* must be included by AEMO in the *central dispatch* process when the deadline for submission of *dispatch offers*, *dispatch bids* and *market ancillary service offers* for that *trading day* arrives in accordance with the *timetable* if, and only if, no later valid *dispatch offer*, *dispatch bid* or *market ancillary service offer* has been submitted pursuant to clauses 3.8.6, 3.8.6A, 3.8.7, 3.8.7A or 3.8.9(b).
- (d) AEMO, in consultation with *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* in accordance with the *Rules consultation procedures*, must develop and *publish* procedures to determine the circumstances when AEMO may use a prior *dispatch offer* or *dispatch bid* lodged by a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* as a substitute for a *default dispatch offer* or *default dispatch bid*.
- (e) AEMO may disregard a *default dispatch offer* or a *default dispatch bid* and substitute a prior *dispatch offer* or *dispatch bid* or *market ancillary service offer* lodged by a *Scheduled Generator*, *Semi-Scheduled Generator* or a *Market Participant* determined in accordance with a procedure developed under clause 3.8.9(d) as input to *PASA*, *pre-dispatch* and *central dispatch*.

3.8.10 Network constraints

- (a) In accordance with the *AEMO power system security responsibilities* and any other standards set out in Chapter 4, AEMO must determine any *constraints* on the *dispatch* of *scheduled generating units*, *semi-scheduled*

generating units, scheduled network services, scheduled loads, ancillary service generating units or ancillary service loads which may result from planned network outages.

- (b) Subject to paragraph (e), AEMO must determine and represent *network constraints* in *dispatch* which may result from limitations on *intra-regional* or *inter-regional* power flows and, in doing so, must use a *fully co-optimised network constraint formulation*.
- (c) AEMO must, in accordance with the *Rules consultation procedures*, develop and *publish* by 1 June 2010, and, where necessary, amend *network constraint* formulation guidelines, to address, amongst other things, the following matters:
 - (1) the circumstances in which AEMO will use *alternative network constraint formulations* in *dispatch*;
 - (2) the process by which AEMO will identify or be advised of a requirement to create or modify a *network constraint* equation, including in respect of:
 - (i) the methodology to be used by AEMO in determining *network constraint* equation terms and co-efficients; and
 - (ii) the means by which AEMO will obtain information from, and disseminate information to, *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants*;
 - (3) the methodology to be used by AEMO in selecting the form of a *network constraint*, equation including in respect of the location of terms on each side of the equation;
 - (4) the process to be used by AEMO for applying, invoking and revoking *network constraint* equations in relation to different types of *network constraints*, including in respect of:
 - (i) the circumstances in which AEMO will use *alternative network constraint formulations* and *fully co-optimised network constraint formulations*; and
 - (ii) the dissemination of information to *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* in respect of this process; and
 - (5) AEMO's policy in respect of the management of negative *settlements residue*, by intervening in the *central dispatch* process under clause 3.8.1 through the use of *fully co-optimised network constraint formulations*, including in respect of the process to be undertaken by AEMO to manage negative *settlements residue*.
- (d) AEMO must at all times comply with the *network constraint* formulation guidelines issued in accordance with paragraph (c).

- (e) Where, in *AEMO's* reasonable opinion, a specific *network constraint* is such that use of a *fully co-optimised network constraint formulation* is not appropriate, *AEMO* may apply an *alternative network constraint formulation* for the expected duration of that *network constraint*, if *AEMO*:
 - (1) has previously identified, in guidelines issued in accordance with paragraph (c), that it may use an *alternative network constraint formulation* in respect of that type of *network constraint*; and
 - (2) reasonably considers that it can apply an *alternative network constraint formulation* without prejudicing its obligation to operate a *central dispatch* process to *dispatch scheduled generating units, semi-scheduled generating units, scheduled loads, scheduled network services* and *market ancillary services* in order to balance *power system supply* and *power system demand*, consistent with using its reasonable endeavours to maintain *power system security* in accordance with Chapter 4 of the *Rules* and to maximise the value of *spot market trading* on the basis of *dispatch offers* and *dispatch bids*, in accordance with clause 3.8.1(a) and (b).
- (f) *AEMO* must represent *network constraints* as inputs to the *dispatch* process in a form that can be reviewed after the *trading interval* in which they occurred.
- (g) [Deleted]

3.8.11 Ancillary services constraints

- (a) *AEMO* must determine the quantity and nature of *ancillary services* which:
 - (1) have been provided or procured in accordance with the *AEMO power system security responsibilities* set out in clause 4.3.1 or are otherwise available;
 - (2) are required to be managed in conjunction with *dispatch*; and
 - (3) may impose constraints on *central dispatch*.
- (a1) For each *dispatch interval* *AEMO* must impose constraints upon the *dispatch algorithm* to determine the quantity of each *global market ancillary service requirement* and any *local market ancillary service requirements*.

3.8.12 System scheduled reserve constraints

AEMO must use its reasonable endeavours to ensure that the *dispatch* process meets all requirements for *scheduled reserves* as described in Chapter 4.

3.8.13 Notification of constraints

AEMO must publish the parameters used in the dispatch algorithm for the modelling of network constraints, regulating capability constraints, power system reserve constraints and ancillary services.

3.8.14 Dispatch under conditions of supply scarcity

During times of *supply* scarcity, *AEMO* must use its reasonable endeavours to ensure that the actions set out below occur in the following sequence:

(a) subject to:

- (1) any adjustments which may be necessary to implement action under paragraph (c); and
- (2) any *plant* operating restrictions associated with a *relevant AEMO intervention event*,

all valid dispatch bids and dispatch offers submitted by Scheduled Generators, Semi-Scheduled Generators or Market Participants are dispatched, including those priced at the market price cap;

(b) subject to:

- (1) any adjustments which may be necessary to implement action under paragraph (c); and
- (2) any *plant* operating restrictions associated with a *relevant AEMO intervention event*,

after all valid dispatch bids and dispatch offers referred to in paragraph (a) have been exhausted, exercise the reliability and emergency reserve trader in accordance with rule 3.20 by:

- (3) *dispatching scheduled generating units, scheduled network services or scheduled loads in accordance with any scheduled reserve contract; or*
- (4) *activating loads or generating units under any unscheduled reserve contract; and*

(c) any further corrective actions required are implemented in accordance with clauses 4.8.5B and 4.8.9.

3.8.15 [Deleted]

3.8.16 Equal priced dispatch bids and dispatch offers

If there are scheduled generating units, semi-scheduled generating units or scheduled loads, in the same region, for which the prices submitted in dispatch bids or dispatch offers for a particular trading interval result in identical prices at their regional reference node, then the MW quantities specified in the relevant

price bands of those *dispatch bids* or *dispatch offers* must be *dispatched* on a pro-rata basis, where this can be achieved without imposing undue costs on any party, or violating other constraints.

3.8.17 Self-commitment

- (a) *Slow start generating units* are *generating units* which are unable to *synchronise* and increase *generation* within 30 minutes of receiving an instruction from AEMO.
- (b) *Slow start generating units* must *self-commit* to be eligible for *dispatch*.
- (c) A *Generator* may only *self-commit* a *scheduled generating unit* in accordance with this clause.
- (d) A *Scheduled Generator* or a *Semi-Scheduled Generator* has a right to *synchronise* its *scheduled generating unit* or *semi-scheduled generating unit* (as the case may be) to the *power system* and have AEMO *dispatch* that *generating unit* subject to the *dispatch* procedures set out in this rule 3.8.
- (e) A *Scheduled Generator* must advise AEMO of its intention to *self-commit* and *synchronise* a *scheduled generating unit* with a *nameplate rating* of 30MW or more.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (f) Unless otherwise agreed with AEMO, the *Scheduled Generator* must advise of its intention under paragraph (e) through PASA and *pre-dispatch* by submitting an amended *available capacity* profile of the *scheduled generating unit* into the *market information bulletin board*.
- (g) The exact time of *synchronisation* for a *scheduled generating unit* will be subject to directions from AEMO in accordance with Chapter 4.
- (h) A *Scheduled Generator* or *Market Participant* must notify AEMO of any changes to *self-commitment* decisions without delay.
- (i) AEMO must notify all *Scheduled Generators* and *Market Participants* of any changes to *self-commitment* decisions without delay.

3.8.18 Self-decommitment

- (a) A *Generator* may only *self-decommit* a *scheduled generating unit* in accordance with this clause.
- (b) *Scheduled Generators* must notify AEMO of their planned *self-decommitment* decisions in relation to *slow start generating units* at least 2 days in advance of *dispatch*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) A *Scheduled Generator* must advise *AEMO* of its intention to *self-decommit* and *de-synchronise* a *generating unit* with a *nameplate rating* of 30 MW or more.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) Unless otherwise agreed with *AEMO*, the *Scheduled Generator* must advise of its intention under paragraph (c) through *PASA* and *pre-dispatch* by submitting an amended *available capacity* profile of the *scheduled generating unit* into the *market information bulletin board*.
- (e) A *Scheduled Generator* or *Market Participant* must notify *AEMO* as soon as practicable of any changes in their *self-decommitment* decisions.
- (f) *AEMO* must notify all *Scheduled Generators* and *Market Participants* of any changes to *self-decommitment* decisions as soon as practicable.

3.8.19 Dispatch inflexibilities

- (a) Subject to clause 3.8.19(a2), if a *Scheduled Generator* or *Market Participant* reasonably expects one or more of its *scheduled generating units*, *scheduled network services* or *scheduled loads* to be unable to operate in accordance with *dispatch instructions* in any *trading interval*, due to abnormal *plant* conditions or other abnormal operating requirements in respect of that *scheduled generating unit*, *scheduled network service* or *scheduled load*, it must advise *AEMO* through the *PASA* process or in its *dispatch offer* or *dispatch bid* in respect of that *scheduled generating unit*, *scheduled network service* or *scheduled load*, as appropriate under this Chapter, that the *scheduled generating unit*, *scheduled network service* or *scheduled load* is *inflexible* in that *trading interval* and must specify a fixed *loading level* at which the *scheduled generating unit*, *scheduled network service* or *scheduled load* is to be operated in that *trading interval*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (a1) Subject to clause 3.8.19(a2), if a *Semi-Scheduled Generator* reasonably expects one or more of its *semi-scheduled generating units* to be unable to operate in accordance with *dispatch instructions* in any *trading interval* due to abnormal *plant* conditions or other abnormal operating requirements in respect of that *semi-scheduled generating unit*, it must advise *AEMO* in its

dispatch offer in respect of that *semi-scheduled generating unit*, as appropriate under this Chapter, that the *semi-scheduled generating unit* is *inflexible* in that *trading interval* and must specify a maximum *loading level* at or below which the *semi-scheduled generating unit* is to be operated in that *trading interval*. Where the specified maximum *loading level* in these circumstances exceeds the *unconstrained intermittent generation forecast* for the *semi-scheduled generating unit*, the *dispatch level* for the *semi-scheduled generating unit* will nonetheless not exceed the *unconstrained intermittent generation forecast*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (a2) If clause 3.8.19(a) or clause 3.8.19(a1) applies, the *Scheduled Generator*, *Market Participant* or *Semi-Scheduled Generator*:
 - (1) must not advise AEMO that a *scheduled generating unit*, *semi-scheduled generating unit*, *scheduled network service* or *scheduled load* is *inflexible* under clause 3.8.19(a) or clause 3.8.19(a1) unless it reasonably expects the *scheduled generating unit*, *semi-scheduled generating unit*, *scheduled network service* or *scheduled load* to be unable to operate in accordance with *dispatch instructions* in any *trading interval*, due to abnormal *plant* conditions or other abnormal operating requirements in respect of that *scheduled generating unit*, *semi-scheduled generating unit*, *scheduled network service* or *scheduled load*; and
 - (2) must, as soon as practicable, advise AEMO that a *scheduled generating unit*, *semi-scheduled generating unit*, *scheduled network service* or *scheduled load* is not *inflexible* once it no longer reasonably expects the *scheduled generating unit*, *semi-scheduled generating unit*, *scheduled network service* or *scheduled load* to be unable to operate in accordance with *dispatch instructions* in any *trading interval*, due to abnormal *plant* conditions or other abnormal operating requirements in respect of that *scheduled generating unit*, *semi-scheduled generating unit*, *scheduled network service* or *scheduled load*.
- (b) Where a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* advises AEMO that a *scheduled generating unit*, *semi-scheduled generating unit*, *scheduled network service* or *scheduled load* is *inflexible* in accordance with clause 3.8.19(a) or 3.8.19(a1) the *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* must:
 - (1) provide AEMO with a brief, verifiable and specific reason why the *scheduled generating unit*, *semi-scheduled generating unit*, *scheduled network service* or *scheduled load* is *inflexible* at the same time as it advises AEMO of the *inflexibility*; and

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (2) provide to the *AER*, upon written request, in accordance with the guidelines issued by the *AER* from time to time in accordance with the *Rules consultation procedures* such additional information to substantiate and verify the reason for such *inflexibility* as the *AER* may require from time to time. The *AER* must provide information provided to it in accordance with this clause 3.8.19(b)(2) to any *Market Participant* that requests such information, except to the extent that the information can be reasonably claimed to be *confidential information*.
- (c) Other than in *trading intervals* for which it has been specified by a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* in the relevant *dispatch offer* or *dispatch bid* for a *scheduled generating unit*, *semi-scheduled generating unit*, *scheduled network service* or *scheduled load* that the *scheduled generating unit*, *semi-scheduled generating unit*, *scheduled network service* or *scheduled load* is *inflexible*, *AEMO* will *dispatch* the *scheduled generating unit*, *semi-scheduled generating unit*, *scheduled network service* or *scheduled load* in accordance with the prices and *price bands* specified in the relevant *dispatch offer* or *dispatch bid*.
- (d) In respect of *scheduled loads*, *scheduled generating units* or *semi-scheduled generating units* which are not *slow start generating units*, *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* may provide *AEMO*, as part of a *dispatch offer* or *dispatch bid* in respect of those *scheduled loads* or *generating units* or *semi-scheduled generating units*, with a *dispatch inflexibility profile*.
- (e) A *dispatch inflexibility profile* for a *generating unit* must contain the following parameters to indicate its MW capacity and time related *inflexibilities*:
 - (1) The time, T1, in minutes, following the issue of a *dispatch instruction* by *AEMO* to increase its *loading level* from 0 MW, which is required for the *plant* to begin to vary its *dispatch level* from 0 MW in accordance with the instruction;
 - (2) The time, T2, in minutes, that the *plant* requires after T1 (as specified in subparagraph (1)) to reach a specified minimum MW *loading level*;
 - (3) The time, T3, in minutes, that the *plant* requires to be operated at or above its minimum *loading level* before it can be reduced below that level;
 - (4) The time, T4, in minutes, following the issue of a *dispatch instruction* by *AEMO* to reduce *loading level* from the minimum *loading level*

(specified under subparagraph (2)) to zero, that the *plant* requires to completely comply with that instruction;

- (5) T1, T2, T3 and T4 must all be equal to or greater than zero;
 - (6) The sum (T1 + T2) must be less than or equal to 30 minutes; and
 - (7) The sum (T1 + T2 + T3 + T4) must be less than 60 minutes.
- (f) A *dispatch inflexibility profile* for a *scheduled load* must contain parameters to indicate its MW capacity and time related *inflexibilities*.
- (g) AEMO must use reasonable endeavours not to issue a *dispatch instruction* which is inconsistent with a *Scheduled Generator's*, *Semi-Scheduled Generator's* or *Market Participant's dispatch inflexibility profile*.

3.8.20 Pre-dispatch schedule

- (a) Each *day*, in accordance with the *timetable*, AEMO must prepare and publish a *pre-dispatch schedule* covering each *trading interval* of the period commencing from the next *trading interval* after the current *trading interval* up to and including the final *trading interval* of the last *trading day* for which all valid *dispatch bids* and *dispatch offers* have been received in accordance with the *timetable* and applied by the *pre-dispatch* process.
- (b) The *pre-dispatch* process is to have a resolution of one *trading interval* and no analysis will be made of operations within the *trading interval*, other than to ensure that *contingency capacity reserves* are adequate as set out in Chapter 4.
- (c) AEMO must determine the *pre-dispatch schedule* for each *trading interval* on the basis of:
 - (1) *dispatch bids*, *dispatch offers* and *market ancillary service offers* submitted for that *trading interval*;
 - (2) AEMO's forecast *power system load* for each *region* for that *trading interval*; and
 - (3) the *unconstrained intermittent generation forecasts*,and by using a process consistent with the principles for *central dispatch* as set out in clause 3.8.1.
- (d) In determining the *pre-dispatch schedule* AEMO shall not take account of any *dispatch inflexibility profile* submitted in accordance with clause 3.8.19.
- (e) Any inputs made to the *pre-dispatch* process by AEMO for the purpose of achieving a physically realisable schedule or to satisfy *power system security* requirements must be made prior to release of the *pre-dispatch schedule* and recorded by AEMO in a manner suitable for audit.

- (f) The *pre-dispatch schedule* must include the details set out in clause 3.13.4(f).
- (g) Each *Scheduled Generator*, *Scheduled Network Service Provider* and *Market Customer* which has classified a *scheduled load* and *Market Participant* (which has classified an *ancillary service generating unit* or *ancillary service load*) must ensure that it is able to *dispatch* the relevant plant as required under the *pre-dispatch schedule* and is responsible for changing inputs to the *central dispatch* process, if necessary to achieve this, via the rebidding provisions under clause 3.8.22.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (h) The *pre-dispatch schedule* must be re-calculated and the results re-*published* by *AEMO* regularly in accordance with the *timetable*, or more often if a change in circumstances is deemed by *AEMO* to be likely to have a significant effect on the operation of the *market*.
- (i) *AEMO* must fully document the operation of the *pre-dispatch* process, including the principles adopted in making calculations required to be included and all such documentation must be made available to *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* at a fee to be set by *AEMO* to cover its costs of supplying such documentation.
- (j) The following *pre-dispatch* outputs relating specifically to a *generating unit*, *scheduled network service*, *scheduled load* or *ancillary service load* operated by a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* (as the case may be) must be made available electronically to the relevant *Generator* or *Market Participant* on a confidential basis:
 - (1) the scheduled times of *commitment* and de-commitment of individual *slow start generating units*;
 - (2) scheduled half hourly *loading level* for each scheduled entity;
 - (3) scheduled provision of *ancillary services*;
 - (4) scheduled *constraints* for the provision of *ancillary services*;
 - (5) scheduled *constraints* due to *network* limitations;
 - (6) *unconstrained intermittent generation forecasts* for each *trading interval*; and
 - (7) for each *semi-scheduled generating unit* and *trading interval*, whether or not a condition for setting a *semi-dispatch interval* applies.
- (k) Where the *pre-dispatch schedule* may have failed to *dispatch* a *scheduled generating unit* or a *semi-scheduled generating unit* to maximise the joint

value of *energy* and *ancillary services pre-dispatch* outputs of a *scheduled generating unit* or *semi-scheduled generating unit*, due to the *generating unit* operating outside its *enablement limit*, AEMO must notify the *Scheduled Generator* or *Semi-Scheduled Generator* operating the relevant *generating unit* electronically on a confidential basis.

3.8.21 On-line dispatch process

- (a) *Dispatch bids* and *dispatch offers* must be centrally dispatched by AEMO using the *dispatch algorithm*.
- (a1) A *dispatch interval* is to be five minutes in duration.
- (b) The *dispatch algorithm* is to be run by AEMO for each *dispatch interval*. If the *dispatch algorithm* is not successfully run for any *dispatch interval* then the values of the last successful run of the *dispatch algorithm* must be used for that *dispatch interval*.
- (c) *Central dispatch* results in the setting of *dispatch prices* and *ancillary services prices* for each *dispatch interval* and *spot prices* for each *trading interval* in accordance with rule 3.9.
- (d) Where possible, *dispatch instructions* will be issued electronically via the *automatic generation control system* or via an electronic display in the *plant control room* (which may be onsite or offsite) of the *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* (as the case may be).
- (e) AEMO may issue *dispatch instructions* in some other form if in its reasonable opinion the methods described in paragraph (d) are not possible.
- (f) A *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* must ensure it has facilities to receive *dispatch instructions* in the manner described in this clause 3.8.21.
- (g) *Dispatch instructions* that are issued via the *automatic generation control system* are to be issued progressively at intervals of no more than 5 minutes following re-evaluation of *central dispatch* to achieve a prompt and smooth implementation of the outcomes of each *central dispatch* update.
- (h) With the exception of instructions issued by telephone, all *dispatch instructions* and the times at which they are issued are to be logged automatically and *dispatch instructions* that are issued by telephone must be recorded by AEMO.
- (i) AEMO may modify or override the *dispatch algorithm* outcome in accordance with the requirements of clause 4.8.9 or due to *plant* not conforming to *dispatch instructions* and in such circumstances AEMO must record the details of the event and the reasons for its action for audit purposes.
- (j) If a *scheduled load*, *scheduled generating unit* or *semi-scheduled generating unit*, in respect of which a *dispatch inflexibility profile* has been notified to

AEMO in accordance with clause 3.8.19, is *dispatched* from 0 MW in any *dispatch interval* by the *central dispatch* process, then the specified *dispatch inflexibility profile* must be used by *AEMO* as a *constraint* on the *dispatch* of that *plant* for the relevant subsequent *dispatch intervals*.

- (k) A *scheduled load* or *generating unit* whose *dispatch* is *constrained* in any *dispatch interval* due to a *dispatch inflexibility profile* submitted under clause 3.8.19 cannot be used as the basis for setting the *dispatch price* in that *dispatch interval* at any location.
- (l) *AEMO* must fully document the operation of the process described in this clause 3.8.21, including the software, algorithms, and the principles adopted in making judgments where they are required in the process and all such documentation must be made available to *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* at a price reflective of costs incurred by *AEMO* in providing such documentation.
- (m) Where the *central dispatch* process may have failed to *dispatch* a *scheduled generating unit* or *semi-scheduled generating unit* to maximise the joint value of *energy* and *ancillary services* due to the relevant *generating unit* operating outside its *enablement limit*, *AEMO* must notify the *Scheduled Generator* or *Semi-Scheduled Generator* operating the relevant *generating unit* electronically on a confidential basis.

3.8.22 Rebidding

- (a) Prices for each *price band* that are specified in *dispatch bids*, *dispatch offers* and *market ancillary service offers* are firm and no changes to the price for any *price band* are to be accepted under any circumstances.
- (b) Subject to clauses 3.8.3A, 3.8.7A, 3.8.19(a) and 3.8.22A, a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* may submit a *rebid* to vary:
 - (1) its *available capacity*, *daily energy constraints*, *dispatch inflexibilities* and *ramp rates* of *generating units*, *scheduled network services* and *scheduled loads*; and
 - (2) the *response breakpoints*, *enablement limits* and response limits of *market ancillary services*,previously notified in a *dispatch offer*, a *dispatch bid* or a previous *rebid*.
- (c) A *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* must provide:
 - (1) all *rebids* to *AEMO* electronically unless otherwise approved by *AEMO*;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.) - what

- (2) to *AEMO*, at the same time as the *rebid* is made:
 - (i) a brief, verifiable and specific reason for the *rebid*; and
 - (ii) the time at which the event(s) or other occurrence(s) adduced by the relevant *Generator* or *Market Participant* as the reason for the *rebid*, occurred;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

Clause 3.8.22(c)(2) applies in respect of any *rebid* submitted during the *late rebidding period*.

- (3) to the *AER*, upon written request, in accordance with guidelines published by the *AER*, such additional information to substantiate and verify the reason for a *rebid* (including any record made under paragraph (ca)) as the *AER* may require from time to time.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (ca) A *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* who makes a *rebid* during the *late rebidding period* must make a contemporaneous record in relation to the *rebid*, which must include a record of:
 - (i) the material conditions and circumstances giving rise to the *rebid*;
 - (ii) the *Generator's* or *Market Participant's* reasons for making the *rebid*;
 - (iii) the time at which the relevant event(s) or other occurrence(s) occurred; and
 - (iv) the time at which the *Generator* or *Market Participant* first became aware of the relevant event(s) or other occurrence(s).

Notes

Clause 1.9 applies to records made under paragraph (ca).

This AEMC will be recommending to the COAG Energy Council that this clause be classified as a civil penalty provision under the National Electricity (South Australia) Regulations.

- (d) The *AER* must provide information provided to it in accordance with paragraph (c)(3) to any *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* that requests such information, except to the extent that the information can be reasonably claimed to be *confidential information*.
- (e) The guidelines referred to in paragraphs (c)(3) must be developed in accordance with the *Rules consultation procedures* and must include:
 - (1) the amount of detail to be included in the information provided to *AEMO* under paragraph (c)(2); and
 - (2) procedures for handling claims by *Scheduled Generators*, *Semi-Scheduled Generators* or *Market Participants* in accordance with paragraph (d) or clause 3.8.19(b)(2) that the information provided to the *AER* by such *Generators* or *Market Participants* under those clauses is *confidential information*.
- (f) The *AER* must *publish* the guidelines developed under this clause 3.8.22 and may amend such guidelines from time to time.
- (g) *AEMO* must:
 - (1) subject to the *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* complying with paragraphs (c)(1) and (c)(2)(i) and (ii), accept the *rebid*; and
 - (2) *publish*, in accordance with clause 3.13.4(p), the time the *rebid* was made and the reason provided by the *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* under paragraph (c)(2)(i).

3.8.22A Offers, bids and rebids must not be false or misleading

- (a) A *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* must not make a *dispatch offer*, *dispatch bid* or *rebid* that is false, misleading or likely to mislead.
 - (a1) For the purposes of paragraph (a), the making of a *dispatch offer*, *dispatch bid* or *rebid* is deemed to represent to other *Generators* or *Market Participants* through the *pre-dispatch schedules published* by *AEMO* that the offer, bid or *rebid* will not be changed, unless the *Generator* or *Market Participant* becomes aware of a change in the material conditions and circumstances upon which the offer, bid or *rebid* are based.
- (b) Without limiting paragraph (a), a *dispatch offer*, *dispatch bid* or *rebid* is deemed to be false or misleading if, at the time of making such an offer, bid or *rebid*, a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant*:
 - (1) does not have a genuine intention to honour; or
 - (2) does not have a reasonable basis to make;

the representations made by reason of paragraph (a1).

- (b1) In any proceeding in which a contravention of paragraph (a) is alleged, in determining whether a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* made a *dispatch offer*, *dispatch bid* or *rebid* that was false, misleading or likely to mislead, a court must have regard to the market design principle set out in clause 3.1.4(a)(2).
- (c) A *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* may be taken to have contravened paragraph (a) notwithstanding that, after all the evidence has been considered, the false or misleading character of the *dispatch offer*, *dispatch bid* or *rebid* (including either of the matters referred to in subparagraphs (b)(1) and (2)) is ascertainable only by inference from:
 - (1) other *dispatch offers*, *dispatch bids* or *rebids* made by the *Generator* or *Market Participant*, or in relation to which the *Generator* or *Market Participant* had substantial control or influence;
 - (2) other conduct (including any pattern of conduct), knowledge, belief or intention of the relevant *Generator* or *Market Participant*;
 - (3) the conduct (including any pattern of conduct), knowledge, belief or intention of any other person;
 - (4) information published by AEMO to the relevant *Generator* or *Market Participant*; or
 - (5) any other relevant circumstances.
- (d) A *rebid* must be made as soon as practicable after the *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* becomes aware of the change in material conditions and circumstances on the basis of which it decides to vary its *dispatch offer* or *dispatch bid*.
- (e) In any proceeding in which a contravention of paragraph (d) is alleged, in determining whether the *Generator* or *Market Participant* made a *rebid* as soon as practicable, a court must have regard to:
 - (1) the market design principle set out in clause 3.1.4(a)(2); and
 - (2) the importance of *rebids* being made, where possible, in sufficient time to allow reasonable opportunity for other *Market Participants* to respond (including by making responsive *rebids*, by bringing one or more *generating units* into operation or increasing or decreasing the *loading level* of any *generating units*, or by adjusting the *loading level* of any *load*) prior to:
 - (i) the commencement of the *trading interval* to which the *rebid* relates; or
 - (ii) the commencement of any *dispatch interval* within that *trading interval*.

and may have regard to any other relevant matter, including any of the matters referred to in sub-paragraphs (c)(1) to (5).

Note

This clause is a rebidding civil penalty provision for the purposes of the National Electricity Law. (See clause 6(2) of the National Electricity (South Australia) Regulations.)

3.8.23 Failure to conform to dispatch instructions

- (a) If a *scheduled generating unit*, *scheduled network service* or *scheduled load* fails to respond to a *dispatch instruction* within a tolerable time and accuracy (as determined in AEMO's reasonable opinion), then the *scheduled generating unit*, *scheduled network service* or *scheduled load* (as the case may be):
 - (1) is to be declared and identified as non-conforming; and
 - (2) cannot be used as the basis for setting *spot prices*.
- (b) If a *semi-scheduled generating unit* fails to respond to a *dispatch instruction* within a tolerable time and accuracy (as determined in AEMO's reasonable opinion) in a *semi-dispatch interval* where the unit's actual *generation* is more than the *dispatch level*, the unit is to be declared and identified as non-conforming and cannot be used as the basis for setting *spot prices*.
- (c) If a *scheduled generating unit*, *semi-scheduled generating unit*, *scheduled network service* or *scheduled load* is identified as non-conforming under paragraphs (a) or (b):
 - (1) AEMO must advise the *Scheduled Generator*, *Semi-Scheduled Generator*, *Scheduled Network Service Provider* or *Market Customer* that the relevant *generating unit*, *scheduled network service* or *scheduled load* is identified as non-conforming, and request and log a reason for the non-compliance with the *dispatch instruction*;
 - (2) if in AEMO's opinion modification of *plant* parameters is necessary or desirable, AEMO must request the *Scheduled Generator*, *Semi-Scheduled Generator*, *Scheduled Network Service Provider* or *Market Customer* to submit modified *plant* parameters to satisfy AEMO that a realistic real time *dispatch* schedule can be carried out;
 - (3) should a *Scheduled Generator* or *Semi-Scheduled Generator* fail to meet the requests set out subparagraphs (1) and (2) or if AEMO is not satisfied that the *generating unit* will respond to future *dispatch instructions* as required, AEMO must direct the *generating unit's* output to follow, as far as is practicable, a specified output profile to be determined at its discretion by AEMO;
 - (4) should a *Scheduled Network Service Provider* fail to meet the requests set out in subparagraphs (1) and (2) or if AEMO is not satisfied that the *scheduled network service* will respond to future *dispatch*

instructions as required, *AEMO* must direct the *scheduled network service* to follow, as far as is practicable, a specified transfer profile to be determined at its discretion by *AEMO*; and

- (5) should a *Market Customer* not meet the requests set out in subparagraphs (1) and (2) within a reasonable time of the request, or if *AEMO* is not satisfied that the *scheduled load* will respond to future *dispatch instructions* as required, *AEMO* acting reasonably may invoke a *default dispatch bid* lodged by the relevant *Market Customer* or apply *constraints* as it deems appropriate.
- (d) Until a *Scheduled Generator*, *Semi-Scheduled Generator*, *Scheduled Network Service Provider* or *Market Customer* satisfactorily responds to the requests under paragraphs (c)(1) and (2) and *AEMO* is satisfied that the *generating unit*, *scheduled network service* or *scheduled load* (as the case may be) will respond to future *dispatch instructions* as required, the *generating unit*, *scheduled network service* or *scheduled load* (as the case may be) continues to be non-conforming.
- (e) If a *generating unit*, *scheduled network service* or *scheduled load* (as the case may be) continues to be non-conforming under this clause 3.8.23 after a reasonable period of time, *AEMO* must prepare a report setting out the details of the non-conformance and forward a copy of the report to the *Scheduled Generator*, *Semi-Scheduled Generator*, *Scheduled Network Service Provider* or *Market Customer* (as the case may be) and the *AER*.
- (f) The direction referred to in paragraphs (c)(3) and (4) must remain in place until the *Scheduled Generator*, *Semi-Scheduled Generator* or *Scheduled Network Service Provider* (whichever is relevant) satisfies *AEMO* of rectification of the cause of the non-conformance.
- (g) If an *ancillary service generating unit* or *ancillary service load* is enabled to provide a *market ancillary service* and fails to respond in the manner contemplated by the *market ancillary service specification* (as determined in *AEMO*'s reasonable opinion), then:
 - (1) the *ancillary service generating unit* or *ancillary service load* is to be declared and identified as non-conforming;
 - (2) *AEMO* must advise the relevant *Market Participant* that the *ancillary service generating unit* or *ancillary service load* is identified as non-conforming, and request a reason for the non-conformance. The relevant *Market Participant* must promptly provide a reason if requested to do so, and the reason is to be logged; and
 - (3) *AEMO* may set a fixed level for the relevant *ancillary service* (in this clause 3.8.23 called the 'fixed constraint') for the *ancillary service generating unit* or *ancillary service load* and the relevant *Market Participant* must ensure that the *ancillary service generating unit* or *ancillary service load* complies with the fixed constraint set by *AEMO*.

- (h) *AEMO* must lift the fixed constraint in respect of an *ancillary service generating unit* or *ancillary service load* when *AEMO* is reasonably satisfied (as a result of a test or otherwise) that the *ancillary service generating unit* or *ancillary service load* is capable of responding in the manner contemplated by the *market ancillary service specification*.
- (i) In assessing a report of non-conformance with a *dispatch instruction* by a *scheduled load*, the *AER* shall have regard to whether a *default dispatch bid* had been lodged with *AEMO* and was, or could have reasonably been, applied in the circumstances applicable to that *scheduled load*.

3.8.24 Scheduling errors

- (a) A *scheduling error* is any one of the following circumstances:
 - (1) the *dispute resolution panel* determines under rule 8.2 that *AEMO* has failed to follow the *central dispatch* process set out in this rule 3.8; or
 - (2) *AEMO* declares that it failed to follow the *central dispatch* process set out in this rule 3.8; or
 - (3) *AEMO* determines under clause 3.9.2B(d) that a *dispatch interval* contained a manifestly incorrect input.
- (b) *Spot prices* and *ancillary service prices* will not be adjusted due to the occurrence of a *scheduling error* except where the *scheduling error* arises through the application of clause 3.9.2B.

3.9 Price Determination

3.9.1 Principles applicable to spot price determination

- (a) The principles applying to the determination of prices in the *spot market* are as follows:
 - (1) a *dispatch price* at a *regional reference node* is determined by the *central dispatch* process for each *dispatch interval*;
 - (2) a *spot price* at a *regional reference node* is the time-weighted average of the *dispatch prices* at that *regional reference node* in a *trading interval*;
 - (2A) the *central dispatch* process must determine an *ancillary service price* for each *market ancillary service* at each *regional reference node* for every *dispatch interval*;
 - (3) *dispatch prices* determine *dispatch* such that a *generating unit* or *load* whose *dispatch bid* or *dispatch offer* at a location is below the *spot price* at that location will normally be *dispatched*;

- (3A) *generating units, scheduled network services or scheduled loads* which operate in accordance with a *direction*, are to be taken into account in the *central dispatch* process, but the *dispatch offer*, in the case of a *generating unit* or *scheduled network service*, which operates in accordance with a *direction*, or the *dispatch bid*, in the case of a *scheduled load* which operates in accordance with a *direction*, will not be used in the calculation of the *dispatch price* in the relevant *dispatch interval*;
- (3B) *ancillary service generating units and ancillary service loads* the subject of a fixed constraint (within the meaning of clause 3.8.23(g)) are to be taken into account in the *central dispatch* process, but the price in a *market ancillary service offer* which operates in accordance with a fixed constraint will not be used in the calculation of the *ancillary service price* for that *market ancillary service* in the relevant *dispatch interval*;
- (3C) *generating units or loads* which operate in accordance with a *direction* to provide an *ancillary service* are to be taken into account in the *central dispatch* process, but the price in a *market ancillary service offer* which operates in accordance with a *direction*, will not be used in the calculation of the *ancillary service price* for that *market ancillary service* in the relevant *dispatch interval*;
- (4) *network losses, network constraints*, the availability of *scheduled network services* and *network dispatch offers* are taken into account in the determination of *dispatch* and consequently affect *dispatch prices, spot prices* and (apart from *network losses*) *ancillary services prices*;
- (5) where the *energy* output of a *Registered Participant* is limited above or below the level at which it would otherwise have been *dispatched* by AEMO on the basis of its *dispatch offer* or *dispatch bid* due to an *ancillary services direction*, the *Registered Participant's dispatch offer* or *dispatch bid* is taken into account in the determination of *dispatch* but the *dispatch offer* or *dispatch bid* will not be used in the calculation of the *dispatch price* for *energy* in the relevant *dispatch interval*;
- (5A) *market ancillary service offers*, in other *ancillary services markets*, due to an *ancillary services direction* are taken into account in the determination of *dispatch* and consequently affect *ancillary service prices* in those other *ancillary services markets*;
- (6) when the *spot price* is determined, it applies to both sales and purchases of electricity at a particular location and time;
- (6A) when an *ancillary service price* is determined for an *ancillary service*, it applies to purchases of that *ancillary service*;

- (6B) when an *ancillary service price* is determined under paragraph (6A) for a *regulation service*, it applies to purchases of that *regulation service* and, where appropriate, purchases of a *delayed service*;
 - (7) *spot prices* and *dispatch prices* provide *Market Participants* with signals as to the value of providing or cost of consuming electricity at a particular location at a particular time; and
 - (7A) *ancillary service prices* provide *Ancillary Service Providers* with signals as to the value of providing the relevant *market ancillary service* within a particular *region* at a particular time.
- (b) A single *regional reference price* which is the *spot price* at the *regional reference node* provides a reference from which the *spot prices* are determined within each *region*.
 - (c) The *local spot price* at each *transmission network connection point* is the *spot price* at the *regional reference node* for the *region* to which the *connection point* is assigned multiplied by the relevant *intra-regional loss factor* applicable to that *connection point*.

Note

Where two *intra-regional loss factors* are determined for a *transmission network connection point* under clause 3.6.2(b)(2), AEMO will determine the relevant *intra-regional loss factor* for use under this clause in accordance with the procedure determined under clause 3.6.2(d1).

3.9.2 Determination of spot prices

- (a) **[Deleted]**
- (b) **[Deleted]**
- (c) Each time the *dispatch algorithm* is run by AEMO, it must determine a *dispatch price* for each *regional reference node* for a *dispatch interval* in accordance with clause 3.8.21(b), provided that if AEMO fails to run the *dispatch algorithm* to determine *dispatch prices* for any *dispatch interval* then the *dispatch price* for that *dispatch interval* is the last *dispatch price* determined by the *dispatch algorithm* prior to the relevant *dispatch interval*.
- (d) The *dispatch price* at a *regional reference node* represents the marginal value of *supply* at that location and time, this being determined as the price of meeting an incremental change in *load* at that location and time in accordance with clause 3.8.1(b).
- (e) Notwithstanding clauses 3.9.2(c) or (d), for any *dispatch interval* if:
 - (1) the *dispatch price* for that *dispatch interval* has not already been set by the *central dispatch* process and AEMO reasonably determines that the *central dispatch* process may determine that all *load* in a *region* could not otherwise be supplied and AEMO issues instructions that are current for that *dispatch interval* to *Network Service Providers* or

Market Participants to shed load, then AEMO must set the dispatch price at that region's regional reference node to equal the market price cap;

- (2) *AEMO has declared a dispatch interval to be an intervention price dispatch interval under clause 3.9.3(a), then subject to clauses 3.9.3(c) and 3.9.3(d) AEMO must set the dispatch price in accordance with clause 3.9.3;*
- (3) **[Deleted]**
- (4) *an administered price period in accordance with clause 3.14.2 applies, then AEMO must limit the dispatch price in accordance with clause 3.14.2(d1); and*
- (5) *AEMO has made a declaration that the spot market in a region is suspended under clause 3.14.4, then AEMO must set the dispatch price for each dispatch interval during the period for which the spot market is suspended in accordance with clause 3.14.5.*
- (f) **[Deleted]**
- (g) **[Deleted]**
- (h) *The spot price at a regional reference node for a trading interval equals the time weighted average of the dispatch prices at the regional reference node for each of the dispatch intervals in the trading interval.*
- (i) **[Deleted]**
- (j) **[Deleted]**
- (k) *If a test is being conducted on a generating unit or scheduled load in accordance with clause 3.11.2 and for the purpose of conducting that test, the generating unit or scheduled load is excluded from central dispatch, then that generating unit or scheduled load cannot be used to set the dispatch price for energy in the relevant dispatch interval.*

3.9.2A Determination of ancillary services prices

- (a) *Each time the dispatch algorithm is run by AEMO, it must determine an ancillary service price for each market ancillary service for each regional reference node which is to apply until the next time the dispatch algorithm is run, provided that if AEMO fails to run the dispatch algorithm to determine ancillary service prices for any dispatch interval then the ancillary service price for that dispatch interval is the last ancillary service price determined by the dispatch algorithm prior to the relevant dispatch interval.*
- (b) *For each market ancillary service, including the regulating raise service and the regulating lower service, each time the dispatch algorithm is run by*

AEMO where a local *ancillary services* constraint has been applied, AEMO must:

- (1) calculate the marginal price of meeting any *global market ancillary service requirement* for that service;
- (2) calculate the marginal price of meeting each *local market ancillary service requirement* for that service and;
- (3) identify for each *local market ancillary service requirement* the *regions* requiring the service.

(b1) An *ancillary service price* for a *region* is the sum of:

- (1) the marginal price of meeting any *global market ancillary service requirement* for that service; and
- (2) the marginal price of meeting each *local market ancillary service requirement* for that service in that *region*.

(c) If an *ancillary service price* determined using the *dispatch algorithm* under clause 3.9.2A(a):

- (1) is less than zero, then the *ancillary service price* is reset to zero; and
- (2) is greater than the *market price cap*, then the *ancillary service price* is reset to the *market price cap*.

(c1) If a marginal price calculated pursuant to clause 3.9.2A(b) is greater than the *market price cap*, then that marginal price is reset to the *market price cap*.

(d) If a test is being conducted on a *generating unit* or *scheduled load* in accordance with clause 3.11.2 and for the purpose of conducting that test, the *generating unit* or *scheduled load* is excluded from *central dispatch*, then that *generating unit* or *scheduled load* cannot be used to set *ancillary service prices*.

3.9.2B Pricing where AEMO determines a manifestly incorrect input

(a) For the purposes of this clause:

Input means any value that is used by the *dispatch algorithm* including measurements of *power system* status, five minute demand forecast values, *constraint* equations entered by AEMO, or software setup but not including *dispatch bids* and *dispatch offers* submitted by *Registered Participants*.

Last correct *dispatch interval* means the most recent *dispatch interval* preceding the affected *dispatch interval* that is not itself an affected *dispatch interval*.

- (b) *AEMO* may apply the automated procedures developed in accordance with clause 3.9.2B(h), to identify a *dispatch interval* as subject to review ("a ***dispatch interval subject to review***").
- (c) *AEMO* may also determine that a *dispatch interval* is subject to review if *AEMO* considers that it is likely to be subject to a manifestly incorrect input, but only where the *dispatch interval* immediately preceding it was a *dispatch interval* subject to review.
- (d) *AEMO* must determine whether a *dispatch interval* subject to review contained a manifestly incorrect input to the *dispatch algorithm* ("an ***affected dispatch interval***").
- (e) Where *AEMO* determines an affected *dispatch interval*, *AEMO* must:
 - (1) replace all *dispatch prices* and *ancillary service prices* with the corresponding prices for the last correct *dispatch interval*; and
 - (2) recalculate, in accordance with clause 3.9.2(h), and adjust all *spot prices* relevant to each affected *dispatch interval*.
- (f) *AEMO* may only carry out the action described in clause 3.9.2B(e) if no more than 30 minutes have elapsed since the publication of the *dispatch prices* for the *dispatch interval* subject to review.
- (g) As soon as reasonably practicable after the action as described in clause 3.9.2B(e), *AEMO* must *publish* a report outlining:
 - (1) The reasons for the determination under clause 3.9.2B(d);
 - (2) Whether that determination was correct;
 - (3) What action will be taken to minimise the risk of a similar event in future.
- (h) *AEMO* must, in consultation with *Registered Participants*, develop procedures for the automatic identification of *dispatch intervals* subject to review under clause 3.9.2B (b) ("the ***automated procedures***").
- (i) The purpose of the automated procedures is to detect instances where manifestly incorrect inputs may have resulted in material differences in pricing outcomes.
- (j) **[Deleted]**
- (k) At least once each calendar year, *AEMO* must review the effectiveness of the automated procedures referred to in clause 3.9.2B(h).
- (l) *AEMO* must report on the findings of the review under clause 3.9.2B(k) and must include in that report details of all *dispatch intervals* subject to review that were not affected *dispatch intervals* and an analysis of why such intervals were identified as subject to review.

(m) [Deleted]

3.9.3 Pricing in the event of intervention by AEMO

- (a) In respect of a *dispatch interval* where a *AEMO intervention event* occurs *AEMO* must declare that *dispatch interval* to be an *intervention price dispatch interval*.
- (b) Subject to paragraphs (c) and (d), *AEMO* must in accordance with the methodology or assumptions *published* pursuant to paragraph (e) set the *dispatch price* and *ancillary service prices* for an *intervention price dispatch interval* at the value which *AEMO*, in its reasonable opinion, considers would have applied as the *dispatch price* and *ancillary service price* for that *dispatch interval* in the relevant *region* had the *AEMO intervention event* not occurred.
- (c) *AEMO* may continue to set *dispatch prices* pursuant to clause 3.9.2 and *ancillary service prices* pursuant to clause 3.9.2A until the later of:
 - (1) the second *dispatch interval* after the first *dispatch interval* in which the *AEMO intervention event* occurred; or
 - (2) if applicable, the second *dispatch interval* after the restoration of the power system to a *secure operating state* after any *direction* which constitutes the *AEMO intervention event* was issued,

provided that *AEMO* must use its reasonable endeavours to set *dispatch prices* and *ancillary service prices* pursuant to this clause 3.9.3 as soon as practicable following the *AEMO intervention event*.

- (d) *AEMO* must continue to set *dispatch prices* pursuant to clause 3.9.2 and *ancillary service prices* pursuant to clause 3.9.2A if a *direction* given to a *Registered Participant* in respect of *plant* at the *regional reference node* would not in *AEMO*'s reasonable opinion have avoided the need for any *direction* which constitutes the *AEMO intervention event* to be issued.
- (e) Subject to paragraph (g), *AEMO* must develop in accordance with the *Rules consultation procedures* and *publish* details of the methodology it will use, and any assumptions it may be required to make, to determine *dispatch prices* and *ancillary service prices* for the purposes of paragraph (b).
- (f) The methodology developed by *AEMO* under paragraph (e) must wherever reasonably practicable:
 - (1) be consistent with the principles for *spot price* determination set out in clause 3.9.1;
 - (2) enable *AEMO* to determine and *publish* such prices in accordance with clause 3.13.4; and
 - (3) be consistent with the principles for *ancillary service price* determination set out in clauses 3.9.2 and 3.9.2A.

- (g) *AEMO* may make minor and administrative amendments to the methodology developed under paragraph (e) without complying with the *Rules consultation procedures*.

3.9.3A Reliability standard and settings review

Reliability standard and settings guidelines

- (a) The *Reliability Panel* must develop and publish, and may amend from time to time, guidelines (the *reliability standard and settings guidelines*) that set out the principles and assumptions that the *Reliability Panel* will use in conducting the *reliability standard and settings review*.
- (b) The *Reliability Panel* must develop the *reliability standard and settings guidelines* in accordance with the *Rules consultation procedures* and must amend the *reliability standard and settings guidelines* in accordance with the consultation process set out in clauses 8.8.3(d) to (l).
- (c) There must be *reliability standard and settings guidelines* in force at all times after the date on which the *Reliability Panel* publishes the first *reliability standard and settings guidelines* under these *Rules*.

Conducting the reliability standard and settings review

- (d) By 30 April of each fourth year (with the first four year period ending in 2014), the *Reliability Panel* must:
 - (1) conduct the *reliability standard and settings review* in accordance with the *Rules consultation procedures* and this clause; and
 - (2) publish a report in accordance with clause 3.9.3B on the *reliability standard* and *reliability settings* that it recommends should apply on and from 1 July in the year commencing 2 years after the year in which the report is published.

Requirements for reliability standard and settings review

- (e) In conducting the *reliability standard and settings review* the *Reliability Panel*:
 - (1) must comply with the *reliability standard and setting guidelines*;
 - (2) must have regard to any terms of reference for the review provided by the *AEMC* under clause 8.8.3(c);
 - (3) must have regard to the potential impact of any proposed change to a *reliability setting* on:
 - (i) *spot prices*;
 - (ii) investment in the *National Electricity Market*;
 - (iii) the *reliability* of the *power system*; and

- (iv) *Market Participants*;
 - (4) must have regard to any value of customer reliability determined by the *AER* under rule 8.12 which the *Reliability Panel* considers to be relevant; and
 - (5) may take into account any other matters specified in the *reliability standards and setting guidelines* or which the *Reliability Panel* considers relevant.
- (f) The *Reliability Panel* may only recommend a *market price cap* or *cumulative price threshold* which the *Reliability Panel* considers will:
 - (1) allow the *reliability standard* to be satisfied without use of *AEMO's* powers to intervene under clauses 3.20.7(a) and 4.8.9(a); and
 - (2) in conjunction with other provisions of the *Rules*, not create risks which threaten the overall integrity of the *market*.
- (g) If the *Reliability Panel* is of the view that a decrease in either the *market price cap* or the *cumulative price threshold* may mean the *reliability standard* is not maintained, the *Reliability Panel* may only recommend such a decrease where it has considered any alternative arrangements necessary to maintain the *reliability standard*.
- (h) The *Reliability Panel* may only recommend a *market floor price* which the *Reliability Panel* considers will:
 - (1) allow the *market* to clear in most circumstances; and
 - (2) not create substantial risks which threaten the overall stability and integrity of the *market*.
- (i) The *Reliability Panel* must submit to the *AEMC* any *Rule* change proposal that results from a review under this clause as soon as practicable after the review is completed.

3.9.3B Reliability standard and settings review report

A report of the findings of the *Reliability Panel* in a review under clause 3.9.3A must set out the *Reliability Panel's* conclusions and its recommendations in relation to:

- (a) the *reliability standard*;
- (b) the level of the *reliability settings*;
- (c) the manner of indexing the *market price cap* and the *cumulative price threshold*;
- (d) supporting information including:

- (1) a description of how the *Reliability Panel* has conducted the review in accordance with the *reliability standard and setting guidelines*;
- (2) how the *Reliability Panel* has taken into account any terms of reference for the review provided by the *AEMC* under clause 8.8.3(c);
- (3) details of all relevant *market* conditions and circumstances on which its recommendation is based (if not specified under subparagraph (d)(1)); and
- (4) an assessment of whether the level of the *market price cap* together with the operation of the *cumulative price threshold* have achieved the objectives set out in clause 3.9.3A(f).

3.9.3C Reliability standard

- (a) The *reliability standard* for *generation* and *inter-regional transmission elements* in the *national electricity market* is a maximum expected *unserved energy (USE)* in a *region* of 0.002% of the total *energy* demanded in that *region* for a given *financial year*.
- (b) For the purposes of paragraph (a) *unserved energy* is to:
 - (1) include *unserved energy* associated with *power system reliability* incidents that result from:
 - (i) a single *credible contingency event* on a *generating unit* or an *inter-regional transmission element*, that may occur concurrently with *generating unit* or *inter-regional transmission element outages*; or
 - (ii) delays to the construction or commissioning of new *generating units* or *inter-regional transmission elements*, including delays due to industrial action or acts of God; and
 - (2) exclude *unserved energy* associated with *power system security* incidents that result from:
 - (i) multiple *contingency events*, *protected events* or *non-credible contingency events* on a *generating unit* or an *inter-regional transmission element*, that may occur concurrently with *generating unit* or *inter-regional transmission element outages*;
 - (ii) *outages* of *transmission network* or *distribution network* elements that do not significantly impact the ability to transfer *power* into the *region* where the *USE* occurred; or
 - (iii) industrial action or acts of God at existing *generating facilities* or *inter-regional transmission facilities*.

3.9.3D Implementation of the reliability standard

- (a) *AEMO* must develop, publish and amend from time to time *reliability standard implementation guidelines* that set out how *AEMO* will implement the *reliability standard*.
- (b) The *reliability standard implementation guidelines* must include, without limitation, the approach *AEMO* will use and the assumptions it will make in relation to:
 - (1) demand for electricity;
 - (2) *reliability* of existing and future *generation*;
 - (3) *intermittent generation*;
 - (4) *energy constraints*;
 - (5) the treatment of extreme weather events; and
 - (6) *network constraints*.
- (b1) In addition to the matters specified in paragraph (b), the *reliability standard implementation guidelines* must set out the factors that *AEMO* will consider in determining whether it has an obligation to publish an *EAAP* under clause 3.7C(d)(2).
- (c) *AEMO* must develop and amend the *reliability standard implementation guidelines* in consultation with the *Reliability Panel*, *Registered Participants* and other interested persons in accordance with the *Rules consultation procedures*.
- (d) There must be *reliability standard implementation guidelines* in force at all times after the date on which *AEMO* publishes the first *reliability standard implementation guidelines* under these *Rules*.
- (e) *AEMO* must review the *reliability standard implementation guidelines* at least once every four years. *AEMO* must conduct the review in consultation with the *Reliability Panel*, *Registered Participants* and other interested persons in accordance with the *Rules consultation procedures*.

3.9.4 Market Price Cap

- (a) The *market price cap* is a price cap which is to be applied to *dispatch prices*.
- (b) The value of the *market price cap* for each *financial year* is the dollar amount per MWh calculated by the *AEMC* under paragraph (c).

Note

The current value of the *market price cap* is set out in a schedule of reliability settings published on the *AEMC*'s website www.aemc.gov.au

- (c) By 28 February of each year (commencing 2012), the *AEMC* must calculate the *market price cap* to apply on and from 1 July of that year in accordance with paragraphs (d) and (e) and *publish* its calculation on its website as part of a schedule of *reliability* settings.
- (d) Subject to paragraph (e), the *AEMC* must calculate the *market price cap* using the following formula:

$$MPC^x = BV^{MPC} \times \frac{(Q_1^c + Q_2^c + Q_3^c + Q_4^c)}{(Q_1^b + Q_2^b + Q_3^b + Q_4^b)}$$

Where:

MPC is the *market price cap* in dollars per MWh;

x is the *financial year* for which the *market price cap* is being calculated;

BV^{MPC} is \$12,500/MWh (being the value of the *market price cap* prior to 1 July 2012);

Q1 to Q4 are the values of the Reliability Settings Index for each of the four quarters of years c and b (as the case may be) as at five months before the start of year x;

Reliability Settings Index is the All groups, Australia CPI found at Index Numbers, All groups, Australia, in Tables 1 and 2 of the Consumer Price Index, Australia published by the Australian Bureau of Statistics for the relevant quarter, except where that index ceases to be published or is substantially changed, in which case the Reliability Settings Index will be such other index as is determined by the *AEMC* as suitable;

c is the calendar year commencing 18 months before the start of year x; and

b is calendar year 2010.

- (e) If the value calculated by the *AEMC* under paragraph (d) is:
 - (1) not in whole hundreds of dollars, then the *market price cap* for year x will be the value calculated under paragraph (d) rounded to the nearest \$100/MWh;
 - (2) less than the *market price cap* applied under this clause 3.9.4 for the preceding *financial year* (year x-1), then the *market price cap* for year x will be the value of the *market price cap* for year x-1.

3.9.5 Application of the Market Price Cap

- (a) *Dispatch prices* at *regional reference nodes* must not exceed the *market price cap*.
- (b) If *central dispatch* and determination of *dispatch prices* in accordance with rule 3.8, and clauses 3.9.2 and 3.9.3 would otherwise result in a *dispatch*

price greater than the market price cap at any regional reference node, then subject to clause 3.9.5(c), the dispatch price at that regional reference node must be set to the market price cap.

- (c) *If the dispatch price at any regional reference node is set to the market price cap under clause 3.9.2 or clause 3.9.5 then dispatch prices at all other regional reference nodes connected by a regulated interconnector or regulated interconnectors that have an energy flow towards that regional reference node must not exceed the market price cap divided by the average loss factor that applies for energy flow in that direction for that dispatch interval and determined in accordance with clause 3.9.5(d).*
- (d) *AEMO must determine the average loss factors applicable to clause 3.9.5(c) by reference to the inter-regional loss factor equations relating to the relevant regulated interconnector.*

3.9.6 Market Floor Price

- (a) *The market floor price is a price floor which is to be applied to dispatch prices.*
- (b) *The value of the market floor price is \$-1,000/MWh.*
- (c) **[Deleted]**
- (d) **[Deleted]**
- (e) **[Deleted]**

3.9.6A Application of the Market Floor Price

- (a) *Dispatch prices at regional reference nodes must not be less than the market floor price.*
- (b) *If central dispatch and determination of dispatch prices in accordance with rule 3.8, and clauses 3.9.2 and 3.9.3 would otherwise result in a dispatch price less than the market floor price at any regional reference node, then subject to clause 3.9.6A(c), the dispatch price at that regional reference node must be set to the market floor price.*
- (c) *If the dispatch price at any regional reference node is set to the market floor price under clause 3.9.6A then dispatch prices at all other regional reference nodes connected by a regulated interconnector or regulated interconnectors that have an energy flow away from that regional reference node must be equal to or greater than the market floor price multiplied by the average loss factor that applies for energy flow in that direction for that dispatch interval and determined in accordance with clause 3.9.6A(d).*
- (d) *AEMO must determine the average loss factors applicable to clause 3.9.6A(c) by reference to the inter-regional loss factor equations relating to the relevant regulated interconnector.*

3.9.7 Pricing for constrained-on scheduled generating units

- (a) In the event that a *network constraint* causes a *scheduled generating unit* to be *constrained-on* in any *dispatch interval*, that *scheduled generating unit* must comply with *dispatch instructions* from AEMO in accordance with its availability as specified in its *dispatch offer* but may not be taken into account in the determination of the *dispatch price* in that *dispatch interval*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) A *Scheduled Generator* that is *constrained-on* in accordance with clause 3.9.7(a) is not entitled to receive from AEMO any compensation due to its *dispatch price* being less than its *dispatch offer price*.
- (c) In the event that:
- (1) an *inertia network service* under an *inertia services agreement* is enabled such that an *inertia generating unit* is *constrained on* in any *dispatch interval* to provide *inertia*; or
 - (2) a *system strength service* under a *system strength services agreement* is enabled such that a *system strength generating unit* is *constrained on* in any *dispatch interval* to provide a *system strength service*,

the relevant *generating unit* must comply with *dispatch instructions* from AEMO in accordance with its availability as specified in its *dispatch offer* but may not be taken into account in the determination of the *dispatch price* in that *dispatch interval* except to the extent that the *generating unit* is *dispatched* at a level above its minimum *loading level*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) A *Scheduled Generator* that is *constrained on* in accordance with paragraph (c) is not entitled to receive from AEMO any compensation due to its *dispatch price* being less than its *dispatch offer price*.

3.10 [Deleted]

3.11 Ancillary Services

3.11.1 Introduction

- (a) *Ancillary services* are services that are essential to the management of *power system security*, facilitate orderly trading in electricity and ensure that electricity supplies are of acceptable quality.

- (b) *Market ancillary services* are *ancillary services* acquired by AEMO as part of the *spot market* in accordance with this Chapter 3. The prices for *market ancillary services* are determined using the *dispatch algorithm*.
- (c) *Non-market ancillary services* are *ancillary services* not acquired by AEMO as part of the spot market, but acquired:
 - (1) in the case of SRAS, by AEMO under *ancillary services agreements*, with the prices for SRAS being determined in accordance with the relevant *ancillary services agreements*; and
 - (2) in the case of NSCAS:
 - (i) by *Transmission Network Service Providers* under *connection agreements* or *network support agreements* to meet an NSCAS need; and
 - (ii) in the circumstances contemplated in clause 3.11.3(c), by AEMO under *ancillary services agreements* entered into following a call for offers made in accordance with rule 3.11.5 to meet a NSCAS gap only for *power system security* and reliability of supply of the *transmission network* in accordance with the *power system security standards* and the *reliability standard*,

with the prices for NSCAS being determined in accordance with the relevant agreements;
 - (3) in the case of NMAS other than SRAS and NSCAS, by *Transmission Network Service Providers* under *connection agreements* or *network support agreements* to meet the service standards in accordance with the technical requirements of schedule 5.1 or in *applicable regulatory instruments*, with the prices for those services being determined in accordance with the relevant agreements.
- (d) AEMO may instruct a person to provide a *non-market ancillary service* under an *ancillary services agreement* or otherwise in accordance with the relevant *performance standards*, and any person so instructed must use reasonable endeavours to comply with that instruction.
- (e) AEMO is not responsible for payment to a person for *non-market ancillary services* provided by that person under a *connection agreement* or a *network support agreement*.

3.11.2 Market ancillary services

- (a) The *market ancillary services* are:
 - (1) the *fast raise service*;
 - (2) the *fast lower service*;
 - (3) the *slow raise service*;

- (4) the *slow lower service*;
 - (5) the *regulating raise service*;
 - (6) the *regulating lower service*;
 - (7) the *delayed raise service*; and
 - (8) the *delayed lower service*.
- (b) AEMO must make and *publish* a *market ancillary service specification* containing:
 - (1) a detailed description of each kind of *market ancillary service*; and
 - (2) the performance parameters and requirements which must be satisfied in order for a service to qualify as the relevant *market ancillary service* and also when a *Market Participant* provides the relevant kind of *market ancillary service*.
- (c) AEMO may amend the *market ancillary service specification*, from time to time.
- (d) AEMO must comply with the *Rules consultation procedures* when making or amending the *market ancillary service specification*.
- (e) An amendment to the *market ancillary service specification* must not take effect until at least 30 days after the amendment has been *published*.
- (f) In addition to the requirements under rule 4.15, a *Market Participant* which has classified a *generating unit* as an *ancillary service generating unit* or a *load* as an *ancillary service load* must install and maintain in accordance with the standards referred to in clause 3.11.2(g) monitoring equipment to monitor and record the response of the *ancillary service generating unit* or *ancillary service load* to changes in the *frequency* of the *power system*.
- (g) AEMO must develop, and may amend from time to time, standards which must be met by *Market Participants* in installing and maintaining the equipment referred to in paragraph 3.11.2(f).
- (h) AEMO may request a *Market Participant* with an *ancillary service generating unit* or an *ancillary service load* to provide to AEMO a report detailing how the relevant facility responded to a particular change or particular changes in the *frequency* of the *power system*. A *Market Participant* must provide a report requested under this paragraph 3.11.2(h) promptly but, in any event, in no more than 20 *business days* after notice to do so.
- (i) AEMO may from time to time require a *Registered Participant* which provides a *market ancillary service* under the *Rules* to demonstrate the relevant *plant's* capability to provide the *market ancillary service* to the satisfaction of AEMO according to standard test procedures. A *Registered*

Participant must promptly comply with a request by *AEMO* under this clause.

3.11.3 Acquisition of Network Support and Control Ancillary Service

- (a) Where an *NTNDP* identifies an *NSCAS gap*, *AEMO* may request the relevant *Transmission Network Service Provider* to advise when the *Transmission Network Service Provider* will have arrangements in place to meet that *NSCAS gap*, or provide reasons why the *NSCAS gap* will not be met.
- (b) Within 30 days of *AEMO*'s request under paragraph (a), the *Transmission Network Service Provider* must provide a response to *AEMO*. If the *Transmission Network Service Provider* proposes to put in place arrangements to meet the relevant *NSCAS gap*, it must include in its response full details of those arrangements.
- (c) If, after considering any response made under paragraph (b), *AEMO*:
 - (1) considers that the relevant *NSCAS gap* will remain; and
 - (2) considers it is necessary to acquire *NSCAS* to meet the relevant *NSCAS gap* to prevent an adverse impact on *power system security* and reliability of *supply* of the *transmission network* in accordance with the *power system security standards* and the *reliability standard*,
AEMO:
 - (3) must *publish* details of why it considers that the relevant *NSCAS gap* will remain; and
 - (4) must use reasonable endeavours to acquire *NSCAS* to meet the relevant *NSCAS gap* in accordance with clause 3.11.5.

3.11.4 Guidelines and objectives for acquisition of network support and control ancillary services

- (a) In this clause 3.11.4:

NSCAS description means a detailed description of each type of *network support and control ancillary service*.

NSCAS quantity procedure means a procedure that determines the location and quantity of each type of *network support and control ancillary service* required.
- (a1) *AEMO* must develop and *publish* the *NSCAS description* in accordance with the *Rules consultation procedures*.
- (b) *AEMO* must develop and *publish* the *NSCAS quantity procedure* in accordance with the *Rules consultation procedures*.

- (c) *AEMO* may amend the NSCAS description and the NSCAS quantity procedure.
- (d) *AEMO* must comply with the *Rules consultation procedures* when making or amending the NSCAS description or the NSCAS quantity procedure.
- (e) *AEMO* may make minor and administrative amendments to the NSCAS description or the NSCAS quantity procedure without complying with the *Rules consultation procedures*.

3.11.5 Tender process for network support and control ancillary services

- (a) In this clause 3.11.5:

NSCAS tender guidelines means the guidelines developed and *published* by *AEMO* in accordance with paragraph (b) as in force from time to time, and includes amendments made in accordance with paragraphs (c) and (d).

- (a1) If *AEMO* proposes to acquire a *network support and control ancillary service*, *AEMO* must call for offers from persons who are in a position to provide the *network support and control ancillary service* in accordance with the NSCAS tender guidelines.
- (b) *AEMO* must determine and *publish* the NSCAS tender guidelines. The NSCAS tender guidelines must contain the following:
 - (1) a requirement for *AEMO* to call for NSCAS expressions of interest before issuing an NSCAS invitation to tender in relation to any required *network support and control ancillary services*;
 - (2) a requirement that a person who is to provide *network support and control ancillary services* under an *ancillary services agreement* has the *facility* tested in accordance with the NSCAS tender guidelines;
 - (3) a requirement for a *Network Service Provider* or other *Registered Participant* to assist a prospective tenderer in identifying and, if possible, resolving issues that would prevent the delivery of effective *network support and control ancillary services* proposed by a prospective tenderer;
 - (4) the timeframes over which *AEMO*'s assessment of NSCAS expressions of interest, NSCAS tenders and physical testing of selected *network support and control ancillary services* will occur;
 - (5) a requirement for a tenderer to provide sufficient data, models and parameters of relevant *plant* in accordance with the requirements specified in the *Power System Model Guidelines*, the *Power System Design Data Sheet* and the *Power System Setting Data Sheet*, to facilitate a thorough assessment of the *network* impacts and *power station* impacts of the use of the relevant *network support and control ancillary service*;

- (6) the terms and conditions of the *ancillary services agreement* that a successful tenderer would be expected to enter into with AEMO;
 - (7) the principles AEMO will apply in assessing NSCAS expressions of interest and NSCAS tenders; and
 - (8) any other matter considered appropriate by AEMO.
- (c) AEMO may amend the NSCAS tender guidelines, subject to paragraph (d), and must comply with the *Rules consultation procedures* when making or amending the NSCAS tender guidelines.
- (d) AEMO may make minor and administrative amendments to the NSCAS tender guidelines without complying with the *Rules consultation procedures*.
- (e) AEMO is not under any obligation to accept the lowest priced NSCAS tender or any NSCAS tender in response to an NSCAS invitation to tender.
- (f) A Network Service Provider must:
- (1) negotiate in good faith with a prospective tenderer in respect of issues the NSCAS tender guidelines require a prospective tenderer to discuss and, if possible, resolve with a Network Service Provider; and
 - (2) participate in, or facilitate, testing of a *network support and control ancillary service* required by the NSCAS tender guidelines where it is reasonable and practicable to do so, and when participating in or facilitating such activities, the Network Service Provider will be entitled to recover from the relevant prospective tenderer all reasonable costs incurred by the Network Service Provider and for such purposes the activities of the Network Service Provider will be treated as *negotiable services*.
- (g) Where a person submits an NSCAS tender in response to an NSCAS invitation to tender and AEMO wishes to negotiate an aspect of that NSCAS tender, AEMO and that person must negotiate in good faith concerning that aspect.
- (h) In assessing any tenders submitted to meet a particular NSCAS gap, AEMO must first determine whether those tenders are competitive. The tenders submitted to meet a particular NSCAS gap will be deemed to be competitive if the quantity of NSCAS that AEMO is seeking can be supplied from the conforming tenders received by AEMO with any one conforming tender discarded or all conforming tenders from any one party discarded. If the tenders submitted to meet a particular NSCAS gap are not deemed to be competitive, AEMO and NSCAS preferred tenderers, must negotiate in good faith to agree reasonable terms and conditions for the supply of the relevant type of NSCAS, taking into account the need to:
- (1) subject to subparagraph (h)(2), so far as practicable minimise the overall cost of supply of that service; and

- (2) appropriately remunerate the providers of the relevant *NSCAS* for that service.
- (i) If *AEMO* and a *NSCAS preferred tenderer* cannot agree on the terms and conditions for the supply of a *NSCAS* after 21 *business days* from delivery to the preferred tenderer of a written notice from *AEMO* to negotiate, either *AEMO* or the preferred tenderer may refer the matter to the *Adviser* for the determination of a dispute as to those terms and conditions in accordance with rule 8.2.
- (j) If *AEMO* calls for offers under paragraph (a1), *AEMO* must give a notice to *Registered Participants* and *NSCAS providers* when the tender process is complete.
- (k) Within 5 *business days* of *AEMO* giving a notice under paragraph (j), *AEMO* must *publish* the total estimated annual costs and quantities of each type of *NSCAS* acquired by *AEMO* under *ancillary services agreements* in respect of each *region* and in total and provide a breakdown of those costs and quantities relating to each *facility* contracted under those agreements.
- (l) An *NSCAS provider* must comply with an *ancillary services agreement* under which they provide one or more *network support and control ancillary services*.
- (m) *AEMO* may from time to time require an *NSCAS Provider* which provides a *network support and control ancillary service* under an *ancillary services agreement* to demonstrate the relevant *plant's* capability to provide the *network support and control ancillary service* to the satisfaction of *AEMO* according to standard test procedures. An *NSCAS Provider* must promptly comply with a request by *AEMO* under this clause.

3.11.6 Dispatch of network support and control ancillary services by AEMO

- (a) For the avoidance of doubt, *AEMO* may *dispatch NSCAS* to:
 - (1) maintain *power system security* and reliability of *supply* of the *transmission network* in accordance with the *power system security standards* and the *reliability standard*; and
 - (2) maintain or increase the *power transfer capability* of that *transmission network* so as to maximise the present value of net economic benefit to all those who produce, consume or transport electricity in the *market*,

but *AEMO* may only call for offers to acquire *NSCAS* to maintain *power system security* and reliability of *supply* of the *transmission network* in accordance with the *power system security standards* and the *reliability standard*.

- (a1) *AEMO* must develop procedures for:
 - (1) *dispatching NCAS*; and

- (2) reporting to *Registered Participants* and *NSCAS providers*, on a periodic basis, on the effectiveness of the *dispatch of network support and control ancillary services* using criteria related to the performance of the *power system* specified in the procedures developed under subparagraph (a1)(1).
- (b) *AEMO* must *publish* the procedures developed under this clause 3.11.6.
- (c) *AEMO* may amend a procedure developed under this clause 3.11.6, from time to time.
- (d) *AEMO* must develop and *publish* guidelines for the *dispatch* of *NSCAS* to support the relevant procedure developed under subparagraph (a1)(1).
- (e) Subject to paragraph (f), *AEMO* must comply with the *Rules consultation procedures* when making or amending the guidelines in paragraph (d).
- (f) *AEMO* may make minor and administrative amendments to the guidelines in paragraph (d) without complying with the *Rules consultation procedures*.

3.11.7 Guidelines and objectives for acquisition of system restart ancillary services by AEMO

- (a) [not used].
- (a1) *AEMO* must use reasonable endeavours to acquire *system restart ancillary services* to meet *the system restart standard* at the lowest cost (**the SRAS Procurement Objective**).
- (b) *AEMO* must consult with the relevant *Network Service Provider* to identify and resolve issues in relation to the capability of any *system restart ancillary service* proposed to be provided by an *SRAS Provider* in an *electrical sub-network* to meet the *system restart standard*.
- (c) *AEMO* must develop and *publish* the *SRAS Guideline*. The *SRAS Guideline* must be designed to ensure that the *system restart standard* is met at the lowest cost.
- (d) The *SRAS Guideline* must include:
 - (1) a description of the technical and availability requirements of *system restart ancillary services*;
 - (2) a process for meeting the aggregate required reliability of *system restart ancillary services* for each *electrical sub-network* under clause 8.8.3(aa)(3);
 - (3) a process for the modelling, assessment and physical testing of *system restart ancillary services* proposed to be provided by an *SRAS Provider*, including any assumptions to be made by *AEMO* regarding the state of *transmission elements* during a *major supply disruption*;

- (4) a process for determining the number and location of *system restart ancillary services* required to be procured for each *electrical sub-network* consistent with the *system restart standard*;
 - (5) guidance to *Registered Participants* on the factors that *AEMO* must take into account when making a decision to follow a particular type of procurement process to acquire *system restart ancillary services* to meet the *SRAS Procurement Objective*;
 - (6) a process for *AEMO* to follow for contacting a potential *SRAS Provider* to negotiate the provision of *system restart ancillary services* without a competitive tender process; and
 - (7) a process for a potential *SRAS provider* to contact *AEMO* to offer the provision of *system restart ancillary services* without a competitive tender process, which offer *AEMO* is in no way obliged to accept.
- (e) *AEMO* may amend the *SRAS Guideline* from time to time.
- (f) When making or amending the *SRAS Guideline*, *AEMO* must, subject to paragraph (g), consult with:
- (1) *Registered Participants*; and
 - (2) Such other persons who, in *AEMO*'s reasonable opinion, have, or have identified themselves to *AEMO* as having, an interest in the *SRAS Guideline*,
- in accordance with the *Rules consultation procedures*.
- (g) *AEMO* may make minor and administrative amendments to the *SRAS Guideline* without complying with the *Rules consultation procedures*.

3.11.8 Determination of electrical sub-network boundaries

- (a) For the purpose of acquiring *system restart ancillary services* and determining and implementing the *system restart plan*, the power system is to be divided into *electrical sub-networks*.
- (b) *AEMO* must determine the boundaries of the *electrical sub-networks* in accordance with the guidelines determined by the *Reliability Panel* under clause 8.8.3(aa)(5), and must *publish* a report setting out how it has complied with these guidelines.
- (c) *AEMO* must comply with the *Rules consultation procedures* in determining the boundaries of the *electrical sub-networks*.

3.11.9 Acquisition of system restart ancillary services by AEMO

- (a) If *AEMO* proposes to acquire a *system restart ancillary service*, *AEMO* must enter into an *ancillary services agreement* with a prospective *SRAS Provider* following the completion of any procurement process to acquire *system*

restart ancillary services which AEMO is satisfied will enable it to meet the *SRAS Procurement Objective*.

- (b) Subject to paragraph (c), *AEMO* must only acquire *system restart ancillary services* from a person who is a *Registered Participant*.
- (c) *AEMO* may enter into an agreement to acquire *system restart ancillary services* with a person who is not a *Registered Participant* if that agreement includes a condition for the benefit of *AEMO* that no *system restart ancillary services* will be provided under the agreement until that person becomes a *Registered Participant*.
- (d) An *SRAS Provider* must comply with an *ancillary services agreement* under which they provide one or more *system restart ancillary services*
- (e) A dispute concerning any aspect, (other than the aspect of price), of a *system restart ancillary services* agreement or a call for offers conducted by *AEMO* for the acquisition of *system restart ancillary services*, must be dealt with in accordance with rule 8.2.
- (f) *AEMO* may from time to time require an *SRAS Provider* which provides a *system restart ancillary service* under an *ancillary services agreement* to demonstrate the relevant *plant's* capability to provide the *system restart ancillary service* to the satisfaction of *AEMO* according to standard test procedures. An *SRAS Provider* must promptly comply with a request by *AEMO* under this clause.
- (g) A prospective *SRAS Provider* must provide to *AEMO* sufficient data, models and parameters of relevant *plant* in accordance with the requirements specified in the *Power System Model Guidelines*, the *Power System Design Data Sheet* and the *Power System Setting Data Sheet*, to facilitate a thorough assessment of the *network* impacts and *power station* impacts of the use of the relevant *system restart ancillary service*.
- (h) If *AEMO* seeks to enter into an *ancillary services agreement* with a prospective *SRAS Provider*, *AEMO* and that *SRAS Provider* must negotiate in good faith as to the terms and conditions of the *ancillary services agreement*.
- (i) A *Network Service Provider* must:
 - (1) provide any information to *AEMO* which *AEMO* reasonably requires in order for *AEMO* to assess the capability of a *system restart ancillary service* to meet the *system restart standard*;
 - (2) negotiate in good faith with a prospective *SRAS Provider* in respect of identifying and, if possible, resolving issues that would prevent the delivery of effective *system restart ancillary services* proposed by a prospective *SRAS Provider*; and
 - (3) participate in, or facilitate, testing of a *system restart ancillary service* proposed to be provided by a prospective *SRAS Provider* where it is

reasonable and practicable to do so, and when participating in or facilitating such activities, the *Network Service Provider* will be entitled to recover from the prospective *SRAS Provider* all reasonable costs incurred by the *Network Service Provider* and for such purposes the activities of the *Network Service Provider* will be treated as *negotiable services*.

3.11.10 Reporting

- (a) At least once each year, *AEMO* must prepare and *publish* a report detailing the total estimated annual cost for the provision of *system restart ancillary services*, broken down to charges for availability and use, for each *electrical sub-network* and for each *region*.
- (b) At least once each year, *AEMO* must *publish* a report on:
 - (1) any *electrical sub-network* where *system restart ancillary services* were not acquired by *AEMO* to a level satisfactory to meet the *system restart standard*, and reasons why the *system restart standard* was not met; and
 - (2) the process followed by *AEMO* to acquire *system restart ancillary services* for each *electrical sub-network*.

3.12 Market Intervention by AEMO

3.12.1 Intervention settlement timetable

- (a) *AEMO* must use reasonable endeavours to complete and fulfil its obligations set out in clauses 3.12.2, 3.12.3, 3.15.7, 3.15.7A, 3.15.7B, 3.15.8 and 3.15.10C as soon as practicable and no later than:
 - (1) 100 *business days* after the end of the *AEMO intervention event* or the end of a series of related *AEMO intervention events* if *AEMO* is not required to appoint an independent expert under clause 3.15.7A or refer a matter to an independent expert under clause 3.12.2(l), 3.12.2(m), 3.15.7B(c) or 3.15.7B(d);
 - (2) 150 *business days* after the end of the *AEMO intervention event* or the end of a series of related *AEMO intervention events* if *AEMO* is:
 - (i) required to appoint an independent expert under clause 3.15.7A but is not required to refer a claim or matter to an independent expert under clause 3.12.2(l), 3.12.2(m), 3.15.7B(c) or 3.15.7B(d); or
 - (ii) required to refer a claim or matter to an independent expert under clause 3.12.2(l), 3.12.2(m), 3.15.7B(c) or 3.15.7B(d) but is not required to appoint an independent expert under clause 3.15.7A; and

- (3) 200 *business days* after the end of the *AEMO intervention event* or the end of a series of related *AEMO intervention events* if *AEMO* is required to appoint an independent expert under clause 3.15.7A and refer a claim or matter to an independent expert under clause 3.12.2(l), 3.12.2(m), 3.15.7B(c) or 3.15.7B(d).
- (b) Subject to clause 3.12.1(a), *AEMO* must *publish* a timetable that sets a date for each of *AEMO*'s and the independent expert's obligations pursuant to clauses 3.12.2, 3.12.3, 3.15.7, 3.15.7A, 3.15.7B, 3.15.8 and 3.15.10C, where required (the *intervention settlement timetable*).
- (c) *AEMO* must at least once a month revise and *publish* the *intervention settlement timetable* to reflect any changes to the *intervention settlement timetable*.

3.12.2 Affected Participants and Market Customers entitlements to compensation in relation to AEMO intervention

- (a) In respect of each *intervention price trading interval*:
 - (1) an *Affected Participant* is entitled to receive from *AEMO*, or must pay to *AEMO*, an amount as determined in accordance with this clause 3.12.2 that will put the *Affected Participant* in the position that the *Affected Participant* would have been in regarding the *scheduled generating unit* or *scheduled network service*, as the case may be, had the *AEMO intervention event* not occurred, taking into account solely the items listed in paragraph (j);
 - (2) a *Market Customer*, other than a *Market Customer* which was the subject of any *direction* that constituted the *AEMO intervention event*, is entitled, in respect of one or more of its *scheduled loads*, to receive an amount calculated by applying the following formula:

$$DC = ((RRP \times LF) - BidP) \times QD$$

where:

DC (in dollars) is the amount the *Market Customer* is entitled to receive in respect of that *scheduled load* for the relevant *intervention price trading interval*;

RRP (in dollars per MWh) is the *regional reference price* in the relevant *intervention price trading interval* determined in accordance with clause 3.9.3;

LF where the *scheduled load's connection point* is a *transmission connection point*, is the relevant *intra-regional loss factor* at that *connection point* or where the *scheduled load's connection point* is a *distribution network connection point*, is the product of the *distribution loss factor* at that *connection point* multiplied by the

relevant *intra-regional loss factor* at the *transmission connection point* to which it is assigned;

BidP (in dollars per MWh) is the price of the highest priced *price band* specified in a *dispatch bid* for the *scheduled load* in the relevant *intervention price trading interval*;

QD (in MWh) is the difference between the amount of electricity consumed by the *scheduled load* during the relevant *intervention price trading interval* determined from the *metering data* and the amount of electricity which AEMO reasonably determines would have been consumed by the *scheduled load* if the *AEMO intervention event* had not occurred,

provided that if DC is negative for the relevant *intervention price trading interval*, then the adjustment that the *Market Customer* is entitled to claim in respect of that *scheduled load* for that *intervention price trading interval* is zero.

Note

Where two *intra-regional loss factors* are determined for a *transmission network connection point* under clause 3.6.2(b)(2), AEMO will determine the relevant *intra-regional loss factor* for use under this clause in accordance with the procedure determined under clause 3.6.2(d1).

- (b) In respect of a single *intervention price trading interval*, an *Affected Participant* or *Market Customer* is not entitled to receive from, or obliged to pay to, AEMO an amount pursuant to this clause 3.12.2 if such an amount is less than \$5,000.
- (c) In respect of each *intervention price trading interval*, AEMO must, in accordance with the *intervention settlement timetable*, notify, in writing:
 - (1) each *Affected Participant* (except *eligible persons*) of:
 - (i) the estimated level of *dispatch* in MW that its *scheduled network service* or *scheduled generating unit* would have been *dispatched* at had the *AEMO intervention event* not occurred; and
 - (ii) an amount equal to:
 - (A) the estimated *trading amount* that it would have received had the *AEMO intervention event* not occurred based on the level of *dispatch* in subparagraph (i), less:
 - (B) the *trading amount* for that *Affected Participant* (excluding from that *trading amount* the amount referred to in clause 3.15.10C(a)) as set out in its *final statement* provided pursuant to clause 3.15.14 for the *billing period* in which the *intervention price trading interval* occurs;

- (2) each *eligible person* of:
 - (i) the estimated level of flow in MW of all relevant *directional interconnectors* that would have occurred had the *AEMO intervention event* not occurred; and
 - (ii) an amount equal to:
 - (A) the estimated amount that person would have been entitled to receive pursuant to clause 3.18.1(b) had the *AEMO intervention event* not occurred based upon the flows referred to in subparagraph (i); less
 - (B) the actual entitlement of that person under clause 3.18.1(b); and
- (3) each *Market Customer*, the amount calculated by *AEMO* in accordance with paragraph (a)(2) for that *Market Customer*.
- (d) *AEMO* must include in an *Affected Participant's* or *Market Customer's final statement* provided pursuant to clause 3.15.15 for a *billing period* in which one or more *intervention price trading intervals* occurred:
 - (1) the amount notified by *AEMO* pursuant to paragraph (c) if the absolute value of such amount is greater than \$5,000; and
 - (2) in all other cases no amount in relation to compensation pursuant to this clause 3.12.2.
- (e) If the figure calculated in accordance with paragraph (c) is:
 - (1) negative, the absolute value of that amount is the amount payable to *AEMO* by the relevant person; and
 - (2) positive, the absolute value of that amount is the amount receivable from *AEMO* by the relevant person.
- (f) Subject to paragraphs (h) and (i), within 7 *business days* of receipt of the notice referred to in paragraph (c) an *Affected Participant* or *Market Customer* may make a written submission to *AEMO* in accordance with paragraph (g) claiming that the amount set out in the notice is greater than, less than, or equal to its entitlement pursuant to paragraph (a)(1) as an *Affected Participant* or paragraph (a)(2) as a *Market Customer*, as the case may be.
- (g) A written submission made by an *Affected Participant* or *Market Customer* pursuant to paragraph (f) must:
 - (1) itemise each component of the claim;
 - (2) contain sufficient data and information to substantiate each component of the claim;

- (3) if the *Affected Participant* claims that the amount calculated by AEMO pursuant to paragraphs (c)(1) or (c)(2) is less than the amount the *Affected Participant* is entitled to receive pursuant to paragraph (a)(1), specify the difference between such amounts (such difference being the *affected participant's adjustment claim*);
 - (4) if the *Market Customer* claims that the amount calculated by AEMO pursuant to paragraph (c)(3) is less than the amount the *Market Customer* is entitled to receive pursuant to paragraph (a)(2), specify the difference between such amounts (such difference being the *market customer's additional claim*); and
 - (5) be signed by an authorised officer of the *Affected Participant* or *Market Customer* certifying that the written submission is true and correct.
- (h) If an *Affected Participant* or *Market Customer* does not deliver to AEMO a written submission in accordance with paragraph (f) it shall cease to have an entitlement to compensation under this clause 3.12.2.
- (i) In respect of a single *intervention price trading interval* an *Affected Participant* or *Market Customer* may only make a claim pursuant to paragraph (f) in respect of that *intervention price trading interval* if it claims that its entitlement or liability pursuant to this clause 3.12.2 is greater than \$5,000.
- (j) In determining the amount for the purposes of paragraph (a)(1), the following must, as appropriate, be taken into account:
- (1) the direct costs incurred or avoided by the *Affected Participant* in respect of that *scheduled generating unit* or *scheduled network service*, as the case may be, as a result of the *AEMO intervention event* including:
 - (i) fuel costs in connection with the *scheduled generating unit* or *scheduled network service*;
 - (ii) incremental maintenance costs in connection with the *scheduled generating unit* or *scheduled network service*; and
 - (iii) incremental manning costs in connection with the *scheduled generating unit* or *scheduled network service*;
 - (2) any amounts which the *Affected Participant* is entitled to receive under clauses 3.15.6 and 3.15.6A; and
 - (3) the *regional reference price published* pursuant to clause 3.13.4(m).
- (k) AEMO must in accordance with the *intervention settlement timetable* calculate the *additional intervention claim* being the total of:

- (1) the sum of the *affected participant's adjustment claims* and *market customer's additional claims* in respect of a *AEMO intervention event*, or in respect of, in *AEMO's* reasonable opinion, a series of related *AEMO intervention events*; plus
 - (2) the total claims by *Directed Participants* pursuant to clauses 3.15.7B(a), 3.15.7B(a1) and 3.15.7B(a2) in respect of that *AEMO intervention event*, or in respect of that series of related *AEMO intervention events*.
- (l) *AEMO* must in accordance with the *intervention settlement timetable*:
- (1) refer an *affected participant's adjustment claim* or *market customer's additional claim* to an independent expert to determine such claim in accordance with clause 3.12.3 if the claim is equal to or greater than \$20,000 and the *additional intervention claim* that includes that claim is equal to or greater than \$100,000; and
 - (2) determine in its sole discretion whether all other *affected participants' adjustment claims* and *market customers' additional claims* are reasonable and if so pay the amounts claimed in accordance with clause 3.15.10C.
- (m) If *AEMO* determines pursuant to paragraph (l) that an *affected participant's adjustment claim* or *market customer's additional claim* in respect of a *AEMO intervention event* is unreasonable, it must in accordance with the *intervention settlement timetable*:
- (1) advise the *Affected Participant* or *Market Customer*, as the case may be, in writing of its determination including its reasons for the determination; and
 - (2) refer the matter to an independent expert to determine the claim for compensation in accordance with clause 3.12.3.
- (n) For the purposes of clauses 3.15.8 and 3.15.10C(b) any payment pursuant to paragraph (a) must include interest on the sum of that amount less the payment made in accordance with 3.15.10C(a)(1), computed at the average *bank bill rate* for the period from the date on which payment was required to be made under clauses 3.15.16 and 3.15.17 in respect of the *final statement* for the *billing period* in which the *AEMO intervention event* occurred to the date on which payment is required to be made pursuant to clause 3.15.10C.

3.12.3 Role of the Independent Expert in calculating payments in relation to intervention by AEMO

- (a) Subject to clause 3.12.3(a1), if a matter is to be referred to an independent expert pursuant to clauses 3.12.2(l), 3.12.2(m) or 3.15.7B, *AEMO* must in accordance with the *intervention settlement timetable* publish a notice of its proposed nominee as independent expert and appoint such nominee.

- (a1) If within 3 *business days* of *publication* of AEMO's nominee pursuant to clause 3.12.3(a) more than 25% of the *Referred Affected Participants*, *Referred Market Customers* and *Referred Directed Participants* in relation to that *direction* object in writing to AEMO's nominee AEMO must, as soon as reasonably practicable thereafter, request the AEMC to nominate an independent expert.
- (a2) If a valid objection pursuant to clause 3.12.3(a1) is made, the AEMC must, within 3 *business days* of a written request from AEMO, nominate an independent expert to be appointed by AEMO for the purposes of this clause 3.12.3.
- (b) AEMO must provide to the independent expert a copy of all written submissions made by *Referred Affected Participants*, *Referred Market Customers* or *Referred Directed Participants* under clause 3.12.2(f) or 3.15.7B (a).
- (b1) To the extent reasonably practicable, all claims arising out of a single *AEMO intervention event* or arising out of, in AEMO's reasonable opinion, a series of related *AEMO intervention events*, should be determined by the same independent expert as part of the same process.
- (c) AEMO must include as part of the independent expert's terms of appointment the following requirements:
 - (1) In accordance with the *intervention settlement timetable* the independent expert must:
 - (i) determine and *publish* a draft report setting out:
 - (A) as appropriate, the total compensation payable by, or receivable by, *Referred Affected Participants* and *Referred Market Customers* under clause 3.12.2(a) pursuant to claims referred to the independent expert pursuant to clauses 3.12.2(l) and 3.12.2(m) in respect of the *intervention price trading interval*;
 - (B) the total amount of compensation payable to *Referred Directed Participants* pursuant to clause 3.15.7B; and
 - (C) the methodology and assumptions, if any, used by the independent expert in making the determination in clauses 3.12.3(c)(1)(ii) and 3.12.3(c)(1)(iii);
 - (ii) notify individual assessments by delivery to each *Referred Affected Participant* and *Referred Market Customer* and to AEMO of a draft assessment detailing the amount payable or receivable by that party, as the case may be, pursuant to clause 3.12.2(a); and

- (iii) deliver to each *Referred Directed Participant* and to *AEMO* a draft assessment detailing the calculation of the amount of compensation receivable by that party pursuant to 3.15.7B.
- (2) The independent expert must call for submissions from all relevant *Referred Affected Participants*, *Referred Market Customers* and *Referred Directed Participants* after *publishing* the draft report and delivering the draft assessment under clause 3.12.3(c)(1).
- (3) Before the *publication* of the final report and delivery of the final assessment pursuant to clause 3.12.3(c)(4), the independent expert must:
 - (i) if requested to do so by a *Referred Affected Participant*, *Referred Market Customer* or *Referred Directed Participant*, within 15 *business days* of the *publication* of the draft report and draft assessment, meet with *representatives* of the *Referred Affected Participant*, *Referred Market Customer*, or *Directed Participant* to discuss any queries it has in relation to the draft report or draft assessment as appropriate; and
 - (ii) take into consideration, any further written submissions made by a *Referred Affected Participant*, *Referred Market Customer* or *Referred Directed Participant* in relation to the draft report or draft assessment, as the case may be, if the independent expert receives those submissions within 15 *business days* of the *publication* of the draft report and draft assessment.
- (4) The independent expert must in accordance with the *intervention settlement timetable*:
 - (i) prepare and *publish* a final report;
 - (ii) prepare and deliver his or her final assessment of the amounts payable or receivable by the relevant party pursuant to clause 3.12.2(a) or 3.15.7B, as the case may be; and
 - (iii) deliver to *AEMO* a final tax invoice for the services rendered by the independent expert and a copy of all final assessments issued pursuant to clause 3.12.3(c)(ii).
- (5) A report prepared under clauses 3.12.3(c)(1)(i) and 3.12.3(c)(4)(i) must not disclose *confidential information*.
- (6) If the independent expert requires further information than that contained in a written submission made by the *Referred Affected Participant*, *Referred Market Customer* or *Referred Directed Participant* under clause 3.12.2(f) or 3.15.7B(a), the independent expert may advise the relevant party in writing of the information required.

- (7) If the relevant party has not provided that information to the independent expert within 10 *business days* of the date of the request for further information, then the independent expert, acting reasonably, is entitled to make such assumptions concerning that information as he or she thinks appropriate.
- (8) The independent expert must enter into, and deliver, a confidentiality deed for the benefit of each *Referred Affected Participant*, *Referred Market Customer* and *Referred Directed Participant* in a form developed by AEMO pursuant to clause 3.12.3(e).
- (d) A final report and a final assessment of an independent expert prepared in accordance with clause 3.12.3(c)(4) is final and binding.
- (e) AEMO must in accordance with the *Rules consultation procedures* prepare and *publish* a confidentiality deed for the purposes of this clause 3.12.3.

3.12A Mandatory restrictions

3.12A.1 Restriction offers

- (a) AEMO must develop, and may vary from time to time, in accordance with the *Rules consultation procedures* a *mandatory restrictions* trading system. The trading system must include:
 - (1) procedures for the acquisition by AEMO of capacity the subject of *restriction offers*;
 - (2) the standard terms and conditions upon which AEMO shall accept a *restriction offer*;
 - (3) the criteria to be applied by AEMO in the appointment of an appropriately qualified independent expert for the purposes of clause 3.12A.7(g)(ii); and
 - (4) procedures for the rebidding and *dispatch* of capacity the subject of an *accepted restriction offer*.
- (b) The *restriction offer procedures* must take into account the following principles:
 - (1) AEMO may accept a *restriction offer* for all or part of the capacity of a *scheduled generating unit* or *scheduled network service*, as recorded in the *bid and offer validation data* for that *scheduled generating unit* or *scheduled network service*.
 - (2) AEMO must use its reasonable endeavours to acquire capacity from valid *restriction offers* or to terminate in whole or part an *accepted restriction offer* in a manner that minimises the estimated *restriction shortfall amount*.

- (3) *AEMO* may at any time terminate an *accepted restriction offer* in whole or in part by providing 4 hours notice to the relevant *Scheduled Generator* or *Scheduled Network Service Provider* that an *accepted restriction offer* is so terminated.
 - (4) The submission of *restriction offers* must be made in the form and by the means set out in procedures developed and *published* by *AEMO* for the purpose of the submission of *restriction offers*.
 - (5) If a *restriction offer* is made in accordance with the *restriction offer procedures*, *AEMO* must make available to the parties who submitted the *restriction offer* the following information without delay:
 - (i) acknowledgment of receipt of a valid *restriction offer*; and
 - (ii) notification detailing why a *restriction offer* is invalid, if appropriate.
 - (6) If any details contained within a *restriction offer* are inconsistent with the *bid and offer validation data* provided by the relevant party then *AEMO* has the right to reject that *restriction offer* as invalid.
 - (7) A valid *restriction offer* must set out for each *trading interval* of a *trading day*:
 - (i) the price offered in \$/MWh or as otherwise permitted by the *restriction offer procedures*; and
 - (ii) MW amount for that *trading interval* being offered.
 - (8) *AEMO* must only accept *restriction offers* from *Scheduled Generators* and *Scheduled Network Service Providers* with a *connection point* located in the *region* in which *mandatory restrictions* apply or are proposed to apply.
- (c) The standard terms and conditions developed by *AEMO* pursuant to clause 3.12A.1(a)(2) must take into account the following principles:
- (1) All capacity the subject of the *restriction offer* must be available for immediate *dispatch* in the *central dispatch* process at all times.
 - (2) An *accepted restriction offer* is binding and may only be revoked or varied if the *Scheduled Generator* or *Scheduled Network Service Provider* notifies *AEMO* in accordance with the *restriction offer procedures* of a revocation or variation. Immediately upon receipt of such notification *AEMO* must amend the *accepted restriction offer* to reduce the capacity of the *accepted restriction offer* by the notified capacity. Such capacity must not be *dispatched* by *AEMO* pursuant to a *dispatch offer* for such capacity during the remainder of the *trading day* in which the *accepted restriction offer* was revoked or varied in accordance with this clause 3.12A.1(c) provided that such capacity may be re-offered as a *restriction offer*.

- (3) A *restriction offer* may be amended or revoked in accordance with the *restriction offer procedures* at any time prior to it becoming an *accepted restriction offer*.

3.12A.2 Mandatory restrictions schedule

- (a) AEMO must, within 4 hours of receipt of a formal written notice from a *Jurisdictional System Security Coordinator* advising that the relevant *participating jurisdiction* proposes to invoke *mandatory restrictions*:
 - (1) in consultation with such *participating jurisdiction*, and in accordance with any procedures developed with that *participating jurisdiction*, estimate the effect in MW of the *mandatory restrictions* on the *region's* demand for each *trading interval* of the next *trading day* of the proposed *mandatory restriction period*; and
 - (2) prepare and deliver to the *Jurisdictional System Security Coordinator* a schedule of capacity for each *trading interval* of the next *trading day* of the proposed *mandatory restriction period* which is approximately equal to the estimated reduction in *regional* demand due to the *mandatory restrictions* net of all *scheduled loads* in that *region*.
- (b) AEMO must regularly in conjunction with the relevant *Jurisdictional System Security Coordinator* review the current *mandatory restriction schedule* and when appropriate prepare and deliver to the *Jurisdictional System Security Coordinator* a revised schedule of capacity for each *trading interval* of that *trading day* which is approximately equal to the revised estimated reduction in *regional* demand due to the *mandatory restrictions* net of all *scheduled loads* in that *region*.
- (c) AEMO may only *publish* a *mandatory restriction schedule* and an amended *mandatory restriction schedule* upon receipt of a formal written notice approving the *mandatory restriction schedule* from the relevant *Jurisdictional System Security Coordinator*.

3.12A.3 Acquisition of capacity

- (a) AEMO must immediately upon *publication* of a *mandatory restriction schedule* or an amended *mandatory restriction schedule* use its reasonable endeavours to acquire, in accordance with the *restriction offer procedures*, capacity to meet the *mandatory restriction schedule* or amended *mandatory restriction schedule* as the case may be.
- (b) AEMO must terminate in accordance with the *restriction offer procedures* such number of *accepted restriction offers*, in whole or in part, so that the total capacity of existing *accepted restriction offers* as far as practicable equals the amended *mandatory restriction schedule*.

3.12A.4 Rebid of capacity under restriction offers

In each *dispatch interval* when *mandatory restrictions* apply, each *scheduled generating unit* or *scheduled network service* the subject of an *accepted restriction offer* with respect to that *dispatch interval* must rebid the total capacity the subject of such *restriction offer* by varying the respective *dispatch offers* or *network dispatch offers* in accordance with the procedures developed pursuant to clause 3.12A.1(a)(4).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

3.12A.5 Dispatch of restriction offers

- (a) In a *dispatch interval* AEMO may only *dispatch* the capacity of a *scheduled generating unit* or *scheduled network service* in accordance with the procedures for the *rebidding* and *dispatch* of capacity the subject of an *accepted restriction offer* developed by AEMO in consultation with *Registered Participants*. Such procedures must as far as reasonably practical incorporate the following principles:
 - (i) *dispatch* of *accepted restriction offers* only after all the capacity of *scheduled loads*, *scheduled generating units* and *scheduled network services* contained in valid *dispatch offers* and *dispatch bids* have been *dispatched*;
 - (ii) recognise any requirement for advance notice or action for generators to operate at minimum generation, provide advance notice to *loads* or obtain capacity of *market network services* that are or may become the subject of a *AEMO intervention event*;
 - (iii) be consistent with the price of *accepted restriction offers* in accordance with clause 3.12A.6; and
 - (iv) minimise the *restriction shortfall amount*.
- (b) Notwithstanding the provisions of this clause 3.12A.5, at no time is AEMO required to *dispatch* the capacity of a *Scheduled Generator* or *Scheduled Network Service Provider* the subject of an *accepted restriction offer* if such *dispatch* would prevent AEMO from meeting its obligations for system security.

3.12A.6 Pricing during a restriction price trading interval

During a *mandatory restriction period*, *dispatch prices* must be determined by the *central dispatch* process based on *dispatch offers*, *dispatch bids* and *network dispatch offers* in accordance with clause 3.9.2, provided that AEMO must calculate the *dispatch price* as if the *dispatch offer price* for all capacity the

subject of an *accepted restriction offer* was the maximum price permitted by clause 3.8.6(c) and 3.8.6A(i) notwithstanding any other provision of the *Rules*.

3.12A.7 Determination of funding restriction shortfalls

- (a) *AEMO* is entitled to the *trading amount* received by *Scheduled Generators* and *Scheduled Network Service Providers* from the *dispatch* of capacity the subject of an *accepted restriction offer* in accordance with 3.15.10B.
- (b) *AEMO* must, as soon as reasonably practicable following the end of a *mandatory restriction period*, calculate:
 - (i) the aggregate amount payable to *AEMO* pursuant to clause 3.12A.7(a) from all *accepted restriction offers* in that *mandatory restriction period*;
 - (ii) the aggregate amount payable by *AEMO* pursuant to all *accepted restriction offers* in that *mandatory restriction period*; and
 - (iii) the sum of the amount determined under clause 3.12A.7(b)(i) less the amount determined under clause 3.12A.7(b)(ii) (the *restriction shortfall amount*).
- (b1) The maximum amount payable to a *Scheduled Generator* or *Market Participant* for any *accepted restriction offer* of that *Scheduled Generator* or *Market Participant* during a *mandatory restriction period* is the aggregate of the maximum possible *spot price* for each *trading interval* within the *mandatory restriction period*, being the *market price cap* or an *administered price cap* as the case may be, multiplied by the capacity of the *accepted restriction offer* in MWh for each corresponding *trading interval*.
- (c) Notwithstanding any other provisions of the *Rules*, the absolute value of the *restriction shortfall amount* must not exceed the sum of the maximum possible *spot price* for a *trading interval*, being the *market price cap* or an *administered price cap* as the case may be, multiplied by the aggregate of the capacity of all *accepted restriction offers* in MWh for that *trading interval* for all *trading intervals* in the *mandatory restriction period*.
- (d) Notwithstanding any other provision of the *Rules*, if the *restriction shortfall amount* is capped pursuant to clause 3.12A.7(c) and the *restriction shortfall amount* calculated pursuant to clause 3.12A.7 is a negative number, then the amount payable by *AEMO* pursuant to each *accepted restriction offer* is to be reduced pro-rata until clause 3.12A.7(c) is satisfied.
- (e) If the *restriction shortfall amount* is a negative number, *Market Customers* in the relevant *region* must pay to *AEMO* an amount determined in accordance with clause 3.12A.7(f) or 3.12A.7(g).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (f) If the *restriction shortfall amount* is between minus \$100,000 and \$0, then each *Market Customer* in the relevant *region* must pay to AEMO an amount determined in accordance with the following formula:

$$MCP = RSA \times \frac{(AGE)}{(AAGE)}$$

Where:

MCP is the amount payable by a *Market Customer* in accordance with this clause 3.12A.7(f).

RSA is the *restriction shortfall amount*.

AGE is the *adjusted gross energy* of a *Market Customer* in that *region* for the *mandatory restriction period* expressed in MWh.

AAGE is the aggregate of the *adjusted gross energy* of all *Market Customers* in that *region* for the *mandatory restriction period* expressed in MWh.

- (g) If the *restriction shortfall amount* is less than minus \$100,000:
- (i) each *Market Customer* in the relevant *region* must pay to AEMO an amount determined in accordance with the following formula:

$$RCP = (RSA + IE) \times (RD/TRD)$$

Where

RCP is the amount payable to AEMO by a *Market Customer* in that *region* following the cessation of the *mandatory restriction period*.

RSA is the *restriction shortfall amount* incurred by AEMO upon the cessation of the *mandatory electricity restriction period*.

RD is the *Market Customer's restriction demand reduction*.

TRD is the sum of RD for all *Market Customers* in the relevant *region*.

IE is the amount of the independent expert's final tax invoice delivered to AEMO in accordance with clause 3.12A.7(i)(11) plus any amounts payable by AEMO on behalf of the independent expert as determined by the *dispute resolution panel* established in accordance with clause 3.12A.7(m); and

- (ii) *AEMO* must within 10 days of the end of a *mandatory restriction period* appoint an appropriately qualified independent expert as *AEMO's* agent to determine the *restriction demand reduction* claimed by each *Market Customer* in a *region* for the purposes of clause 3.12A.7(g).
- (h) If the *restriction shortfall amount* is a positive number then *AEMO* must pay to *Market Customers* in the relevant *region* an amount equal to:

$$RCRP = RSA \times \frac{(AGE)}{(AAGE)}$$

Where:

RCRP is the payment to be made by *AEMO* to *Market Customers* pursuant to this clause 3.12A.7.

RSA is the *restriction shortfall amount*.

AGE is the *adjusted gross energy* of a *Market Customer* in that *region* for the *mandatory restriction period* expressed in MWh.

AAGE is the aggregate of the *adjusted gross energy* of all *Market Customers* in that *region* for the *mandatory restriction period* expressed in MWh.

- (i) When appointing the independent expert under clause 3.12A.7(g), *AEMO* must include as part of the independent expert's terms of appointment the following requirements:
 - (1) The independent expert must prepare a statement of the principles which the independent expert believes should be followed in determining the *restriction demand reduction* of *Market Customers*.
 - (2) Within 5 *business days* of his or her appointment, the independent expert must provide *AEMO* with details of his or her estimated fees and costs.
 - (3) Within 5 *business days* of his or her appointment, the independent expert must provide the statement prepared under clause 3.12A.7(i)(1) to all *Market Customers* in the relevant *region* and request that each *Market Customer* in the relevant *region* provide him or her with details of the *restriction demand reduction* claimed by that *Market Customer* and such additional information specified by the independent expert to fulfil its obligations.
 - (4) The independent expert must offer to meet with and consult each *Market Customer* who may be liable to make a payment to *AEMO* pursuant to clause 3.12A.7(g).

- (5) The independent expert must within 30 *business days* of his or her appointment or such later date as approved by *AEMO* in its sole discretion:
 - (i) *publish* a draft report; and
 - (ii) provide each *Market Customer* in the relevant *region* with a draft statement.
- (6) The draft report must contain:
 - (i) the *restriction shortfall amount* based upon the independent expert's estimated fees and costs; and
 - (ii) the methodology used by the independent expert in determining the *restriction demand reduction* of each *Market Customer* in a *region*.

The draft report must not contain details pertaining to individual *Market Customers*.
- (7) A draft statement provided to a *Market Customer* must contain:
 - (i) the *Market Customer's restriction demand reduction* as determined by the independent expert;
 - (ii) the estimated amount payable by that *Market Customer* under clause 3.12A.7(g), based upon the independent experts estimated fees and costs; and
 - (iii) information showing how the estimated amount referred to in clause 3.12A.7(i)(7)(ii) was calculated.
- (8) The independent expert must within 50 *business days* of his or her appointment or such later date as approved by *AEMO* in its sole discretion make any necessary amendments to his or her draft report and draft statements following consultation with *Market Customers*, and:
 - (i) *publish* his or her final report; and
 - (ii) provide each *Market Customer* in the relevant *region* with a final statement.
- (9) The independent expert's final report must contain the information set out in clause 3.12A.7(i)(6).
- (10) A final statement provided to a *Market Customer* by the independent expert must contain the information set out in clause 3.12A.7(i)(7).

(11) The independent expert must provide *AEMO* with his or her final tax invoice for services rendered at the time of publication of the final report.

- (i1) Each *Market Customer* must within 10 *business days* of the independent expert requesting information in accordance with clause 3.12A.7(i)(3) deliver to the independent expert all such information.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (i2) The independent expert may request a *Market Customer* to provide further information that he or she requires to prepare either the draft or final report or a draft or final statement within 5 *business days* of the request being made.
- (j) A *Market Customer* must not unreasonably withhold information sought by the independent expert and must use its reasonable endeavours to provide the independent expert with the information required within the relevant timeframe specified in this clause 3.12A.7.
- (k) If a *Market Customer* has not provided the independent expert with information required under this clause 3.12A.7 within the specified time period, then the independent expert is entitled to make such assumptions concerning that information as he or she thinks appropriate.
- (l) Subject to the review process specified in clause 3.12A.7(m), a determination made by an independent expert appointed under clause 3.12A.7(g) binds all *Market Customers*.
- (m) Following the publication of the independent expert's final report, a *Market Customer* may request the *Adviser* to establish a *dispute resolution panel* to redetermine that *Market Customer's restriction demand reduction* only if the *Market Customer* reasonably believes that the independent expert's determination:
- (1) has incorrectly assessed the *restriction demand reduction* of that *Market Customer* by more than 10%; or
 - (2) was made negligently or in bad faith.
- (n) The determination of a *dispute resolution panel* established under clause 3.12A.7(m):
- (1) binds all *Market Customers* and each *Market Customer* must comply with a determination of the *dispute resolution panel*; and

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (2) may only order reimbursement of the reasonable fees and expenses incurred by a *Market Customer* in disputing the independent expert's determination and no other amounts.
- (o) Any amounts determined by the *dispute resolution panel* as payable by *AEMO* on behalf of the independent expert for the reasonable fees and expenses incurred by a *Market Customer* in disputing the independent expert's determination must be included on the next statement provided under clauses 3.15.14 and 3.15.15.

3.12A.8 Cancellation of a mandatory restriction period

- (a) At the cessation time designated in the *mandatory restriction schedule*, *AEMO* must:
 - (1) immediately terminate all current *restriction offers*; and
 - (2) *publish* a notice detailing the termination of all current *restriction offers* following the cancellation of the relevant *mandatory restriction period*.

3.12A.9 Review by AEMC

- (a) The *AEMC* must, in accordance with clause 3.12A.9(b), conduct a review of the operation of the provisions applicable to *mandatory restrictions* including:
 - (1) the integration of *restriction offers* and *mandatory restrictions* into the *market*; and
 - (2) any other matters which the *AEMC* reasonably believes are relevant to the operation of clauses 3.12A.1 to 3.12A.8 and clause 3.15.10B.
- (b) The review conducted by the *AEMC* in accordance with clause 3.12A.9(a) must:
 - (1) include an analysis of:
 - (i) the accuracy of the forecast demand reduction due to restrictions and the impact any error had on the resulting *spot price*;
 - (ii) whether the impact on the *spot price* resulting from an error in the forecast demand reduction due to restrictions adversely affects one group of *Scheduled Generators* or *Market Participants* over another group;

- (iii) the *restriction offer* prices for contracts accepted by *AEMO* in meeting the *mandatory restriction schedule* including a comparison with the expected revenue the capacity subject to the *restriction offer* would have earned in the *spot market* taking into account the circumstances in which *restriction offers* were made;
- (2) be conducted in accordance with the *Rules consultation procedures*; and
- (3) commence following the first application of the *mandatory restrictions* where the estimated effect in MW of *mandatory restrictions* on a *region's* demand met or exceeded 10% of that *region's* estimated demand for the same period.

3.13 Market Information

3.13.1 Provision of information

- (a) In addition to any specific obligation or power of *AEMO* under the *Rules* to provide information, *AEMO* must make available to *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* on request any information concerning the operation of the *market* not defined by the *AEMC* or the *Rules* as confidential or commercially sensitive and may charge a fee reflecting the cost of providing any information under this clause 3.13.1(a).
- (b) *AEMO* must make information available to the public on request in respect of the *regional reference price* at any *regional reference node* and, where requested and available, reasons for any significant movements in prices.

3.13.2 Systems and procedures

- (a) Information must be provided to *AEMO* and by *AEMO* on the *electronic communication system* unless:
 - (1) the *electronic communication system* is partially or wholly unavailable, then information will, to the extent of that unavailability, be provided to *AEMO* and by *AEMO* by means of the backup procedures specified by *AEMO* from time to time; or
 - (2) otherwise approved by *AEMO*.
- (b) Information must be provided by using the templates supplied in the *electronic communication system* unless otherwise approved by *AEMO*.
- (c) Where approved by *AEMO*, information may be transmitted to and from *AEMO* and the *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* concerned in any agreed format.

- (d) If possible, information provided to *AEMO* must be *time stamped* by *AEMO* on receipt by *AEMO* of the information by the *electronic communication system* and, if stamped, is deemed to be provided at the time indicated by the *time stamp*.
- (e) Information that is *published* by *AEMO* is deemed to be *published* when the information is placed on the *market information bulletin board*.
- (f) The *market information bulletin board* must be accessible by *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* via the *electronic communication system* subject to applicable security requirements.
- (g) Information *published* or notified to a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* must be capable of being reviewed by that *Generator* or *Market Participant* and be capable of being downloaded from the *market information bulletin board* to the relevant *Generator* or *Market Participant* via the *electronic communication system*.
- (h) A *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* must notify *AEMO* of, and *AEMO* must *publish*, any *changes* to submitted information within the times prescribed in the *timetable*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (i) *AEMO* must make a copy of all *changes* to the data available to *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* for verification and resubmission by the relevant *Generator* or *Market Participant* as necessary.
- (j) All revisions must be provided on the *electronic communication system* and in the same format as the original information.
- (k) A *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* may withhold information from *AEMO* which must otherwise be provided under the *Rules* if:
 - (1) the information is of a confidential or commercially-sensitive nature and is not information of a kind that, in the reasonable opinion of the *AEMC*, is fundamental to the efficient operation of the *market*; or
 - (2) disclosure of the information would have the likely effect of causing detriment to the person required to provide it unless, in the reasonable opinion of the *AEMC*, the public benefit resulting from the provision of the information outweighs that detriment.
- (l) Nothing in paragraph (k) allows a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* to avoid providing information to *AEMO* under the *Rules* where that information is generally available.

3.13.3 Standing data

- (a) *AEMO* must establish, maintain, update and *publish*:
 - (1) a list of all of the *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* and a list of all applications to become a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant*, including *bid and offer validation data*;
 - (2) a list of all of the *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* who will cease to be *Scheduled Generators*, *Semi-Scheduled Generators* or *Market Participants* and the time that each listed *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* will cease to be a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant*;
 - (3) a list of all of the *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* who are or are going to be suspended and the time at which each listed *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* was suspended or will be suspended.
- (b) All *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* must provide *AEMO* with the *bid and offer validation data* relevant to their *scheduled loads*, *scheduled network services* and *generating units* in accordance with schedule 3.1.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b1) In addition to the information provided to *AEMO* in paragraph (b), all *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* which have aggregated their *scheduled loads*, *scheduled network services* and *generating units* in accordance with clause 3.8.3, must provide *AEMO* with:
 - (A) the maximum *generation* of each individual *scheduled generating unit*, or *semi-scheduled generating unit* to which the individual *scheduled generating unit*, or *semi-scheduled generating unit* may be dispatched;
 - (B) the number of individual *scheduled loads* that have been aggregated in accordance with clause 3.8.3; or
 - (C) the number of *scheduled network services* that have been aggregated in accordance with clause 3.8.3.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) All *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* will be required to provide AEMO with information as set out below:

- (1) forecasts for *connection points* as prescribed in clause 5.11.1; and
- (2) *metering* information for *settlements* purposes as prescribed in Chapter 7.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) *Network Service Providers* are to maintain a register of data provided by *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* for planning and design purposes in accordance with schedule 5.7 of Chapter 5 and are to provide a copy of this register of data to AEMO on request and in a form specified by AEMO.
- (e) *Network Service Providers* must, without delay, notify and provide AEMO with details of any additions or *changes* to the register of data described in clause 3.13.3(d).
- (f) Each year, by a date to be specified by AEMO, *Network Service Providers* must provide AEMO with the following information:
- (1) expected *network capability* under normal, *outage* and emergency conditions;
 - (2) electrical data sufficient to allow *power system* modelling under steady state and dynamic conditions, this data to be made available in hard copy and an acceptable industry standard electronic format approved by AEMO; and
 - (3) operating procedures and practices for *network* operation and maintenance.
- (g) *Network Service Providers* must notify AEMO of any *changes* to the information provided under clause 3.13.3(f) as soon as practicable.
- (h) *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* must notify AEMO of any *changes* to *bid and offer validation data* 6 weeks prior to the implementation of planned *changes* and without unreasonable delay in the event of unplanned *changes*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (i) *Network Service Providers* must notify *AEMO* of any *changes* or additions to technical data one month prior to the implementation of planned *changes* and without unreasonable delay in the event of unplanned *changes*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (j) *AEMO* must conduct an annual review of *Scheduled Generator*, *Semi-Scheduled Generator* and *Market Participant bid and offer validation data* in consultation with *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* and *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* must advise *AEMO* of any required *changes* to the data.
- (k) A *Registered Participant* may request from *AEMO*:
 - (1) *bid and offer validation data*;
 - (2) information that is reasonably required by the *Registered Participant* to carry out *power system* simulation studies (including load flow and dynamic simulations) for planning and operational purposes; and
 - (3) operation and maintenance procedures and practices for *transmission network* or *distribution network* operation, developed for the purposes of schedule 5.1 sufficient to enable the *Registered Participant* to carry out *power system* modelling under normal, *outage* and emergency conditions.
- (k1) *AEMO* must set out in the *Power System Model Guidelines* the circumstances in which *AEMO* will consider the information under paragraph (k)(2) to be reasonably required by a *Registered Participant*.
- (l) If *AEMO* holds information requested under clause 3.13.3(k), *AEMO* must provide the requested information to the *Registered Participant* as soon as practicable, subject to the following requirements:
 - (1) If *AEMO* holds and is required under this paragraph (l) to provide a *releasable user guide* that *AEMO* received under clause S5.2.4(b)(8), *AEMO* must provide the *releasable user guide* to the *Registered Participant* in an unaltered form.
 - (2) If *AEMO* holds and is required under this paragraph (l) to provide a form of the model source code that *AEMO* received under clauses S5.2.4(b)(6) and S5.2.4(d) or from any other source, *AEMO* must provide that information:
 - (i) only in the form of, at *AEMO*'s discretion:

- (A) compiled information (such as, for example, compiled Fortran code in object code or dynamic link library (DLL) form);
 - (B) encrypted information; or
 - (C) a secured format agreed by the provider of the model source code,

unless *AEMO* has the written consent of the person who provided the information to *AEMO* to provide it in another form; and
 - (ii) in a form that can be interpreted by a software simulation product nominated by *AEMO*.
- (3) Any information provided by *AEMO* under clause 3.13.3(l) to a *Registered Participant* must be treated as *confidential information*.
- (11) *AEMO* may charge a fee, except where the information is requested by a *Network Service Provider* under clause 3.13.3(15), to recover all reasonable costs incurred in providing information to a *Registered Participant* under this clause 3.13.3.
- (12) For the purposes of clause 3.13.3(l), the provider of the model source code is:
- (1) the *Generator* if the model source code was received from that *Generator* under clause S5.2.4(b)(6) or S5.2.4(d); or
 - (2) the person required under the *Rules* to register as a *Generator* in respect of a *generating system* comprised of *generating units* with a combined *nameplate rating* of 30 MW or more, if the model source code was received from that person under clause S5.2.4(b)(6) or S5.2.4(d); or
 - (3) the *Generator*, if the model source code was provided to *AEMO* by a *Network Service Provider* and that same *Network Service Provider* advises *AEMO* that the provider of the model source code is the *Generator*; or
 - (4) the relevant *Network Service Provider*, if that same *Network Service Provider* advises *AEMO* that the provider of the model source code is itself; or
 - (5) otherwise, the relevant Transmission Network Service Provider.
- (13) If *AEMO* is required under clause 3.13.3(l) to provide information requested under clause 3.13.3(k)(2), *AEMO* may provide:
- (1) historical information relating to the operating conditions of the *power system*;

- (2) information and data provided to *AEMO* under clauses 3.13.3(f)(1) and 3.13.3(f)(3) and information of the same type provided under clause 3.13.3(g);
 - (3) *network* dynamic model parameter values obtained under clauses 3.13.3(f)(2) and 3.13.3(g);
 - (4) model parameter values and load flow data derived from a *releasable user guide*;
 - (5) a *network* model of the *national grid*, suitable for load flow and fault studies; and
 - (6) other technical data as listed in Schedules 5.5.3 and 5.5.4.
- (14) Despite clause 3.13.3(l), *AEMO* must not provide information relating to *plant* that is the subject of an *application to connect* or a *connection agreement*, until the earlier of:
 - (1) the date when a *connection agreement* relating to that *plant* is executed; or
 - (2) three months before the proposed start of commissioning of that *plant*.
- (15) Subject to clause 3.13.3(l6), if a *Transmission Network Service Provider* is responsible for provision of *network* limit advice relating to *power system* stability limits to *AEMO* under clause S5.1.2.3, *AEMO* must, on request from that *Transmission Network Service Provider*, provide all *power system* and *generating system* model information that is reasonably required for planning and operational purposes, if *AEMO* holds that information, including:
 - (1) functional block diagram information, including information provided to *AEMO* under clause S5.2.4(b)(5);
 - (2) *generating unit*, *generating system* and *power system* static and dynamic model information, including model parameters and parameter values; and
 - (3) information provided to *AEMO* in accordance with clause S5.2.4(a).
- (16) If *AEMO* is required to provide information to a *Transmission Network Service Provider* under paragraph (15), this must not include:
 - (1) model source code provided to *AEMO* under clauses S5.2.4(b)(6) and S5.2.4(d), except as allowed under clause 3.13.3(l); and
 - (2) information relating to *plant* that is the subject of an *application to connect* until after the execution of the relevant *connection agreement*.

- (l7) Any information provided by *AEMO* under clause 3.13.3(l5) to a *Transmission Network Service Provider* must be treated as *confidential information*.
- (m) Where special approvals or exemptions have been granted by *AEMO*, including approval to aggregate *generating units*, *market network services*, *loads* for *central dispatch*, or exemptions from *central dispatch*, details of such special arrangements must be *published* by *AEMO*.
- (n) *AEMO* must determine and *publish intra-regional loss factors* in accordance with clause 3.6.2 by 1 April each year and whenever changes occur.
- (o) *Network Service Providers* must advise *AEMO* of their *distribution loss factors*, duly authorised by the *AER*, and *AEMO* must *publish* such *distribution loss factors* in accordance with clause 3.6.3(i).
- (p) *AEMO* must *publish* on a quarterly basis details of:
 - (1) *interconnector* transfer capability; and
 - (2) the discrepancy between *interconnector* transfer capability and the capacity of the relevant *interconnector* in the absence of *outages* on the relevant *interconnector* only,for each day of the preceding quarter for all *interconnectors*.
- (p1) *AEMO* must establish, maintain and *publish* a register which identifies:
 - (1) the *Registered Participant* to whom any information is provided under clause 3.13.3(l); and
 - (2) the date on which such information was provided.

Statement of opportunities

- (q) By 31 August in each year, *AEMO* must prepare and *publish* at a reasonable charge to cover the cost of production, a *statement of opportunities*, including at least the following information for the subsequent 10 year period:
 - (1) projections of aggregate MW demand and *energy* requirements for each *region*;
 - (2) generating capabilities of existing *generating units* and *generating units* for which formal commitments have been made for construction or installation;
 - (3) planned *plant* retirements;
 - (4) a summary of *network capabilities* and *constraints* based upon *Transmission Annual Planning Reports*; and

- (5) operational and economic information about the *market* to assist planning by:
 - (i) *Scheduled Generators, Semi-Scheduled Generators and Market Participants*; and
 - (ii) potential *Scheduled Generators, Semi-Scheduled Generators and Market Participants*.
- (r) If after the publication of the most recent *statement of opportunities*, significant new information becomes available to AEMO relating to:
 - (1) projections of aggregate MW demand and *energy* requirements for each *region*; or
 - (2) generating capabilities of existing *generating units* and *generating units* for which formal commitments have been made for construction or installation; or
 - (3) planned *plant* retirements,

AEMO must, as soon as practicable, *publish* that information in a descriptive form that is consistent with the *statement of opportunities*.
- (s) AEMO may by written notice request a *jurisdictional planning body* to provide AEMO with information that AEMO requires for the preparation of a *statement of opportunities* and the *jurisdictional planning body* must comply with that notice.
- (t) As soon as practicable after a *Scheduled Generator, Semi-Scheduled Generator Market Participant* or *Network Service Provider* becomes aware of any information required for *publication* by AEMO under paragraph (q), that information must be provided to AEMO by that *Scheduled Generator, Market Participant* or *Network Service Provider*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (u) AEMO must, no less than annually, prepare and publish on its website information on:
 - (1) the accuracy of the demand forecasts to date in the most recent *statement of opportunities*; and
 - (2) any improvements made by AEMO or other relevant parties to the forecasting process that will apply to the next *statement of opportunities*.
- (v) **[Deleted]**

- (w) In relation to the *declared transmission system* of an *adoptive jurisdiction*:
 - (1) AEMO must maintain the register referred to in paragraph (d); and
 - (2) a *declared transmission system operator* must provide AEMO with information reasonably required by AEMO for maintaining the register and keeping it up to date.
- (x) A *jurisdictional planning body* must provide assistance AEMO reasonably requests in connection with the preparation of a report under paragraph (u).

3.13.4 Spot market

- (a) Each week, in accordance with the *timetable*, AEMO must *publish* details of the outputs of the *medium term PASA*.
- (b) The details to be *published* by AEMO under clause 3.13.4(a) must include the information specified in clause 3.7.2(f).
- (c) Each *day*, in accordance with the *timetable*, AEMO must *publish* details of the outputs of the *short term PASA* for each *trading interval* covered.
- (d) The details of the *short term PASA* *published* each *day* by AEMO under clause 3.13.4(c) must include the information specified in clause 3.7.3(h).
- (e) Each *day*, in accordance with the *timetable*, AEMO must *publish* a half hourly *pre-dispatch schedule* for the period described in clause 3.8.20(a).
- (f) Details of the *pre-dispatch schedule* to be *published* must include the following for each *trading interval* in the period covered:
 - (1) forecasts of the most probable peak *power system load* plus required *scheduled reserve* for each *region* and for the total *power system*;
 - (2) forecasts of the most probable *energy* consumption for each *region* and for the total *power system*;
 - (3) forecast *inter-regional loss factors*;
 - (4) aggregate *generating plant* availability for each *region* and aggregate availability of each type of *market ancillary service* for each *region*;
 - (5) projected *supply* surpluses and deficits for each *region*, including shortages of *scheduled reserve* and projected *market ancillary service* surpluses and deficits for each *region*;
 - (5A) the aggregated MW allowance (if any) made by AEMO for generation from *non-scheduled generating systems* in each forecast:
 - (i) of the most probable peak *power system load* referred to in clause 3.13.4(f)(1);

- (ii) referred to in clause 3.13.4(f)(2);
 - (iii) of aggregate *generating plant* availability referred to in clause 3.13.4(f)(4); and
 - (iv) of projected *supply* surpluses and deficits referred to in clause 3.13.4(f)(5) but not including shortages of *scheduled reserve* or projected *market ancillary service* surpluses and deficits for each *region*.
- (5B) in respect of each forecast:
 - (i) of the most probable peak *power system load* referred to in clause 3.13.4(f)(1);
 - (ii) referred to in clause 3.13.4(f)(2);
 - (iii) of aggregate *generating plant* availability referred to in clause 3.13.4(f)(4); and
 - (iv) of projected *supply* surpluses and deficits referred to in clause 3.13.4(f)(5) but not including shortages of *scheduled reserve* or projected *market ancillary service* surpluses and deficits for each *region*,

a value that is the sum of that forecast and the relevant aggregated MW allowance (if any) referred to in clause 3.13.4(f)(5A); and
- (6) identification and quantification of:
 - (i) where a projected *supply* deficit in one *region* can be supplemented by a surplus in a neighbouring *region* (dependent on forecast *interconnector* capacities) and the expected *interconnector flow*;
 - (ii) forecast *interconnector* transfer capabilities and the projected impact of any *inter-network tests* on those transfer capabilities; and
 - (iii) when and where *network constraints* may become binding on the *dispatch* of *generation* or *load*.
- (g) Each *day*, in accordance with the *timetable*, *AEMO* must *publish* forecasts of *spot prices* and *ancillary service prices* at each *regional reference node* for each *trading interval* or *dispatch interval* (as applicable) of the period described in clause 3.8.20(a), with such forecasts being based on the *pre-dispatch schedule* information.
- (h) Together with its forecast *spot prices*, *AEMO* must *publish* details of the expected sensitivity of the forecast *spot prices* to changes in the forecast *load* or *generating unit* availability.

- (i) In accordance with the *timetable* or more often if there is a *change* in circumstances which in the opinion of *AEMO* results in a significant *change* in forecast *spot price*, or in any event no more than 3 hours after the previous such publication, *AEMO* must prepare and *publish* updated *pre-dispatch schedules* and *spot price forecasts*, including the details specified in clause 3.13.4(f).
- (j) If *AEMO* considers there to be a significant change in a forecast *spot price*, *AEMO* must identify and *publish* the cause of such a change in terms of the aggregate *supply* and demand situation and any *network constraints* in or between the affected *region(s)*.
- (k) *AEMO* must specify and *publish* its criteria for a significant change in forecast *spot price* for the purposes of activating an update in the *published* forecasts.
- (l) Within 5 minutes of each time *AEMO* runs the *dispatch algorithm*, *AEMO* must *publish* the *dispatch price* for each *regional reference node* calculated in accordance with clause 3.9.2 and the *ancillary service price* for each *market ancillary service* for each *regional reference node* calculated in accordance with clause 3.9.2A.
- (m) Within 5 minutes of the conclusion of each *trading interval*, *AEMO* must *publish* the *regional reference prices* for each *region* for that *trading interval*.
- (n) Each *day*, in accordance with the *timetable*, *AEMO* must *publish* the actual *regional reference prices*, *ancillary service prices*, *regional* and total *interconnected system loads* and *energies*, *inter-regional loss factors* and details of any *network constraints* for each *trading interval* in the previous *trading day*.
- (n1) In accordance with the *timetable*, *AEMO* must *publish* the *inter-regional* flows.
- (o) **[Deleted]**
- (p) Each *day*, in accordance with the *timetable*, *AEMO* must *publish* details of final *dispatch offers*, *dispatch bids* and *market ancillary service offers* received and actual availabilities of *generating units*, *scheduled network services*, *scheduled loads* and *market ancillary services* for the previous *trading day*, including:
 - (1) the number and times at which *rebids* were made, and the reason provided by the *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* for each *rebid* under clause 3.8.22(c)(2);
 - (2) identification of the *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* submitting the *dispatch bid*, *dispatch offer* or *market ancillary offer*;
 - (3) the *dispatch bid* or *dispatch offer prices*;

- (4) quantities for each *trading interval*;
 - (5) the *ramp rate* of each *generating unit*, *scheduled load* and *scheduled network service* as measured by AEMO's telemetry system;
 - (6) identification of *trading intervals* for which the *plant* was specified as being *inflexible* in accordance with clause 3.8.19 and the reasons provided by the *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* in accordance with clause 3.8.19(b)(1);
 - (7) in respect of a *semi-scheduled generating unit*, the availability of that *generating unit* specified in the relevant *unconstrained intermittent generation forecast* for each *dispatch interval*; and
 - (8) in respect of *semi-scheduled generating units*, the aggregate of the availability of the *semi-scheduled generating units* referred to in subparagraph (7) in respect of each *region* for each *dispatch interval*.
- (q) Each *day*, in accordance with the *timetable*, AEMO must *publish* details of:
- (1) *dispatched generation*, *dispatched network service* or *dispatched load* for each *scheduled generating unit*, *semi-scheduled generating unit*, *scheduled network service* and *scheduled load* respectively in each *trading interval* and *dispatch interval*; and
 - (2) for each *semi-scheduled generating unit* in each *trading interval* and *dispatch interval*, whether or not a condition for setting a *semi-dispatch interval* applied,
- for the previous *trading day*.
- (r) In accordance with the *timetable*, AEMO must *publish* details of:
- (1) actual *generation* for each *scheduled generating unit*, *semi-scheduled generating unit* and *non-scheduled generating unit* or *non-scheduled generating system*;
 - (2) actual *network service* for each *scheduled network service*; and
 - (3) actual *load* for each *scheduled load*.
- (s) Where AEMO *publishes* details as referred to in clause 3.13.4(r), the requirement to *publish* applies only to data available to AEMO.
- (t) AEMO may, in *publishing* the details referred to in clause 3.13.4(s), *publish* aggregated information of actual *generation* for *non-scheduled generating units* or *non-scheduled generating systems* that have a *nameplate rating* that is less than 30 MW.
- (u) Each time AEMO runs the *dispatch algorithm* it must, within 5 minutes, *publish* for the relevant *dispatch interval*:

- (1) details of any MW allowance made by *AEMO* for *generation* from *non-scheduled generating systems* in its forecast regional demand;
 - (2) for each *regional reference node* the sum of the actual *generation* for each *non-scheduled generating unit* or *non-scheduled generating system*; and
 - (3) for each *regional reference node*, a value that is the sum of the *regional demand* value used by *AEMO* in its *dispatch algorithm* to calculate the *dispatch price* referred to in clause 3.13.4(l) and the sum of the actual *generation* referred to in clause 3.13.4(u)(2).
- (v) Where *AEMO publishes* the information referred to in clause 3.13.4(u), the requirement for *AEMO* to *publish* applies only to data available to *AEMO*.
 - (w) Each *day*, in accordance with the *timetable*, *AEMO* must *publish* details of any operational irregularities arising on the previous *trading day* including, for example, any circumstances in which there was *prima facie* evidence of a failure to follow *dispatch instructions*.
 - (x) Each *trading interval*, *AEMO* must, for each *regional reference node*, *publish* the demand for that *trading interval*, both inclusive and exclusive of the aggregate actual *generation* from *non-scheduled generating systems*.
 - (y) In accordance with the *timetable* and no more than 3 hours after the last such notification, *AEMO* must notify electronically on a confidential basis each *Semi-Scheduled Generator* of the *unconstrained intermittent generation forecast* for its *semi-scheduled generating units* that was taken into account for each *trading interval* of the last *pre-dispatch schedule* published by *AEMO* under paragraph (e).
 - (z) At intervals to be determined by *AEMO* under rule 3.7A(e), *AEMO* must, in accordance with the *timetable*, *publish* updates to the *congestion information resource*.

3.13.4A Market ancillary services

- (a) *AEMO* must each *day*, in accordance with the *timetable*, *publish* a forecast of the requirements for each type of *market ancillary service* for each *region* for each *trading interval* during the period described in clause 3.8.20(a).
- (b) *AEMO* must *publish* information describing the key factors which determine the requirement for each type of *market ancillary service* and how they impact on forecast requirements.
- (b1) *AEMO* must *publish* annually the actual quantities and types of *market ancillary services*.
- (c) *AEMO* must *publish* information detailing any significant changes to the forecast requirement for any *market ancillary service* previously *published* under clause 3.13.4A(a), as soon as reasonably practicable after becoming aware of that information.

3.13.5 Ancillary services contracting by AEMO

- (a) *AEMO* must *publish* annually the costs of all of its operations associated with its acquisition of *market ancillary services* and *non-market ancillary services*.
- (b) *AEMO* must *publish* annually the quantities and types of *NSCAS* covered under existing *ancillary services agreements*.
- (c) Information *published* under paragraph (b) must include a breakdown of the actual costs and quantities relating to each *facility* contracted under *ancillary services agreements*.

3.13.5A Settlements residue auctions

- (a) If *AEMO* conducts an *auction* under rule 3.18, *AEMO* must, as soon as practicable thereafter, make available to all *Registered Participants* a report outlining:
 - (1) the *auction* clearing prices;
 - (2) all bids (but not the name of any bidder); and
 - (3) the proceeds of each such *auction*.
- (b) *AEMO* must, as soon as practicable after the *final statements* for a *billing period* have been given to *Market Participants* under clause 3.15.15, make available to all *Registered Participants* a report setting out:
 - (1) the total *settlements residue*;
 - (2) the amount of *settlements residue* attributable to each *directional interconnector* (including the amount paid pursuant to the *jurisdictional derogations* in Chapter 9); and
 - (3) the amount of *settlements residue* attributable to *intra-regional loss factors* for each *region*, for that *billing period*.
- (c) *AEMO* may provide copies of its reports under clauses 3.13.5A(a) and (b) to persons other than *Registered Participants*, and may charge a fee for doing so to cover an appropriate share of the costs of preparing the report.

3.13.6 [Deleted]

3.13.6A Report by AEMO

- (a) *AEMO* must, as soon as reasonably practicable after issuing a *direction*, *publish* a report outlining:
 - (1) the circumstances giving rise to the need for the *direction*;

- (2) the basis on which it determined the latest time for that *direction* and on what basis that it determined that a *market* response would not have avoided the need for the *direction*;
 - (3) details of the changes in *dispatch* outcomes due to the *direction*;
 - (4) the processes implemented by *AEMO* to issue the *direction*;
 - (5) if applicable, the basis upon which *AEMO* did not follow any or all of the processes set out in rule 4.8 either in whole or in part prior to the issuance of the *direction*;
 - (6) if applicable, the basis upon which *AEMO* considered it impractical to set *spot prices* and *ancillary service prices* in accordance with clause 3.9.3(b);
 - (7) details of the adequacy and effectiveness of responses to inquiries made by *AEMO* under clause 4.8.5A(d); and
 - (8) information regarding any notification by a *Registered Participant* that it will not be able to comply with a *direction* under clause 4.8.9(d).
- (b) As soon as reasonably practicable after *AEMO* has, in accordance with clause 3.15.10C, included the amounts arising from a *direction* in a settlement statement provided under clause 3.15.15, *AEMO* must *publish* details of:
 - (1) the *compensation recovery amount* arising from the *direction* as calculated under clause 3.15.8(a) for the period of the *direction*;
 - (2) details of the calculation of the regional benefit determined under clause 3.15.8(b1); and
 - (3) a breakdown of the *compensation recovery amount* by each category of *Registered Participant*, as determined by *AEMO*, in each *region*.

3.13.7 Monitoring of significant variation between forecast and actual prices by AER

- (a) The *AER* must, after consulting with the *AEMC*, specify and make available to *Registered Participants* and the public, criteria which the *AER* will use to determine whether there is a significant variation between the *spot price forecast published* by *AEMO* in accordance with clause 3.13.4 and the actual *spot price* in any *trading interval*. The *AER* must, in accordance with these criteria, monitor in each *trading interval* whether any such significant variation has occurred.
- (b) The *AER* must prepare and *publish* a report in respect of each three month period commencing on 1 January, 1 April, 1 July and 1 October in each year. The report must:

- (1) be *published* no later than 4 weeks after the end of each three month period;
 - (2) identify and review each occasion when, in accordance with the criteria specified under clause 3.13.7(a), the *AER* considers that a significant price variation has occurred;
 - (3) state why the *AER* considers that the significant price variation occurred;
 - (4) be available to members of the public on request; and
 - (5) be provided to the *AEMC*.
- (c) The *ACCC* or the *AEMC* may request the *AER* to report to it on a particular *market* outcome. If the *ACCC* or the *AEMC* makes a request of this type, the *AER* may provide a report on that *market* outcome. The report must review the *market* outcome raised by the *ACCC* or the *AEMC* (as the case may be) and state why the *AER* considers that the *market* outcome occurred.
- (d) The *AER* must, within 40 *business days* of the end of a week in which the *spot price* exceeded \$5,000/MWh in a *trading interval* or *trading intervals*, prepare and *publish* a report which must for each *trading interval* in which the *spot price* exceeded \$5,000/MWh in that week:
 - (1) describe the significant factors that contributed to the *spot price* exceeding \$5,000/MWh, including the withdrawal of *generation* capacity and *network* availability;
 - (2) assess whether *rebidding* pursuant to clause 3.8.22 contributed to the *spot price* exceeding \$5,000/MWh; and
 - (3) identify the marginal *scheduled generating units* and *semi-scheduled generating units* for the *dispatch intervals* in the relevant *trading interval* and all *scheduled generating units* and *semi-scheduled generating units* for which any *dispatch offer* for the *trading interval* was equal to or greater than \$5,000/MWh and compare these *dispatch offers* to relevant *dispatch offers* in previous *trading intervals*.
- (e) Where
 - (1) prices at a *regional reference node* for a *market ancillary service* over a period significantly exceed the relevant *spot price* for *energy*; and
 - (2) prices for that *market ancillary service* exceed \$5,000 for a number of *trading intervals* within that period,the *AER* must prepare and *publish* a report which:
 - (3) describes the significant factors that contributed to the *ancillary service prices* exceeding \$5,000/MWh;

- (4) identifies any linkages between *spot prices* in the *energy market* and *ancillary service prices* contributing to the occurrence; and
- (5) assesses whether *rebidding* pursuant to clause 3.8.22 contributed to prices exceeding \$5,000/Mwh.

3.13.8 Public information

- (a) AEMO must *publish* on a daily basis the following information for the previous *trading day*:
 - (1) *regional reference price* by *trading interval*;
 - (2) *power system load* for each *region* referred to the *regional reference node* by *trading interval*;
 - (3) *regional* electricity consumption in MWh by *trading interval*;
 - (4) *inter-regional* power flows by *trading interval*; and
 - (5) *network constraints* by *trading interval*.
- (b) All *market information* that AEMO is required to *publish* in accordance with the *Rules* shall also be made available by AEMO to persons other than *Registered Participants* using the *electronic communications system* on the fee basis described in clause 8.7.6. AEMO may make the *market information* available to persons other than *Registered Participants* using a mechanism other than the *market information bulletin board* on the fee basis described in clause 8.7.6, so long as that information is also available on the *market information bulletin board*.
- (c) AEMO must make available for purchase by any party the *statement of opportunities* from the date of *publication* of such statement.
- (d) AEMO must retain all information provided to it under the *Rules* for at least 6 years in whatever form it deems appropriate for reasonably easy access.

3.13.9 [Deleted]

3.13.10 Market auditor

- (a) AEMO must appoint one or more *market auditors* to carry out *reviews* of such matters as AEMO considers appropriate which must include (but need not be limited to) a *review* of:
 - (1) the calculations and allocations performed by the *metering system* and *settlements* system;
 - (2) the billing and information systems;
 - (3) the scheduling and *dispatch* processes;

- (4) the processes for software management;
 - (5) the *AEMO* procedures and their compliance with the *Rules*.
- (b) *AEMO* must ensure that the *market auditor* carries out the *reviews* to be carried out under clause 3.13.10(a) no less than annually.
- (c) A *market auditor* shall be an *independent person*.
- (d) A *market auditor* must report in writing to *AEMO*. *AEMO* must, after receiving the report, either:
 - (1) approve the report, and any recommendations made in it, by noting such approval on the report or in a paper attached to the report; or
 - (2) prepare a separate report setting out the matters dealt with in the report which *AEMO* approves and those matters which *AEMO* does not approve and setting out *AEMO*'s reasons for that view.
- (e) *AEMO* must *publish* any report received from the *market auditor* together with the material mentioned in clause 3.13.10(d).

3.13.11 [Deleted]

3.13.12 NMI Standing Data

Note:

Clause 3.13.12 only applies in a participating jurisdiction that has not applied the *NERL* as a law of that jurisdiction. In a participating jurisdiction that has applied the *NERL*, the scheme developed by *AEMO* under clause 3.13.12A supersedes clause 3.13.12 and clause 3.13.12 is revoked (see clause 3.13.12A(d)).

- (a) The authority responsible for administering the *jurisdictional electricity legislation* in for each *participating jurisdiction* may provide *AEMO* with a *Jurisdictional NMI Standing Data schedule* setting out the categories of *NMI Standing Data* which:
 - (1) *Registered Participants* are required by the *participating jurisdiction's* legislation or licensing requirements to provide to *AEMO* in relation to *connection points* in that *participating jurisdiction*; and
 - (2) *AEMO* must make available to *Market Customers*, or a class of *Market Customers*, on request pursuant to its disclosure obligations under clauses 3.13.12(d) and (e).

Any such schedule must contain the matters set out in clause 3.13.12(c).

- (b) A responsible authority may from time to time amend the *Jurisdictional NMI Standing Data schedule* in respect of the relevant *participating jurisdiction*, which amendments must be consistent with the matters set out in clause 3.13.12(c), and must promptly provide the amended schedule to *AEMO*.

- (c) A valid *Jurisdictional NMI Standing Data schedule* must contain the following items:
- (1) a specification of the categories of *NMI Standing Data* which AEMO must provide to *Market Customers*, or a specified class of *Market Customers*, on request, pursuant to its disclosure obligations under clauses 3.13.12(d) and (e), in respect of *connection points* in the relevant *participating jurisdiction*;
 - (2) details of the *Jurisdictional NMI Standing Data suppliers*, including which *Registered Participants* are required to provide that data in respect of particular *connection points* within that *participating jurisdiction*;
 - (3) the timetable which the relevant *participating jurisdiction* will implement to ensure *Jurisdictional NMI Standing Data suppliers* supply *NMI Standing Data* in respect of *connection points* in that *participating jurisdiction* to AEMO;
 - (4) the criteria which AEMO must use to identify whether AEMO must disclose *NMI Standing Data* for *connection points* in that *participating jurisdiction* to particular *Market Customers*, pursuant to its disclosure obligations under clauses 3.13.12(d) and (e);
 - (5) the purposes connected with the facilitation of the wholesale electricity market for which the *Market Customer* may use *NMI Standing Data*;
 - (6) any additional information or criteria as may be determined by the authority responsible for administering the *jurisdictional electricity legislation* as necessary or appropriate in relation to the obligations of *Jurisdictional NMI Standing Data suppliers* and the release by AEMO of *NMI Standing Data* for *connection points* in that *participating jurisdiction*.
- (d) AEMO must:
- (1) publish the *Jurisdictional NMI Standing Data schedules* and any amendments to those schedules provided to it by the responsible authorities under clauses 3.13.12(a) and (b); and
 - (2) subject to clause 3.13.12(e), make available to *Market Customers* on request *NMI Standing Data* within the relevant categories in respect of *connection points* in a *participating jurisdiction* described in the *Jurisdictional NMI Standing Data schedule* for that *participating jurisdiction*.
- (e) AEMO must only provide *NMI Standing Data* under this clause 3.13.12 to a *Market Customer*:

- (1) that is a *Market Customer* or a member of a class of *Market Customers* fitting the criteria stated in the relevant *Jurisdictional NMI Standing Data schedule* as being entitled to receive that data;
 - (2) in accordance with the relevant valid *Jurisdictional NMI Standing Data schedule*; and
 - (3) for the purposes described in clause 3.13.12(g).
- (f) Each *Registered Participant* which is a *Jurisdictional NMI Standing Data supplier* must provide the *NMI Standing Data* to *AEMO* which it is required to provide in accordance with the relevant *Jurisdictional NMI Standing Data schedule*, if any such *Jurisdictional NMI Standing Data schedule* has been provided to *AEMO* under clause 3.13.12(a):
- (1) at no charge and in the format reasonably required by *AEMO*; and
 - (2) after having first done whatever may be required or otherwise necessary under any applicable privacy legislation (including if appropriate making relevant disclosures or obtaining relevant consents from end-use customers) taking into account that *AEMO* will use and disclose the *NMI Standing Data* in accordance with the *Rules*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (g) *Market Customers* must only use *NMI Standing Data* provided to it by *AEMO* under this clause 3.13.12 for the purposes permitted by the relevant *Jurisdictional NMI Standing Data schedule*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (h) Where a responsible authority has provided *AEMO* with a *Jurisdictional NMI Standing Data schedule* for the relevant *participating jurisdiction* and a *Registered Participant* which is a *Jurisdictional NMI Standing Data supplier* fails to provide *AEMO* with *NMI Standing Data* in accordance with clause 3.13.12(f) and *AEMO* becomes aware of that failure, then:
- (1) *AEMO* must advise the *Registered Participant* that, in its opinion, the *Registered Participant* is failing to comply with clause 3.13.12(f);
 - (2) if the *Registered Participant* fails to provide *AEMO* with the *NMI Standing Data* within 5 *business days* of the notice provided under clause 3.13.12(h)(1), *AEMO* must notify the *AER* and the relevant responsible authority of the failure and the failure by the *Registered Participant* to provide the *NMI Standing Data* is to be dealt with by the responsible authority under the relevant *participating*

- jurisdiction's* legislation or licensing requirements unless the responsible authority notifies *AEMO* otherwise in accordance with clause 3.13.12(h)(3); and
- (3) if, after receiving a notice from *AEMO* under clause 3.13.12(h)(2), the responsible authority notifies *AEMO* that the relevant *participating jurisdiction's* legislation or licensing requirements do not contain a regime which empowers the responsible authority to compel the *Registered Participant* to provide the *NMI Standing Data* to *AEMO*, *AEMO* must notify the *AER* of the failure by the *Registered Participant* to provide the *NMI Standing Data* under clause 3.13.12(f).
- (i) Where a responsible authority has provided *AEMO* with a *Jurisdictional NMI Standing Data schedule* for the relevant *participating jurisdiction* and a *Market Customer*, that has been provided with *NMI Standing Data* by *AEMO* under clause 3.13.12(d) in accordance with that schedule, fails to use that *NMI Standing Data* in accordance with clause 3.13.12(g), and *AEMO* becomes aware of that failure, then:
- (1) *AEMO* must advise the *Market Customer* that, in its opinion, the *Market Customer* is failing to comply with clause 3.13.12(g);
 - (2) if the *Market Customer* does not remedy the failure within 5 *business days* of the notice provided under clause 3.13.12(i)(1), *AEMO* must notify the relevant responsible authority of the failure and the failure by the *Market Customer* to use the *NMI Standing Data* in accordance with this clause 3.13.12 is to be dealt with by the responsible authority under the relevant *participating jurisdiction's* legislation or licensing requirements unless the responsible authority notifies *AEMO* otherwise in accordance with clause 3.13.12(i)(3); and
 - (3) if, after receiving a notice from *AEMO* under clause 3.13.12(i)(2), the responsible authority notifies *AEMO* that the relevant *participating jurisdiction's* legislation or licensing requirements do not contain a regime which empowers the responsible authority to regulate the use of the *NMI Standing Data* by a *Market Customer*, *AEMO* must notify the *AER* of the failure by the *Market Customer* to use the *NMI Standing Data* in accordance with clause 3.13.12(g).
- (j) *AEMO* must if requested by a responsible authority:
- (1) develop a regime for monitoring and reporting to the responsible authority on requests received by *AEMO* to provide *NMI Standing Data* to *Market Customers* for *connections points* in the relevant *participating jurisdiction*, in consultation with the responsible authority; and
 - (2) provide information to the responsible authority in accordance with the monitoring and reporting regime developed under this clause 3.13.12(j).

- (k) Nothing in this clause 3.13.12:
 - (1) requires *AEMO* to make available *NMI Standing Data* if that *NMI Standing Data* has not been provided to *AEMO*;
 - (2) requires *AEMO* to make available *NMI Standing Data* where the collection, use or disclosure of that information by *AEMO* would breach applicable privacy laws;
 - (3) precludes *AEMO* from providing *NMI Standing Data* to a *Registered Participant* where the provision of that information is required to give effect to other provisions of the *Rules*;
 - (4) precludes *AEMO* from disclosing *confidential information* in the circumstances in which the disclosure of *confidential information* is permitted under the *National Electricity Law* or these *Rules*; and
 - (5) requires *AEMO* to provide information which its software systems cannot provide without modification.

3.13.12A NMI Standing Data Schedule

Note:

Clause 3.13.12A was inserted in the Rules by the National Electricity Amendment (National Energy Retail Law) Rule 2012. Clause 3.13.12A only applies in a participating jurisdiction that has applied the *NERL* as a law of that jurisdiction. In a participating jurisdiction that has not applied the *NERL* clause 3.13.12 continues to apply.

- (a) *AEMO* must, in consultation with the responsible *authorities* for *participating jurisdictions*, *Registered Participants*, and other interested persons, develop a scheme for an *NMI standing data* schedule (the **NMI Standing Data Schedule**).
- (b) In developing the scheme, *AEMO* must have regard to the *Jurisdictional NMI Standing Data schedules*.
- (c) The proposed scheme must include provisions dealing with:
 - (1) the obligations of *Registered Participants* and others to provide information for inclusion in the Schedule; and
 - (2) the rights of *Registered Participants* and others to have access to the Schedule; and
 - (3) amendment of the Schedule.
- (d) The scheme supersedes clause 3.13.12 and, on the date it takes effect, that clause is revoked.
- (e) *AEMO* must publish a notice of its adoption of the scheme in the South Australian Government Gazette:

- (1) setting out the provisions of the scheme; and
 - (2) fixing a date for its commencement.
- (f) The scheme takes effect on the date fixed under paragraph (e)(2).

3.13.13 Inter-network tests

- (a) *AEMO* must *publish* the *test program* for an *inter-network test* as soon as practicable after determining it under clause 5.7.7(r).
- (b) If *AEMO* amends the *test program* for an *inter-network test* it must *publish* details of the amendment.
- (c) If *AEMO* proposes to conduct an *inter-network test* it must *publish* the approximate time of the test, giving as much notice as is reasonably practicable.
- (d) If the time of an *inter-network test* is changed, *AEMO* must *publish* details of the change.

3.13.14 Carbon Dioxide Equivalent Intensity Index

Carbon dioxide equivalent intensity index procedures

- (a) *AEMO* must develop, review and amend *carbon dioxide equivalent intensity index procedures* in consultation with *Registered Participants* and such other persons as *AEMO* thinks appropriate, in accordance with the *Rules consultation procedures* and paragraphs (b), (c) and (e)
- (a1) For the purposes of this clause, reference to a *market generating unit* is not taken to include a *small generating unit*.
- (b) The *carbon dioxide equivalent intensity index procedures* must include:
- (1) the methodology for calculating the *carbon dioxide equivalent intensity index* and any *supplementary carbon dioxide equivalent intensity indicators*;
 - (2) where relevant, any assumptions used to calculate the *carbon dioxide equivalent intensity index* and any *supplementary carbon dioxide equivalent intensity indicators*;
 - (3) the form of the *emission factors* for the *scheduled generating units* and *market generating units* included in the calculation of the *carbon dioxide equivalent intensity index* and any *supplementary carbon dioxide equivalent intensity indicators*;
 - (4) the methodology for estimating an *emission factor* where the data on the *emission factor* for a *scheduled generating unit* or *market generating unit* included in the calculation of the *carbon dioxide*

- equivalent intensity index* and any *supplementary carbon dioxide equivalent intensity indicators* is not publicly available;
- (5) the form of the energy measurements (in MWh) for the *scheduled generating units* and *market generating units* included in the calculation of the *carbon dioxide equivalent intensity index* and any *supplementary carbon dioxide equivalent intensity indicators*;
 - (6) the time interval for updating and publishing the *carbon dioxide equivalent intensity index* and any *supplementary carbon dioxide equivalent intensity indicators*; and
 - (7) the time interval for conducting a review of the *emission factors* under paragraph (j).
- (c) In developing the *carbon dioxide equivalent intensity index procedures*, AEMO must:
- (1) ensure that the methodology used to calculate the *carbon dioxide equivalent intensity index* under paragraph (b)(1) represents the volume weighted average of the carbon dioxide equivalent greenhouse gas emissions from all the *scheduled generating units* and *market generating units* included in the calculation of the *carbon dioxide equivalent intensity index* for the time interval described in paragraph (b)(6);
 - (2) ensure that the methodology used to calculate any *supplementary carbon dioxide equivalent intensity indicators* under paragraph (b)(1) represents the volume weighted average of the carbon dioxide equivalent greenhouse gas emissions from all the *scheduled generating units* and *market generating units* included in the calculation of the *supplementary carbon dioxide equivalent intensity indicators* for the time interval described in paragraph (b)(6);
 - (3) use reasonable endeavours to obtain the data used to calculate the *carbon dioxide equivalent intensity index* and any *supplementary carbon dioxide equivalent intensity indicators* from reliable sources; and
 - (4) have regard to the methodology for determining *emission factors* under the *Australian Government's National Greenhouse and Energy Reporting System* when determining the methodology for estimating the *emission factors* under paragraph (b)(4).
- (d) AEMO must publish the first *carbon dioxide equivalent intensity index procedures* by no later than 22 July 2011 and such procedures must be available at all times after this date.
- (e) AEMO must conduct a review of the *carbon dioxide equivalent intensity index procedures* at least once every 3 years after the first *carbon dioxide equivalent intensity index procedures* are published.

Carbon dioxide equivalent intensity index and supplementary carbon dioxide equivalent intensity indicators

- (f) *AEMO must calculate, update and publish a carbon dioxide equivalent intensity index for the National Electricity Market in accordance with the carbon dioxide equivalent intensity index procedures and this clause 3.13.14.*
- (g) *The first carbon dioxide equivalent intensity index must be published as soon as practicable after the first carbon dioxide equivalent intensity index procedures are published under paragraph (d).*
- (h) *If AEMO elects to publish any supplementary carbon dioxide equivalent intensity indicators, AEMO must calculate, update and publish the supplementary carbon dioxide equivalent intensity indicators in accordance with the carbon dioxide equivalent intensity index procedures.*
- (i) *At the same time as it publishes the first carbon dioxide equivalent intensity index under paragraph (g), AEMO must publish a table which lists:*
 - (1) *all the scheduled generating units and market generating units included in the calculation of the carbon dioxide equivalent intensity index; and*
 - (2) *for each scheduled generating unit or market generating unit referred to in subparagraph (1), the emission factor and the source of that information.*
- (j) *AEMO must conduct a review of the emission factors for the scheduled generating units and market generating units included in the calculation of the carbon dioxide equivalent intensity index and any supplementary carbon dioxide equivalent intensity indicators in accordance with the carbon dioxide equivalent intensity index procedures to determine whether the emission factors have changed since the last update of the emission factors.*
- (k) *As soon as practicable after a review under paragraph (j), AEMO must update the carbon dioxide equivalent intensity index and where appropriate, any supplementary carbon dioxide equivalent intensity indicators with any new emission factors, if the emission factor for any scheduled generating units or market generating units included in the calculation of the carbon dioxide equivalent intensity index and any supplementary carbon dioxide equivalent intensity indicators has changed since the last update of the emission factors.*
- (l) *In addition to the obligation under paragraph (k), AEMO must update the carbon dioxide equivalent intensity index and where appropriate, any supplementary carbon dioxide equivalent intensity indicators with any new emission factors as soon as practicable if:*
 - (1) *AEMO is advised that the emission factor for any scheduled generating units or market generating units included in the calculation of the carbon dioxide equivalent intensity index and any*

supplementary carbon dioxide equivalent intensity indicators has changed since the last update of the *emission factors*; and

- (2) the data on the *emission factor* is publicly available and, in AEMO's opinion, is from a reliable source.

(m) If:

- (1) a *generating unit* is classified as a *scheduled generating unit* or *market generating unit* under Chapter 2 after the first *carbon dioxide equivalent intensity index* is published under paragraph (g); and
- (2) data for that *generating unit* is not included in the calculation of the *carbon dioxide equivalent intensity index*,

then AEMO must as soon as practicable update the *carbon dioxide equivalent intensity index* to include data for that *generating unit*.

- (n) For the avoidance of doubt, in updating the *carbon dioxide equivalent intensity index* under paragraph (m), AEMO may use the methodology for estimating an *emission factor* under the *carbon dioxide equivalent intensity index procedures* to calculate the *carbon dioxide equivalent intensity index* if the *emission factor* for any *generating units* described in paragraph (m) is not publicly available.
- (o) AEMO must, as soon as practicable after it updates the *carbon dioxide equivalent intensity index* and any *supplementary carbon dioxide equivalent intensity indicators* under paragraphs (k) to (m):
 - (1) update the table described in paragraph (i) with the new *emission factor(s)*, the source of that information and where appropriate, any new *scheduled generating units* or *market generating units* included in the calculation of the *carbon dioxide equivalent intensity index*; and
 - (2) publish the table.
- (p) AEMO must amend the *timetable* to include the time interval in which it must publish the *carbon dioxide equivalent intensity index* under the *carbon dioxide equivalent intensity index procedures* (as amended under this clause 3.13.14).
- (q) Despite clause 3.4.3(b), AEMO may amend the *timetable* under paragraph (p) without following the *Rules consultation procedures*.

3.14 Administered Price Cap and Market Suspension

3.14.1 Cumulative Price Threshold and Administered Price Cap

- (a) The *administered price cap* for each *region* is \$300/MWh.
- (b) The *administered floor price* for each *region* to apply to *spot prices* is the negative of the value of the *administered price cap*.

- (c) The *cumulative price threshold* for each *financial year* is the dollar amount calculated by the AEMC under paragraph (d).

Note

The current value of the *cumulative price threshold* is set out in a schedule of reliability settings published on the AEMC's website www.aemc.gov.au

- (d) By 28 February of each year (commencing 2012), the AEMC must calculate the *cumulative price threshold* to apply on and from 1 July of that year in accordance with paragraphs (e) and (f) and *publish* its calculation on its website as part of a schedule of *reliability* settings.
- (e) Subject to paragraph (f), the AEMC must calculate the *cumulative price threshold* using the following formula:

$$CPT^x = BV^{CPT} \times \frac{(Q_1^c + Q_2^c + Q_3^c + Q_4^c)}{(Q_1^b + Q_2^b + Q_3^b + Q_4^b)}$$

Where:

CPT is the *cumulative price threshold* in dollars;

x is the *financial year* for which the *cumulative price threshold* is being calculated;

BV^{CPT} is \$187,500 (being the value of the *cumulative price threshold* prior to 1 July 2012);

Q1 to Q4 are the values of the Reliability Settings Index for each of the four quarters of years c and b (as the case may be) as at five months before the start of year x;

Reliability Settings Index is the All groups, Australia CPI found at Index Numbers, All groups, Australia, in Tables 1 and 2 of the Consumer Price Index, Australia published by the Australian Bureau of Statistics for the relevant quarter, except where that index ceases to be published or is substantially changed, in which case the Reliability Settings Index will be such other index as is determined by the AEMC as suitable;

c is the calendar year commencing 18 months before the start of year x; and

b is calendar year 2010.

- (f) If the value calculated by the AEMC under paragraph (e) is:
- (1) not in whole hundreds of dollars, then the *cumulative price threshold* for year x will be the value calculated under paragraph (e) rounded to the nearest \$100;
 - (2) less than the *cumulative price threshold* applied under this clause 3.14.1 for the preceding *financial year* (year x-1), then the *cumulative*

price threshold for year x will be the value of the *cumulative price threshold* for year x-1.

3.14.2 Application of Administered Price Cap

- (a) **[Deleted]**
- (b) AEMO must immediately notify all *Market Participants* of the commencement and closing of an *administered price period* under rule 3.14.
- (c) Each of the following periods is an *administered price period* in a *region*:
 - (1) a *trading interval*, where the sum of the *spot prices* in the previous 336 *trading intervals*, calculated as if this clause did not apply, exceeds the *cumulative price threshold*;
 - (1A) a *dispatch interval*, where the sum of the *ancillary service prices* for a *market ancillary service* in the previous 2016 *dispatch intervals*, calculated as if this clause did not apply, exceeds 6 times the *cumulative price threshold*;
 - (2) a *trading interval* in a *trading day* in which a prior *trading interval* is an *administered price period*;
 - (2A) a *dispatch interval* in a *trading day* in which a prior *dispatch interval* is an *administered price period*; or
 - (2B) a *dispatch interval* within a *trading interval* that is an *administered price period*.
- (3) **[Deleted]**
- (d) During an *administered price period* the procedures for *PASA*, *dispatch*, *spot price* and *ancillary service price* determination are to continue in accordance with the provisions of the *Rules*.
- (d1) If, within an *administered price period* triggered because of clause 3.14.2(c)(1) or (2) in relation to *energy*, the *dispatch price* for the *region* identified in clause 3.14.2(c) calculated as if this clause 3.14.2(d1) did not apply:
 - (1) exceeds the *administered price cap*, then AEMO must set the *dispatch price* to the *administered price cap*; or
 - (2) is less than the *administered floor price*, AEMO must set the *dispatch price* to the *administered floor price*.
- (d2) If within an *administered price period* an *ancillary service price* for any *market ancillary service* for the *region* identified in clause 3.14.2(c) calculated as if this clause 3.14.2(d2) did not apply exceeds the *administered price cap*, then AEMO must set that *ancillary service price* to the *administered price cap*.

- (e) If during an *administered price period* the *dispatch price*:
 - (1) **[Deleted]**
 - (2) at any *regional reference node* is set to the *administered price cap* under clause 3.14.2(d1)(1), then *dispatch prices* at all other *regional reference nodes connected by a regulated interconnector or regulated interconnectors* that have an *energy flow* towards that *regional reference node* must not exceed the *administered price cap* divided by the *average loss factor* that applies for *energy flow* in that direction for that *dispatch interval* and determined in accordance with clause 3.14.2(e)(5).
 - (3) **[Deleted]**
 - (4) at any *regional reference node* is set to the *administered floor price* under clause 3.14.2(d1)(2), then *dispatch prices* at all other *regional reference nodes connected by a regulated interconnector or regulated interconnectors* that have an *energy flow* away from that *regional reference node* must be equal to or greater than the *administered floor price* multiplied by the *average loss factor* that applies for *energy flow* in that direction for that *dispatch interval* and determined in accordance with clause 3.14.2(e)(5).
 - (5) AEMO must determine the *average loss factors* applicable to clause 3.14.2(e)(2) and 3.14.2(e)(4) by reference to the *inter-regional loss factor* equations relating to the relevant *regulated interconnector*.

3.14.3 Conditions for suspension of the spot market

- (a) Subject to clause 3.14.3(b), AEMO may declare the *spot market* to be suspended in a *region* when in respect of that *region*:
 - (1) the *power system* has collapsed to a *black system*;
 - (2) AEMO has been directed by a *participating jurisdiction* to suspend the *market* or operate all or part of the *power system* in a manner contrary to the provisions of the *Rules* following the formal declaration by that *participating jurisdiction* of a state of emergency under its emergency services or equivalent legislation; or
 - (3) AEMO determines that it is necessary to suspend the *spot market* in a *region* because it has become impossible to operate the *spot market* in accordance with the provisions of the *Rules*.
- (a1) **[Deleted]**
- (b) AEMO must not suspend the *spot market* solely because:
 - (1) *dispatch prices* have reached the *market price cap*;
 - (1A) *spot prices* have reached the *market floor price*;

- (2) *AEMO* has issued a *direction*; or
- (3) *AEMO* has otherwise intervened in the market under rule 3.12.
- (c) *AEMO* must conduct reviews of each occasion when it suspended the *spot market* in order to assess the adequacy of the provision and response of *facilities* or services, and the appropriateness of actions taken to restore or maintain *power system security*.
- (d) The report of the review carried out in accordance with paragraph (c) must be made available to *Registered Participants* and the public.
- (e) A *Registered Participant* must co-operate in any such review conducted by *AEMO* (including making available relevant records and information).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (f) A *Registered Participant* must provide to *AEMO* such information relating to the performance of its equipment during and after a suspension of the *spot market* as *AEMO* reasonably requires for the purposes of analysing or reporting on that suspension.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (g) *AEMO* must provide to a *Registered Participant* such information or reports relating to the performance of that *Registered Participant's* equipment during a suspension of the *spot market* as that *Registered Participant* reasonably requests and in relation to which *AEMO* is required to conduct a review under this clause 3.14.3.

3.14.4 Declaration of market suspension

- (a) The *spot market* in a *region* can only be suspended by a declaration by *AEMO* in the circumstances described in clause 3.14.3(a), and *AEMO* must *publish* that declaration without delay.
- (b) **[Deleted]**
- (c) The *spot market* in a *region* is deemed to be suspended at the start of the *dispatch interval* in which *AEMO* makes a declaration that the *spot market* is suspended.
- (d) Following a declaration by *AEMO* under clause 3.14.3(a), the *spot market* is to remain suspended in the relevant *region* until *AEMO* declares and informs all *Registered Participants*:

- (1) that *spot market* operation is to resume in accordance with this Chapter 3; and
 - (2) of the *time* at which the *spot market* is to resume.
- (e) If AEMO declares that the *spot market* is suspended:
 - (1) AEMO may issue *directions* to *Registered Participants* in accordance with clause 4.8.9; and
 - (2) *dispatch prices* and *ancillary service prices* in the relevant *region* are to be set by AEMO in accordance with clause 3.14.5 until the *time* at which the *spot market* is resumed.
- (f) AEMO must within 10 *business days* following the day on which, in accordance with the notice given by AEMO under paragraph (d), the *spot market* resumed, commence an investigation of that *spot market* suspension.
- (g) The investigation must examine and report on the reason for the suspension and the effect that the suspension had on the operation of the *spot market*. AEMO must make a copy of the report available to *Registered Participants* and the public as soon as it is practicable to do so.

3.14.5 Pricing during market suspension

- (a) Subject to paragraph (b), if the *spot market* is suspended in a *region* then *central dispatch* and the determination of *dispatch prices*, *spot prices* and *ancillary service prices* in the *suspended region* are to continue in accordance with rules 3.8 and 3.9.
- (b) If, in AEMO's reasonable opinion, it is not practicable to operate *central dispatch* and determine *dispatch prices* and *ancillary service prices* in a *suspended region* in accordance with rules 3.8 and 3.9, AEMO must set *dispatch prices* and *ancillary service prices* for the *suspended region* at the prices applicable to the relevant *dispatch interval* in the current estimated price schedule developed and published in accordance with paragraph (e).
- (c) *Dispatch prices* and *ancillary service prices* determined in accordance with paragraph (b) for a *suspended region*:
 - (1) continue to be subject to the application of clause 3.14.2(d1) and clause 3.14.2(d2) in respect of *administered price periods*, and are to be adjusted (where applicable) in accordance with clause 3.14.2(e);
 - (2) are not to be adjusted in the circumstances set out in clause 3.9.2(e)(1) or clauses 3.9.2(e)(2) and 3.9.3;
 - (3) are not subject to review under clause 3.9.2B; and
 - (4) are not subject to clause 3.12A.6.

- (d) If the *dispatch prices* and *ancillary service prices* in a *suspended region* are being determined in accordance with paragraph (b), they must continue to be determined in accordance with that paragraph until the earlier of:
 - (1) the *time* that the *spot market* is no longer suspended in the relevant *region*; and
 - (2) if AEMO declared the *spot market* to be suspended for the reason set out in clause 3.14.3(a)(1) or (3), the *time* that, in AEMO's reasonable opinion, it is practicable to resume *central dispatch* and the determination of *dispatch prices* and *ancillary service prices* in the *suspended region* in accordance with rules 3.8 and 3.9; and
 - (3) if AEMO declared the *spot market* to be suspended for the reason set out in clause 3.14.3(a)(2), the *time* that, in AEMO's reasonable opinion, it is practicable to resume *central dispatch* and the determination of *dispatch prices* and *ancillary service prices* in the *suspended region* in accordance with rules 3.8 and 3.9, provided that the *participating jurisdiction* that directed AEMO under clause 3.14.3(a)(2) has agreed to the resumption of *central dispatch* and the determination of *dispatch prices* and *ancillary service prices* in the *suspended region* in accordance with rules 3.8 and 3.9
- (e) AEMO must:
 - (1) develop in accordance with the *Rules consultation procedures* a methodology to be used by AEMO (**estimated price methodology**) to prepare and update schedules containing reasonable estimates of typical *market prices* during the periods to which the schedules relate (**estimated price schedules**);
 - (2) develop and update estimated price schedules in accordance with the estimated price methodology, to be used during any period in which the *spot market* is suspended; and
 - (3) *publish* the estimated price methodology promptly after it has been developed and *publish* the estimated price schedule at least 14 days prior to the first day to which the schedule relates.
- (f) If a *dispatch price* is set in accordance with paragraph (b) at a *regional reference node* (**suspension node**), then *dispatch prices* at all other *regional reference nodes connected* by one or more *regulated interconnectors* that have a net *energy flow* towards the suspension node must not exceed the *dispatch price* in the *suspended region* divided by the average *loss factor* that applies for *energy flow* in that direction for that *dispatch interval*.
- (g) Paragraph (f) does not apply to a *dispatch price* at another *regional reference node* that has been replaced in accordance with clause 3.9.2B or where clause 3.8.21(b) applies.
- (h) AEMO must use reasonable endeavours to ensure that any adjustments required to *dispatch prices* so that they do not exceed the limits set by

paragraph (f) are finalised as soon as practicable but in any event by the end of the next *business day* following the day on which the *spot market* in the *region* ceased to be suspended

- (i) *AEMO* must determine the average *loss factor* applicable to paragraph (f) by reference to the *inter-regional loss factor* equations relating to the relevant *regulated interconnectors*.

3.14.6 Compensation due to the application of an administered price cap or administered floor price

Eligibility for compensation

- (a) For the purposes of this clause 3.14.6:

compensation guidelines means the guidelines made by the *AEMC* under paragraph (e).

direct costs means the costs directly incurred by the claimant due to a price limit event

direct cost only claim means a claim made under paragraph (i) that does not include a claim for opportunity costs.

eligibility period means the period starting at the beginning of the first *trading interval* in which the price limit event occurs in a *trading day* and ending at the end of the final *dispatch interval* of the last *trading interval* of that *trading day*.

opportunity costs means the value of opportunities foregone by the claimant due to the price limit event as defined in the compensation guidelines.

price limit event means:

- (1) for *Scheduled Generators* and *Non-Scheduled Generators*:
 - (i) the *dispatch price* for a *dispatch interval* is set by the *administered price cap* during an *administered price period*; or
 - (ii) the *dispatch price* for a *dispatch interval* is set as a result of the application of clause 3.14.2(e)(2);
- (2) for *Market Participants* in respect of *scheduled load*:
 - (i) the *dispatch price* for a *dispatch interval* is set by the *administered floor price* during an *administered price period*; or
 - (ii) the *dispatch price* for a *dispatch interval* is set as a result of the application of clause 3.14.2(e)(4); and
- (3) for *Scheduled Network Service Providers*:

- (i) the *dispatch price* for a *dispatch interval* for a *region* towards which the *Scheduled Network Service Provider* is transporting power is set by the *administered price cap* during an *administered price period*; or
 - (ii) the *dispatch price* for a *dispatch interval* for a *region* towards which the *Scheduled Network Service Provider* is transporting power is set as a result of the application of clause 3.14.2(e)(2).
- (4) for *Ancillary Service Providers*, in respect of an *ancillary generating unit* or an *ancillary service load*, the *ancillary service price* for a *dispatch interval* is set by the *administered price cap* during an *administered price period*.

relevant region means a *region* in which the *dispatch price* or *ancillary service price* (as relevant) is set by the price limit event.

total costs means the direct costs and opportunity costs determined in accordance with the compensation guidelines provided that, in the case of a claimant that is a *Market Network Service Provider*, the total costs must be the costs incurred due to transporting power towards the relevant region and must not include costs incurred, or revenues earned, due to transporting power away from the relevant region.

- (b) If a price limit event occurs then the following are eligible to claim *Registered Participants* compensation for the eligibility period:
- (1) a *Scheduled Generator* or *Non-Scheduled Generator* in the relevant region;
 - (2) a *Market Participant* in respect of a *scheduled load* that has been *dispatched* in the relevant region in that eligibility period;
 - (3) a *Scheduled Network Service Provider* that transported power towards the relevant region; and
 - (4) an *Ancillary Service Provider* that provided *market ancillary services* in the relevant region in the eligibility period,

provided that the relevant claimant has incurred total costs during the eligibility period that exceed the total revenue it received from the *spot market* during that period.

Compensation - objective and basis

- (c) The objective of the payment of compensation under this clause 3.14.6 is to maintain the incentive for:
- (1) *Scheduled Generators*, *Non-Scheduled Generators* and *Scheduled Network Service Providers* to supply energy;
 - (2) *Ancillary Service Providers* to supply *ancillary services*; and

(3) *Market Participants* with *scheduled load* to consume *energy* ,
during price limit events.

- (d) The amount of compensation payable in respect of a claim under this clause 3.14.6 must be based on direct costs and opportunity costs.

Compensation guidelines

- (e) The *AEMC* must, in accordance with the *transmission consultation procedures*, develop and *publish* guidelines (**compensation guidelines**) that are consistent with paragraphs (c) and (d) and that:
- (1) define the types of opportunity costs in relation to which a person can make a claim under this clause 3.14.6;
 - (2) outline the methodology to be used to calculate the amount of any compensation payable in respect of a claim under this clause, including the methodology for calculating direct costs and opportunity costs; and
 - (3) set out the information *AEMO* and a claimant must provide to enable the *AEMC* to make a determination as to compensation under this clause 3.14.6.
- (f) The *AEMC* must ensure that there are compensation guidelines in place at all times.

Note:

The first compensation guidelines were made on 30 June 2009 and have been amended from time to time since that date. The current version of the compensation guidelines are available on the *AEMC*'s website www.aemc.gov.au.

- (g) The *AEMC* may from time to time, in accordance with the *transmission consultation procedures*, amend or replace the compensation guidelines.

Process for making a claim

- (h) A person who is eligible under paragraph (b) may make a claim for compensation by providing the *AEMC* and *AEMO* with written notice of its claim in the form required by the compensation guidelines.
- (i) A claim under paragraph (h) must be made within 5 *business days* of notification by *AEMO* that an *administered price period* has ended.

Initial steps on receipt of claim

- (j) Following its receipt of a notice under paragraph (h), the *AEMC* must promptly:
- (1) publish a notice on its website stating that it has received a claim under paragraph (h). The notice must:

- (i) provide information on the general nature of the claim;
 - (ii) state whether or not the claim is a direct cost only claim; and
 - (iii) state that the *AEMC* will publish a notice when it commences formal assessment of the claim; and
- (2) seek such information from the claimant that the *AEMC* reasonably considers is required to enable assessment of the claim including, in the case of a claim other than a direct cost only claim, the methodology used by the claimant to determine its opportunity costs.

Formal commencement of claim

- (k) As soon as practicable after the *AEMC* is reasonably satisfied that it has sufficient information from the claimant to assess its claim, the *AEMC* must publish a notice on its website that it has formally commenced its assessment of the claim specifying whether or not the claim is a direct cost only claim.

Determination of direct cost only claims

- (l) Not later than 45 *business days* after publication of the notice under paragraph (k) in respect of a direct cost only claim, the *AEMC* must *publish* its final decision as to:
 - (1) whether compensation should be paid by *AEMO* in relation to the claim; and
 - (2) if so, the amount of compensation that should be paid.
- (m) Before making its final decision under paragraph (l) the *AEMC* must consult with the claimant.
- (n) In making its final decision under paragraph (l), the *AEMC* must apply the compensation guidelines unless it is satisfied that there are compelling reasons not to do so.

Determination of claims other than direct cost only claims

- (o) In relation to a claim other than a direct cost only claim, the *AEMC* must, as soon as practicable but not later than 35 *business days* after publication of the notice under paragraph (k) *publish*:
 - (1) the claimant's proposed methodology for determining the claimant's opportunity costs;
 - (2) the methodology the *AEMC* proposes to use in determining the claimant's opportunity costs (**draft opportunity cost methodology**); and

- (3) an invitation for written submissions to be made to the *AEMC* on the draft opportunity cost methodology by a date not less than 20 *business days* after the invitation is made (**submission closing date**).
- (p) Any person may make a written submission to the *AEMC* on the draft opportunity cost methodology by the submission closing date.
- (q) Not later than 35 *business days* after the submission closing date the *AEMC* must *publish* its final decision on:
 - (1) the methodology it will use in determining the claimant's opportunity costs; and
 - (2) whether compensation should be paid by *AEMO* in relation to the claim; and
 - (3) if so, the amount of compensation that should be paid.
- (r) Before making its decision on the matters referred to in paragraph (q), the *AEMC* must consult with the claimant.
- (s) In making its final decision as to the matters referred to in paragraph (q), the *AEMC* must:
 - (1) take into account the submissions made in response to the invitation to in subparagraph (o)(3); and
 - (2) apply the compensation guidelines unless it is satisfied that there are compelling reasons not to do so.

Extensions of time

- (t) Despite anything to the contrary in this clause 3.14.6, the *AEMC* may extend a period of time specified in this clause if it considers the extension reasonably necessary to enable it to properly assess the claim because of the complexity or difficulty of assessing the claim or because of a material change in circumstances.
- (u) The *AEMC* must publish any extension of time made under paragraph (t).

Costs of claim

- (v) The *AEMC* may recover from a claimant for compensation under this clause any costs that are incurred by the *AEMC* in carrying out their functions under this clause in respect of that claim. For this purpose the *AEMC* may require the claimant to pay all or a proportion of those costs to the *AEMC* prior to the claim being considered or determined.

3.15 Settlements

3.15.1 Settlements management by AEMO

- (a) *AEMO* must facilitate the billing and *settlement* of payments due in respect of *transactions* under this Chapter 3, including:
 - (1) *spot market transactions*;
 - (2) *reallocation transactions*;
 - (3) *negative settlements residue* under clause 3.6.5; and
 - (4) under clause 3.15.6A.
- (b) *AEMO* must determine the *Participant fees* and the *Market Participants* must pay them to *AEMO* in accordance with the provisions of rule 2.11.

3.15.2 Electronic funds transfer

- (a) *AEMO* must ensure that an electronic funds transfer (**EFT**) facility is provided and made available for all *Market Participants* for the purposes of *settlements* and the collection and payment of all *market fees*.
- (b) Unless otherwise authorised by *AEMO*, all *Market Participants* must use the EFT facility provided by *AEMO* under clause 3.15.2(a) for the payment and receipt of amounts due in respect of *transactions* and the payment of *market fees*.
- (c) In establishing the EFT facility in accordance with clause 3.15.2(a) *AEMO* must use its reasonable endeavours to ensure that the use of that facility does not impose unnecessary restrictions on the normal banking arrangements of *Market Participants*.

3.15.3 Connection point and virtual transmission node responsibility

- (a) For each *market connection point* there is one person that is *financially responsible* for that *connection point*. The person that is *financially responsible* for such a *connection point* is:
 - (1) the *Market Participant* which has classified the *connection point* as a *market load*;
 - (2) the *Market Participant* which has classified the *generating unit* connected at that *connection point* as a *market generating unit*; or
 - (3) the *Market Participant* which has classified the *network service* connected at that *connection point* as a *market network service*.
- (b) For each *virtual transmission node* there is one person that is *financially responsible* for that *virtual transmission node*. The person that is *financially responsible* for such a *virtual transmission node* is the *Market Participant*

which is the *Local Retailer* for all of the *market connection points* assigned to that *virtual transmission node*.

3.15.4 Adjusted energy amounts connection points

Where a *connection point* is not a *transmission network connection point*, the *adjusted gross energy* amount for that *connection point* for a *trading interval* is calculated by the following formula:

$$AGE = ME \times DLF$$

where:

AGE is the *adjusted gross energy* amount to be determined;

ME is the amount of electrical *energy*, expressed in MWh, flowing at the *connection point* in the *trading interval*, as recorded in the *metering data* in respect of that *connection point* and that *trading interval* (expressed as a positive value where the flow is towards the *transmission network connection point* to which the *connection point* is assigned and negative value where the flow is in the other direction); and

DLF is the *distribution loss factor* applicable at that *connection point*.

3.15.5 Adjusted energy - transmission network connection points

Where a *connection point* is a *transmission network connection point*, the *adjusted gross energy* amount for that *connection point* for a *trading interval* is calculated by the following formula:

$$AGE = ME - AAGE$$

where:

AGE is the *adjusted gross energy* amount to be determined;

ME is the amount of electrical *energy*, expressed in MWh, flowing at the *connection point* in the *trading interval*, as recorded in the *metering data* in respect of that *connection point* and that *trading interval* (expressed as a positive value where the flow is towards the *transmission network*, and negative value where the flow is in the other direction); and

AAGE is the aggregate of the *adjusted gross energy* amounts for that *trading interval* for each *connection point* assigned to that *transmission network connection point*, for which a *Market Participant* (other than a suspended *Market Participant*) is *financially responsible* (and in that aggregation positive and negative *adjusted gross energy* amounts are netted out to give a positive or negative aggregate amount).

3.15.5A Adjusted energy - virtual transmission nodes

For each *virtual transmission node*, the *adjusted gross energy* amount for that *virtual transmission node* for a *trading interval* is calculated by the following formula:

$$AGE = - AAGE$$

where:

AGE is the *adjusted gross energy* amount to be determined; and

AAGE is the aggregate of the *adjusted gross energy* amounts for that *trading interval* for each *connection point* assigned to that *virtual transmission node* for which a *Market Participant* (other than a suspended *Market Participant*) is *financially responsible* (and in that aggregation positive and negative *adjusted gross energy* amounts are netted out to give a positive or negative aggregate amount).

3.15.6 Spot market transactions

- (a) In each *trading interval*, in relation to each *connection point* and to each *virtual transmission node* for which a *Market Participant* is *financially responsible*, a *spot market transaction* occurs, which results in a *trading amount* for that *Market Participant* determined in accordance with the formula:

$$TA = AGE \times TLF \times RRP$$

where

TA is the *trading amount* to be determined (which will be a positive or negative dollar amount for each *trading interval*);

AGE is the *adjusted gross energy* for that *connection point* or *virtual transmission node* for that *trading interval*, expressed in MWh;

TLF for a *transmission network connection point* or *virtual transmission node*, is the relevant *intra-regional loss factor* at that *connection point* or *virtual transmission node* respectively, and for any other *connection point*, is the relevant *intra-regional loss factor* at the *transmission network connection point* or *virtual transmission node* to which it is assigned in accordance with clause 3.6.2(b)(2); and

RRP is the *regional reference price* for the *regional reference node* to which the *connection point* or *virtual transmission node* is assigned, expressed in dollars per MWh.

Note

Where two *intra-regional loss factors* are determined for a *transmission network connection point* under clause 3.6.2(b)(2), AEMO will determine the relevant *intra-regional*

loss factor for use under this clause in accordance with the procedure determined under clause 3.6.2(d1).

- (b) *AEMO* is entitled to the *trading amount* resulting from a *AEMO intervention event* and, for the purposes of determining *settlement amounts*, any such *trading amount* is not a *trading amount* for the relevant *Market Participant*.
- (c) A *Directed Participant* is entitled to the *trading amount* resulting from any service, other than the service the subject of the *AEMO intervention event*, rendered as a consequence of that event.

3.15.6A Ancillary service transactions

- (a) In each *trading interval*, in relation to each *enabled ancillary service generating unit* or *enabled ancillary service load*, an ancillary services transaction occurs, which results in a *trading amount* for the relevant *Market Participant* determined in accordance with the following formula:

$TA = \text{the aggregate of } \frac{EA \times ASP}{(12)}$ for each *dispatch interval* in a *trading interval*

where:

TA (in \$) = the *trading amount* to be determined (which is a positive number);

EA (in MW) = the amount of the relevant *market ancillary service* which the *ancillary service generating unit* or *ancillary service load* has been *enabled* to provide in the *dispatch interval*; and

ASP (in \$ per MW per hour) = the *ancillary service price* for the *market ancillary service* for the *dispatch interval* for the *region* in which the *ancillary service generating unit* or *ancillary service load* has been *enabled*.

- (b) In relation to each *NMAS provider* who provides *non-market ancillary services* under an *ancillary services agreement*, an *ancillary services transaction* occurs, which results in an amount payable by *AEMO* to the *NMAS provider* determined in accordance with that agreement.
- (b1) Where an amount payable by *AEMO* under paragraph (b) is not determined on a *trading interval basis*, that amount is recovered in accordance with the relevant paragraphs (c8), (c9), (d) and (e), except that a reference to *trading interval* in the calculation of RBF, AGE, AAGE, TGE, ATGE, TSGE, ATSGE, TCE, ATCE is to be read as "the relevant period", and any other

reference to *trading interval* in those paragraphs is to be read as the "relevant *billing period*".

(c) **[Deleted]**

(c1) In this clause:

regional benefit ancillary services procedures means the procedures to determine the relative benefit that each *region* is estimated to receive from the provision of *NMAS*.

regional benefit factors means the factors to allocate, between *regions*, the costs associated with the provision of *NMAS* under each *ancillary services agreement* in accordance with the regional benefit ancillary services procedures.

(c2) Subject to paragraph (b1), *AEMO* must recover its liabilities under *ancillary services agreements* for the provision of:

- (1) *NSCAS* from *Market Customers* in each *region* in accordance with paragraphs (c8) and (c9); and
- (2) *system restart ancillary services*, from:
 - (i) *Market Generators* and *Market Small Generation Aggregators* in each *region* in accordance with paragraph (d); and
 - (ii) *Market Customers* in each *region* in accordance with paragraph (e).

(c3) In the statements to be provided under clauses 3.15.14 and 3.15.15 to a *Market Customer*, *AEMO* must separately identify the portion of the total amount payable by *AEMO* in respect of the relevant *billing period* under *ancillary services agreements* for the provision of *NSCAS* that:

- (1) benefits specific *regions* in which there is a *connection point* for which the *Market Customer* is *financially responsible* (being the *regional* amounts given by the first summated term in the paragraph (c8) formula); and
- (2) does not benefit specific *regions* (being the amount *TNSCASp* in the paragraph (c9) formula).

(c4) *AEMO* must develop and *publish* the regional benefit ancillary services procedures in accordance with the *Rules consultation procedures*. Without limiting the matters to be included in the regional benefit ancillary services procedures, they must require *AEMO* to take into account:

- (1) for an *NSCAS*, the estimated increase for each *region* of the gross economic benefit from increased *power transfer capability*; and

- (2) for a *system restart ancillary service*, that can be used to restart *generating units* in two or more *regions*, the relative benefit provided by that service to each *region*.
- (c5) Subject to paragraph (c6), *AEMO* may amend the regional benefit ancillary services procedures from time to time in accordance with the *Rules consultation procedures*.
- (c6) *AEMO* may make minor and administrative amendments to the regional benefit ancillary services procedures without complying with the *Rules consultation procedures*.
- (c7) From time to time, *AEMO* must determine the regional benefit factors.
- (c8) In each *trading interval*, in relation to each *Market Customer* for each *region*, an *ancillary services* transaction occurs, which results in a *trading amount* for the *Market Customer* determined in accordance with the following formula:

$$TA_{p,s} = \left(\sum_{\text{for all 's'}} (TNSCAS_{s,p} \times RBF_{s,p,r}) \right) \times \frac{AGE_{p,r}}{AGE_{p,r} - 1}$$

Where

Subscript 'P' is the relevant period;

Subscript 'R' is the relevant

Subscript 'S' is the relevant *NSCAS*;

$TA_{p,r}$ (in \$) = *trading amount* payable by the *Market Customer* in respect of the relevant *region* and *trading interval*;

$TNSCAS_{s,p}$ the total amount payable by *AEMO* for the provision of the relevant *NSCAS* under an *ancillary services agreement* in respect of the relevant *trading interval*;

$RBF_{s,p,r}$ (number) = the latest regional benefit factor assigned to the provision of the relevant *NSCAS* under an *ancillary services agreement* in respect of the relevant *region* and *trading interval*, as determined by *AEMO* under paragraph (c7);

$AGE_{p,r}$ (in MWh) = the sum of the *adjusted gross energy* figures in respect of the *Market Customer's* relevant *connection points* located in the *region* for the relevant *trading interval*; and

$AAGE_{p,r}$ (in MWh) = the aggregate $AGE_{p,r}$ figures for all *Market Customers* in respect of the relevant *region* and *trading interval*.

- (c9) In each *trading interval*, in relation to each *Market Customer*, an *ancillary services* transaction occurs, which results in a *trading amount* for the *Market Customer* determined in accordance with the following formula:

$$TA_p = TNSCAS_p \times \frac{AGE_p}{AAGE_p} \times -1$$

Where

Subscript 'P' is the relevant period;

TA_p (in \$) = the *trading amount* payable by the *Market Customer* in respect of the relevant *trading interval*;

$TNSCAS_p$ (in \$) = the sum of all amounts payable by AEMO for the provision of *NSCAS* under *ancillary services agreements* in respect of the relevant *trading interval* minus the sum of the *trading amounts* calculated for all *Market Customers* in respect of all of the relevant *trading interval* under paragraph (c8);

AGE_p (in MWh) = the sum of the *adjusted gross energy* figures in respect of all the *Market Customer's* relevant *connection points* for the relevant *trading interval*; and

$AAGE_p$ (in MWh) = the aggregate AGE_p figures for all *Market Customers* in respect of the relevant *trading interval*.

- (c10) AEMO must *publish* the regional benefit factors determined under paragraph (c7);
- (d) In each *trading interval*, in relation to each *Market Generator* and each *Market Small Generation Aggregator* for each *region*, an *ancillary services* transaction occurs, which results in a *trading amount* for the *Market Generator* or the *Market Small Generation Aggregator* determined in accordance with the following formula:

$$TA = \sum \left(\left(\frac{SRP_i \times RBF_{Ri}}{2} \right) \times \left(\frac{TGE_R + TSGE_R}{ATGE_R + ATSGE_R} \right) \right) \times -1$$

Where

TA (in \$) = the *trading amount* to be determined in respect of the relevant region and *trading interval* (which is a negative number);

SRP_i (in \$) = the amount payable by AEMO in respect of the *trading interval* under an individual *ancillary services agreement* in respect of the provision of a specific *system restart ancillary service*;

RBF_{Ri} (number) = the latest regional benefit factor assigned to the provision of the relevant *system restart ancillary service* under an individual *ancillary services agreement* in respect of the relevant *region* and *trading interval*, as determined by AEMO under paragraph (c7);

TGE_R (in MWh) = the *generator energy* for the *Market Generator* for the *trading interval* in that *region*;

TSGE_R (in MWh) = the *small generator energy* for the *Market Small Generator Aggregator* for the *trading interval* in that *region*;

ATGE_R (in MWh) = the aggregate of the *generator energy* figures for all *Market Generators* for the *trading interval* in that *region*; and

ATSGE_R (in MWh) = the aggregate of the *small generator energy* figures for all *Market Small Generator Aggregators* for the *trading interval* in that *region*.

- (e) In each *trading interval*, in relation to each *Market Customer*, for each *region*, an ancillary services transaction occurs, which results in a *trading amount* for the *Market Customer* determined in accordance with the following formula:

$$TA = \sum \left(\left(\frac{SRP_i \times RBF_{Ri}}{2} \right) \times \frac{TCE_R}{ATCE_R} \right) \times -1$$

Where

TA (in \$) = the *trading amount* to be determined in respect of the relevant *region* and *trading interval* (which is a negative number);

SRP_i (in \$) = has the meaning given in clause 3.15.6A(d);

RBF_{Ri} (number) = the latest regional benefit factor assigned to the provision of the relevant *system restart ancillary service* under an individual *ancillary services agreement* in respect of the relevant *region* and *trading interval*, as determined by AEMO under paragraph (c7);

TCE_R (in MWh) = the *customer energy* for the *Market Customer* for the *trading interval* in that *region*; and

ATCE_R (in MWh) = the aggregate of the *customer energy* figures for all *Market Customers* for the *trading interval* in that *region*.

- (f) The total amount calculated by AEMO under clause 3.15.6A(a) for each of the *fast raise service*, *slow raise service* or *delayed raise service* in respect of each *dispatch interval* which falls within the *trading interval* must be allocated to each *region* in accordance with the following procedure and the information provided under clause 3.9.2A(b). AEMO must:
- (1) allocate for each *region* and for each *dispatch interval* within the relevant *trading interval* the proportion of the total amount calculated by AEMO under clause 3.15.6A(a) for each of the *fast raise service*, *slow raise service* or *delayed raise service* between *global market ancillary services requirements* and *local market ancillary service requirement* pro-rata to the respective marginal prices for each such service;
 - (2) calculate for each relevant *dispatch interval* the sum of the costs of acquiring the *global market ancillary service requirements* for all *regions* and the sum of the costs of acquiring each *local market ancillary service requirement* for all *regions*, as determined pursuant to clause 3.15.6A(f)(1); and
 - (3) allocate for each relevant *dispatch interval* the sum of the costs of the *global market ancillary service requirement* and each *local market ancillary service requirement* calculated in clause 3.15.6A(f)(2) to each *region* as relevant to that requirement pro-rata to the aggregate of the *generator energy* for the *Market Generators* and *small generator energy* for the *Market Small Generation Aggregators* in each *region* during the *trading interval*.

For the purpose of this clause 3.15.6A(f) **RTCRSP** is the sum of:

- (i) the *global market ancillary service requirement* cost for that *region*, for all *dispatch intervals* in the relevant *trading interval*, as determined pursuant to clause 3.15.6A(f)(3); and
- (ii) all *local market ancillary service requirement* costs for that *region*, for all *dispatch intervals* in the relevant *trading interval*, as determined pursuant to clause 3.15.6A(f)(3).

In each *trading interval*, in relation to each *Market Generator* and each *Market Small Generation Aggregator* in a given *region*, an ancillary services transaction occurs, which results in a *trading amount* for that *Market Generator* and that *Market Small Generation Aggregator* determined in accordance with the following formula:

$$TA = RTCRSP \times \frac{TGE + TSGE}{RATGE + RATS GE} \times -1$$

where:

TA (in \$)	=	the <i>trading amount</i> to be determined (which is a negative number);
RTCRSP (in \$)	=	the total of all amounts calculated by <i>AEMO</i> as appropriate to recover from the given <i>region</i> as calculated in this clause 3.15.6A(f) for the <i>fast raise service</i> , <i>slow raise service</i> or <i>delayed raise service</i> in respect of <i>dispatch intervals</i> which fall in the <i>trading interval</i> ;
TGE (in MWh)	=	the <i>generator energy</i> for the <i>Market Generator</i> in that <i>region</i> for the <i>trading interval</i> ;
TSGE (in MWh)	=	the <i>small generator energy</i> for the <i>Market Small Generator Aggregator</i> in that <i>region</i> for the <i>trading interval</i> ;
RATGE (in MWh)	=	the aggregate of the <i>generator energy</i> figures for all <i>Market Generators</i> in that <i>region</i> for the <i>trading interval</i> ; and
RATSGE (in MWh)	=	the aggregate of the <i>small generator energy</i> figures for all <i>Market Small Generator Aggregators</i> in that <i>region</i> for the <i>trading interval</i> .

- (g) The total amount calculated by *AEMO* under clause 3.15.6A(a) for each of the *fast lower service*, *slow lower service* or *delayed lower service* in respect of each *dispatch interval* which falls within the *trading interval* must be allocated to each *region* in accordance with the following procedure and the information provided under clause 3.9.2A(b). *AEMO* must:
- (1) allocate for each *region* and for each *dispatch interval* within the relevant *trading interval* the proportion of the total amount calculated by *AEMO* under clause 3.15.6A(a) for each of the *fast lower service*, *slow lower service* or *delayed lower service* between *global market ancillary service requirements* and *local market ancillary service requirement* pro rata to the respective marginal prices of each such service;
 - (2) calculate for each relevant *dispatch interval* the sum of the costs of acquiring the *global market ancillary service requirements* for all *regions* and the sum of the costs of acquiring each *local market ancillary service requirement* for all *regions*, as determined pursuant to clause 3.15.6A(g)(1); and
 - (3) allocate for each relevant *dispatch interval* the sum of the costs of the *global market ancillary service requirement* and each *local market*

ancillary service requirement calculated in clause 3.15.6A(g)(2) to each *region* as relevant to that requirement pro-rata to the aggregate of the *customer energy* figures for all *Market Customers* in each *region* during the *trading interval*.

For the purpose of this clause 3.15.6A(g) **RTCLSP** is the sum of:

- (i) the *global market ancillary service requirement* cost for that *region*, for all *dispatch intervals* in the relevant *trading interval*, as determined pursuant to clause 3.15.6A(g)(3); and
- (ii) all *local market ancillary service requirement* costs for that *region*, for all *dispatch intervals* in the relevant *trading interval*, as determined pursuant to clause 3.15.6A(g)(3).

In each *trading interval*, in relation to each *Market Customer* in a given *region*, an ancillary services transaction occurs, which results in a *trading amount* for that *Market Customer* determined in accordance with the following formula:

$$TA = RTCLSP \times \frac{TCE}{RATCE} \times -1$$

where:

TA (in \$)	=	the <i>trading amount</i> to be determined (which is a negative number);
RTCLSP (in \$)	=	the total of all amounts calculated by AEMO as appropriate to recover from the given <i>region</i> as calculated in this clause 3.15.6A(g) for the <i>fast lower service</i> , <i>slow lower service</i> or <i>delayed lower service</i> in respect of <i>dispatch intervals</i> which fall in the <i>trading interval</i> ;
TCE (in MWh)	=	the <i>customer energy</i> for the <i>Market Customer</i> in that <i>region</i> for the <i>trading interval</i> ; and
RATCE (in MWh)	=	the aggregate of the <i>customer energy</i> figures for all <i>Market Customers</i> in that <i>region</i> for the <i>trading interval</i> .

- (h) The total amount calculated by AEMO under paragraph (a) for the *regulating raise service* or the *regulating lower service* in respect of each *dispatch interval* which falls within the *trading interval* must be allocated by AEMO to each *region* in accordance with the following procedure and the information provided under clause 3.9.2A(b):

- (1) allocate on a pro-rata basis for each *region* and for each *dispatch interval* within the relevant *trading interval* the proportion of the total amount calculated by AEMO under paragraph (a) for the *regulating raise service* and *regulating lower service* between *global market ancillary service requirements* and *local market ancillary service requirements* to the respective marginal prices for each such service; and
 - (2) calculate for each relevant *dispatch interval* the sum of the costs of acquiring the *global market ancillary service requirements* for all *regions* and the sum of the costs of acquiring *local market ancillary service requirements* for all *regions*, as determined under subparagraph (1).
- (i) In each *trading interval* in relation to:
- (1) each *Market Generator*, *Market Small Generation Aggregator* or *Market Customer* which has *metering* to allow their individual contribution to the aggregate deviation in *frequency* of the *power system* to be assessed, an ancillary services transaction occurs, which results in a *trading amount* for that *Market Generator*, *Market Small Generation Aggregator* or *Market Customer* determined in accordance with the following formula:

$$TA = PTA \times -1$$

and

$$PTA = \text{the aggregate of} \left(TSFCAS \times \frac{MPF}{AMPF} \right)$$

for each *dispatch interval* in the *trading interval* for *global market ancillary service requirements* and *local market ancillary service requirements* where:

TA (in \$)	=	the <i>trading amount</i> to be determined (which is a negative number);
TSFCAS (in \$)	=	the total of all amounts calculated by AEMO under paragraph (h)(2) for the <i>regulating raise service</i> or the <i>regulating lower service</i> in respect of a <i>dispatch interval</i> ;
MPF (a number)	=	the contribution factor last set by AEMO for the <i>Market Generator</i> , <i>Market Small Generation Aggregator</i> or <i>Market Customer</i> , as the case may be, under paragraph (j) for the <i>region</i> or <i>regions</i> relevant to the <i>regulating raise service</i>

or *regulating lower service*; and

AMPF (a number) = the aggregate of the MPF figures for all *Market Participants* for the *dispatch interval* for the *region* or *regions* relevant to the *regulating raise service* or *regulating lower service*.

or

- (2) in relation to each *Market Customer* for whom the *trading amount* is not calculated in accordance with the formula in subparagraph (1), an ancillary services transaction occurs, which results in a trading amount for that *Market Customer* determined in accordance with the following formula:

$$TA = PTA \times -1$$

and

$$PTA = \text{the aggregate of} \left(TSFCAS \times \frac{MPF}{AMPF} \times \frac{TCE}{ATCE} \right)$$

for each *dispatch interval* in the *trading interval* for *global market ancillary service requirements* and *local market ancillary service requirements* where:

TA (in \$) = the *trading amount* to be determined (which is a negative number);

TSFCAS (in \$) = has the meaning given in subparagraph (1);

MPF (a number) = the aggregate of the contribution factor set by AEMO under paragraph (j) for *Market Customers*, for whom the *trading amount* is not calculated in accordance with the formula in subparagraph (1) for the *region* or *regions* relevant to the *regulating raise service* or the *regulating lower service*;

AMPF (a number) = the aggregate of the MPF figures for all *Market Participants* for the *dispatch interval* for the *region* or *regions* relevant to the *regulating raise service* or *regulating lower service*;

TCE (in MWh) = the *customer energy* for the *Market Customer* for the *trading interval* in the

region or regions relevant to the regulating raise service or regulating lower service; and

ATCE (in MWh) = the aggregate of the *customer energy* figures for all *Market Customers*, for whom the *trading amount* is not calculated in accordance with the formula in subparagraph (1), for the *trading interval* for the *region or regions* relevant to that *regulating raise service or regulating lower service*.

(j) *AEMO* must determine for the purpose of paragraph (i):

- (1) a contribution factor for each *Market Participant*; and
- (2) notwithstanding the estimate provided in paragraph (nb), if a *region* has or *regions* have operated asynchronously during the relevant *trading interval*, the contribution factors relevant to the allocation of *regulating raise service or regulating lower service* to that *region or regions*,

in accordance with the procedure prepared under paragraph (k).

(k) *AEMO* must prepare a procedure for determining contribution factors for use in paragraph (j) and, where *AEMO* considers it appropriate, for use in paragraph (nb), taking into account the following principles:

- (1) the contribution factor for a *Market Participant* should reflect the extent to which the *Market Participant* contributed to the need for *regulation services*;
- (2) the contribution factor for all *Market Customers* that do not have *metering* to allow their individual contribution to the aggregate need for *regulation services* to be assessed must be equal;
- (3) for the purpose of paragraph (j)(2), the contribution factor determined for a group of *regions* for all *Market Customers* that do not have *metering* to allow the individual contribution of that *Market Customer* to the aggregate need for *regulation services* to be assessed, must be divided between *regions* in proportion to the total *customer energy* for the *regions*;
- (4) the individual *Market Participant*'s contribution to the aggregate need for *regulation services* will be determined over a period of time to be determined by *AEMO*;
- (5) a *Registered Participant* which has classified a *scheduled generating unit, scheduled load, ancillary service generating unit or ancillary service load* (called a **Scheduled Participant**) will not be assessed as

- contributing to the deviation in the *frequency* of the *power system* if within a *dispatch interval*:
- (i) the Scheduled Participant achieves its *dispatch* target at a uniform rate;
 - (ii) the Scheduled Participant is *enabled* to provide a *market ancillary service* and responds to a control signal from AEMO to AEMO's satisfaction; or
 - (iii) the Scheduled Participant is not *enabled* to provide a *market ancillary service*, but responds to a need for *regulation services* in a way which tends to reduce the aggregate deviation;
- (6) where contributions are aggregated for *regions* that are operating asynchronously during the calculation period under paragraph (i), the contribution factors should be normalised so that the total contributions from any non-synchronised *region* or *regions* is in the same proportion as the total *customer energy* for that *region* or *regions*; and
- (7) a *Semi-Scheduled Generator* will not be assessed as contributing to the deviation in the *frequency* of the *power system* if within a *dispatch interval*, the *semi-scheduled generating unit*:
- (i) achieves its *dispatch level* at a uniform rate;
 - (ii) is *enabled* to provide a *market ancillary service* and responds to a control signal from AEMO to AEMO's satisfaction; or
 - (iii) is not *enabled* to provide a *market ancillary service*, but responds to a need for *regulation services*.
- (l) AEMO may amend the procedure referred to in clause 3.15.6A(j) from time to time.
- (m) AEMO must comply with the *Rules consultation procedures* when making or amending the procedure referred to in clause 3.15.6A(k).
- (n) AEMO must *publish*, in accordance with the *timetable*, the historical data used in determining a factor for each *Market Participant* for the purposes of clauses 3.15.6A(h) and (i) in accordance with the procedure contemplated by clause 3.15.6A(k).
- (na) Notwithstanding any other provisions of the *Rules*, AEMO must *publish* the factors determined in accordance with clause 3.15.6A(j)(1) at least 10 *business days* prior to the application of those factors in accordance with clauses 3.15.6A(h) and 3.15.6A(i).
- (nb) When a *region* is or *regions* are operating asynchronously, AEMO must *publish* (where appropriate in accordance with the procedure developed under paragraph (k)), an estimate of the contribution factors referred to in

paragraph (j)(2) to be applied for information purposes only by *Market Participants* for the duration of the separation.

(o) In this clause 3.15.6A:

- (1) '**generator energy**' in respect of a *Market Generator* for a *trading interval* means the sum of the *adjusted gross energy* figures calculated for that *trading interval* in respect of that *Market Generator's* applicable *connection points*, provided that, if the sum of those figures is negative, then the *Market Generator's generator energy* for that *trading interval* is zero;
- (2) a *connection point* is an applicable *connection point* of a *Market Generator* if:
 - (A) the *Market Generator* is *financially responsible* for the *connection point*; and
 - (B) the *connection point* connects a *market generating unit* to the *national grid*;
- (3) '**customer energy**' in respect of a *Market Customer* for a *trading interval* means the sum of the *adjusted gross energy* figures calculated for that *trading interval* in respect of that *Market Customer's* relevant *connection points*;
- (4) a *connection point* is a relevant *connection point* of a *Market Customer* if:
 - (A) the *Market Customer* is *financially responsible* for the *connection point*; and
 - (B) the *load* at that *connection point* has been classified (or is deemed to be classified) as a *market load*;
- (5) '**small generator energy**' in respect of a *Market Small Generation Aggregator* for a *trading interval* means the sum of the *adjusted gross energy* figures calculated for that *trading interval* in respect of that *Market Small Generation Aggregator's* applicable *connection points*, provided that, if the sum of those figures is negative, then the *Market Small Generation Aggregator's small generator energy* for that *trading interval* is zero; and
- (6) a *connection point* is an applicable *connection point* of a *Market Small Generator Aggregator* if:
 - (A) the *Market Small Generator Aggregator* is *financially responsible* for the *connection point*; and
 - (B) the *connection point* connects a *small generating unit* classified as a *market generating unit* to the *national grid*.

- (p) When *AEMO* dispatches a quantity of *regulating raise service* or *regulating lower service* in addition to the quantity it determines in accordance with the *dispatch algorithm*, *AEMO* must:
- (1) for the purposes of paragraphs (f) and (g), include the additional quantity in the cost of *delayed services*; and
 - (2) for the purposes of paragraphs (h) and (i), exclude the additional quantity in the cost of *regulation services*,
- taking into account the requirements in clauses 3.8.1(a) and (b) to maximise the value of *spot market* trading.

3.15.7 Payment to Directed Participants

- (a) Subject to clause 3.15.7(b), *AEMO* must pay compensation to *Directed Participants* calculated in accordance with clauses 3.15.7, 3.15.7A and 3.15.7B, as the case may be, for any service which the *Directed Participant* was required to provide in order to comply with the *direction*.
- (b) For the purpose of clause 3.15.8 and 3.15.10C the amount of compensation due to a *Directed Participant* pursuant to clause 3.15.7(a) must include interest on the sum of that amount less any payment made in accordance with clause 3.15.10C(a), computed at the average *bank bill rate* for the period beginning on the day on which payment was required to be made under clauses 3.15.16 and 3.15.17 in respect of the *final statement* for the *billing period* in which the *direction* was issued and ending on the day on which payment is required to be made pursuant to clause 3.15.10C.
- (c) Subject to clause 3.15.7(d) and clause 3.15.7B, the compensation payable to each *Directed Participant* for the provision of *energy* or *market ancillary services* pursuant to a *direction* is to be determined in accordance with the formula set out below

$$DCP = AMP \times DQ$$

where:

DCP	=	the amount of compensation the <i>Directed Participant</i> is entitled to receive;
AMP	=	the price below which are 90% of the <i>spot prices</i> or <i>ancillary service prices</i> (as the case may be) for the relevant service provided by <i>Scheduled Generators</i> , <i>Semi-Scheduled Generators</i> , <i>Scheduled Network Service Providers</i> or <i>Market Customers</i> in the <i>region</i> to which the <i>direction</i> relates, for the 12 months immediately preceding the <i>trading day</i> in which the <i>direction</i> was issued; and
DQ	=	is either:

- (A) the difference between the total *adjusted gross energy* delivered or consumed by the *Directed Participant* and the total *adjusted gross energy* that would have been delivered or consumed by the *Directed Participant* had the *direction* not been issued; or
 - (B) the amount of the relevant *market ancillary service* which the *Directed Participant* has been *enabled* to provide in response to the *direction*.
- (d) If at the time *AEMO* issues a *direction*:
 - (1) the *Directed Participant* had submitted a *dispatch bid*, *dispatch offer* or *rebid* acknowledged by *AEMO* in accordance with clause 3.8.8 for *dispatch* of the service that is to be *dispatched* in accordance with the *direction*; and
 - (2) the *direction* was issued because *AEMO* was prevented from *dispatching* the *Directed Participant's plant* in accordance with that *dispatch bid*, *dispatch offer* or *rebid* due to a failure of the *central dispatch* process,

the *Directed Participant* is entitled to receive compensation for the provision of that service at a price equal to the price in that *dispatch bid*, *dispatch offer* or *rebid* acknowledged by *AEMO* in accordance with clause 3.8.8, as the case may be.
- (e) *AEMO* must, in accordance with the *intervention settlement timetable*, advise each *Directed Participant* in writing of the amount the *Directed Participant* is entitled to receive pursuant to clause 3.15.7(c) or clause 3.15.7(d).

3.15.7A Payment to Directed Participants for services other than energy and market ancillary services

- (a) Subject to clause 3.15.7(d) and clause 3.15.7B, *AEMO* must compensate each *Directed Participant* for the provision of services pursuant to a *direction* other than *energy* and *market ancillary services*, at the fair payment price of the services determined in accordance with this clause 3.15.7A.
- (a1) In this clause 3.15.7A, a *direction* is a *direction* for services other than *energy* and *market ancillary services* to the extent that the need for the *direction* could not have been avoided by the *central dispatch* process had there been a *dispatch bid*, *dispatch offer* or *rebid* made consistent with the requirements of clauses 3.8.6, 3.8.6A, 3.8.7, 3.8.7A or 3.8.8(d) (whichever is applicable) for *dispatch* of *plant* relevant to that *direction* for one or more of the following services:

- (1) *energy*; and
 - (2) any one service of the *market ancillary services*.
- (a2) For the avoidance of doubt, any component of a *direction* that satisfies this clause 3.15.7A(a1) is to be considered for compensation under this clause 3.15.7A, and clause 3.15.7B, as the case may be. Any other component of the *direction* that does not satisfy clause 3.15.7A(a1) is to be considered for compensation under clause 3.15.7, and clause 3.15.7B, as the case may be.
- (b) Subject to clause 3.15.7A(e) and clause 3.15.7A(e1), *AEMO* must, in accordance with the *intervention settlement timetable* and any guidelines developed by *AEMO* in accordance with the *Rules consultation procedures*, determine if in *AEMO*'s reasonable opinion, an independent expert could reasonably be expected to determine a fair payment price for the services provided pursuant to the *direction* within a reasonable time period.
- (b1) If *AEMO* determines pursuant to clause 3.15.7A(b) that an independent expert could reasonably be expected to determine a fair payment price for the services provided pursuant to the *direction* within a reasonable time period it must as soon as reasonably practicable after making such determination *publish* its determination and, subject to clause 3.15.7A(e1), appoint an independent expert, in accordance with the *intervention settlement timetable*, to determine the fair payment price for the services provided pursuant to the *direction*.
- (c) *AEMO* must include as part of the terms of appointment of an independent expert the following requirements:
- (1) that the independent expert must, in determining the fair payment price of the relevant service for the purposes of clause 3.15.7A, take into account:
 - (i) other relevant pricing methodologies in Australia and overseas, including but not limited to:
 - (A) other electricity markets;
 - (B) other markets in which the relevant service may be utilised; and
 - (C) relevant contractual arrangements which specify a price for the relevant service;
 - (ii) the following principles:
 - (A) the disinclination of *Scheduled Generators*, *Semi-Scheduled Generators*, *Market Generators*, *Scheduled Network Service Providers* or *Market Customers* to provide the service the subject of the *direction* must be disregarded;

- (B) the urgency of the need for the service the subject of the *direction* must be disregarded;
 - (C) the *Directed Participant* is to be treated as willing to supply at the market price that would otherwise prevail for the directed services the subject of the *direction* in similar demand and supply conditions; and
 - (D) the fair payment price is the market price for the directed services the subject of the *direction* that would otherwise prevail in similar demand and supply conditions;
- (2) that the independent expert must determine and *publish* a draft report, in accordance with the *intervention settlement timetable*, setting out:
 - (i) a description of the services provided in response to the *direction*;
 - (ii) the independent expert's draft determination of each fair payment price for the services provided;
 - (iii) the methodology and assumptions used by the independent expert in making the draft determination of the fair payment price; and
 - (iv) a request for submissions from interested parties on the matters set out in the draft report;
- (3) that the independent expert must, in accordance with the *intervention settlement timetable*, determine the fair payment price for the services provided, taking into account the submissions received, and must prepare and *publish* a final report setting out:
 - (i) the description of the services provided in response to the *direction*;
 - (ii) the independent expert's determination of the fair payment price for the services provided;
 - (iii) the methodology and assumptions used by the independent expert in making the determination of each fair payment price; and
 - (iv) summaries of the submissions made by interested parties;
- (4) that the independent expert must deliver to *AEMO* a final tax invoice for the services rendered at the time he or she *publishes* the final report; and
- (5) that a report *published* by the independent expert pursuant to clause 3.15.7A(c) must not disclose *confidential information* or the identity of a *Directed Participant*.

- (d) In accordance with the *intervention settlement timetable*, AEMO must calculate the compensation payable to the *Directed Participant* using the fair payment price *published* by the independent expert under clause 3.15.7A(c)(3).
- (e) The fair payment price determined in accordance with clause 3.15.7A(c)(3) is to be the fair payment price for that service to be applied in all future occurrences where there is a *direction* for that service at any time within a period of 12 calendar months from the date on which the determination of that price was published.
- (e1) AEMO must not appoint an independent expert under clause 3.15.7A(b1) in respect of a *direction* for a service in respect of which:
 - (1) there is a determination of an independent expert in place in accordance with clause 3.15.7A(e) in relation to that service; or
 - (2) AEMO has appointed an independent expert to determine the fair payment price for that service under clause 3.15.7A and the independent expert has not yet made a determination of the fair payment price.

In these circumstances, AEMO must apply to the subsequent *direction* the fair payment price for that service determined, or to be determined, by the independent expert.

- (f) Within 1 *business day* of calculating the compensation payable pursuant to clause 3.15.7A(a) by application of clause 3.15.7A(e) or pursuant to clause 3.15.7A(d), AEMO must advise the relevant *Directed Participant* in writing of the amount of compensation.
- (g) The determination of a fair payment price pursuant to clause 3.15.7A(c)(1) and the calculation of compensation payable to *Directed Participants* pursuant to clause 3.15.7A(d) is final and binding.

3.15.7B Claim for additional compensation by Directed Participants

- (a) Subject to clauses 3.15.7B(a1) and 3.15.7B(a4), a *Directed Participant* entitled to compensation pursuant to clause 3.15.7 or clause 3.15.7A may, in accordance with the *intervention settlement timetable*, make a written submission to AEMO claiming an amount equal to the sum of:
 - (1) the aggregate of the loss of revenue and additional net direct costs incurred by the *Directed Participant* in respect of a *scheduled generating unit*, *semi-scheduled generating unit* or *scheduled network services*, as the case may be, as a result of the provision of the service under *direction*; less
 - (2) the amount notified to that *Directed Participant* pursuant to clause 3.15.7(c) or clause 3.15.7A(f); less

- (3) the aggregate amount the *Directed Participant* is entitled to receive in accordance with clause 3.15.6(c) for the provision of a service rendered as a result of the *direction*.
- (a1) Subject to clause 3.15.7B(a4), if *AEMO* determines pursuant to clause 3.15.7A(b) that an independent expert could not reasonably be expected to determine within a reasonable period of time the relevant fair payment price, a *Directed Participant* may, in accordance with the *intervention settlement timetable*, make a written submission to *AEMO* claiming compensation from *AEMO* for the provision of services under the *direction* equal to:
 - (1) loss of revenue and additional net direct costs which the *Directed Participant* incurred as a result of the provision of services under the *direction*; and
 - (2) a reasonable rate of return on the capital employed in the provision of the service determined by reference as far as reasonably practicable to rates of return for the provision of similar services by similar providers of such services.
- (a2) Subject to clause 3.15.7B(a4), if a *Directed Participant* entitled to compensation pursuant to clause 3.15.7(d) considers that the amount notified pursuant to clauses 3.15.7(e) is less than the amount it is entitled to receive pursuant to that clause, the *Directed Participant* may, in accordance with the *intervention settlement timetable*, make a written submission to *AEMO* requesting compensation from *AEMO* for that difference.
- (a3) For the purposes of the calculation of additional net direct costs pursuant to paragraphs (a)(1) and (a1)(1), the additional net direct costs incurred by the *Directed Participant* in respect of that *scheduled generating unit*, *semi-scheduled generating unit* or *scheduled network services* (as the case may be) includes without limitation:
 - (1) fuel costs in connection with the relevant *generating unit* or *scheduled network services*;
 - (2) incremental maintenance costs in connection with the relevant *generating unit* or *scheduled network services*;
 - (3) incremental manning costs in connection with the relevant *generating unit* or *scheduled network services*;
 - (4) acceleration costs of maintenance work in connection with the relevant *generating unit* or *scheduled network services*, where such acceleration costs are incurred to enable the *generating unit* or *scheduled network services* to comply with the *direction*;
 - (5) delay costs for maintenance work in connection with the relevant *generating unit* or *scheduled network services*, where such delay costs are incurred to enable the *generating unit* or *scheduled network services* to comply with the *direction*;

- (6) other costs incurred in connection with the relevant *generating unit* or *scheduled network services*, where such costs are incurred to enable the *generating unit* or *scheduled network services* to comply with the *direction*; and
 - (7) any compensation which the *Directed Participant* receives or could have obtained by taking reasonable steps in connection with the relevant *generating unit* or *scheduled network services* being available.
- (a4) In respect of a single *intervention price trading interval*, a *Directed Participant* may only make a claim pursuant to clauses 3.15.7B(a), 3.15.7B(a1) or 3.15.7B(a2) if the amount of the claim in respect of that *intervention price trading interval* is greater than \$5,000.
- (b) The submissions pursuant to clauses 3.15.7B(a), 3.15.7B(a1) and 3.15.7B(a2) must:
 - (1) itemise each component of a claim;
 - (2) contain sufficient data and information to substantiate each component of a claim for loss of revenue and additional direct costs incurred and the reasonable rate of return, as the case may be; and
 - (3) be signed by an authorised officer of the applicant certifying that the written submission is true and correct.
- (c) *AEMO* must, in accordance with the *intervention settlement timetable*:
 - (1) refer a claim by a *Directed Participant* under clause 3.15.7B(a), 3.15.7B(a1) or 3.15.7B(a2) to an independent expert to determine such claim in accordance with clause 3.12.3 if the claim is equal to or greater than \$20,000 and the *additional intervention claim* that includes that claim is equal to or greater than \$100,000; and
 - (2) determine in its sole discretion if all other claims by a *Directed Participant* in respect of that *direction* pursuant to clauses 3.15.7B(a), 3.15.7B(a1) and 3.15.7B(a2) are reasonable and if so pay the amount claimed in accordance with clause 3.15.10C.
- (d) If *AEMO* considers that a claim by a *Directed Participant* under clause 3.15.7B(a) or 3.15.7B(a1) or 3.15.7B(a2) is unreasonable, it must, in accordance with the *intervention settlement timetable*:
 - (1) advise the *Directed Participant* of its determination in writing, setting out its reasons; and
 - (2) refer the matter to an independent expert to determine the claim for compensation in accordance with clause 3.12.3.

3.15.8 Funding of Compensation for directions

- (a) *AEMO* must, in accordance with the *intervention settlement timetable*, calculate the *compensation recovery amount* being:
- (1) the sum of:
 - (i) the total of the compensation payable to *AEMO* by *Affected Participants* and *Market Customers* under clause 3.12.2 in respect of a *direction* for the provision of *energy*; plus
 - (ii) the total of the amounts retained by *AEMO* pursuant to clause 3.15.6(b) in respect of a *direction* for the provision of *energy*;
 - (2) less the sum of:
 - (i) the total of the compensation payable by *AEMO* to *Affected Participants* and *Market Customers* pursuant to clause 3.12.2 in respect of a *direction* for the provision of *energy*; plus
 - (ii) the total of the compensation payable by *AEMO* to *Directed Participants* pursuant to clause 3.15.7(a) in respect of a *direction* for the provision of *energy*; plus
 - (iii) the total amount payable by *AEMO* to the independent expert pursuant to clause 3.12.3(c).
- (b) *AEMO* must, in accordance with the *intervention settlement timetable*, calculate a figure for each *Market Customer* in each *region* applying the following formula:

$$MCP = \frac{E}{\sum E} \times \frac{RB}{\sum RB} \times CRA$$

where

MCP is the amount payable or receivable by a *Market Customer* pursuant to this clause 3.15.8(b);

E is the sum of the *Market Customer's adjusted gross energy* amounts at each *connection point* for which the *Market Customer* is *financially responsible* in a *region*, determined in accordance with clauses 3.15.4 and 3.15.5 in respect of the relevant *intervention price trading intervals* excluding any *loads* in respect of which the *Market Customer* submitted a *dispatch bid* for the relevant *intervention price trading interval* in that *region*; and

RB is the regional benefit determined by *AEMO* pursuant to clause 3.15.8(b1) at the time of issuing the *direction*.

CRA is the *compensation recovery amount*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b1) *AEMO* must, as soon as practicable following the issuance of a *direction*, determine the relative benefit each *region* received from the issuance of a *direction* in accordance with the *regional benefit directions procedures*.
- (b2) *AEMO* must develop in accordance with the *Rules consultation procedures* a procedure to determine the relative benefit each *region* receives from the issuance of a *direction* (the *regional benefit directions procedures*). Such procedures must take into account, where applicable to the reason the *direction* was given, the *load* at risk of not being supplied if the *direction* were not issued or the extent of improvement in available *energy* reserve in the *region*, capability to control *voltage* in the *region*, and capability to control *power system frequency* within the *region* and any other relevant matters.
- (c) If the figure calculated for a *Market Customer* under clause 3.15.8(b) is negative, the absolute value of that amount is the amount payable by the *Market Customer* to *AEMO* pursuant to clause 3.15.8(b).
- (d) Subject to clause 3.15.22, if the figure calculated for a *Market Customer* under clause 3.15.8(b) is positive, such amount is the amount receivable by the *Market Customer* from *AEMO* pursuant to clause 3.15.8(b), subject to the provisions of clause 3.15.22.
- (e) *AEMO* must, in accordance with the *intervention settlement timetable*, calculate for each *ancillary service* the subject of a *direction*, the "**ancillary service compensation recovery amount**" being:
 - (1) the sum of:
 - (i) the total of the compensation payable to *AEMO* by *Affected Participants* and *Market Customers* under clause 3.12.2 in respect of a *direction* for the provision of that *ancillary service*; plus
 - (ii) the total of the amounts retained by *AEMO* pursuant to clause 3.15.6(b) in respect of a *direction* for the provision of that *ancillary service*;
 - (2) less the sum of:
 - (i) the total of the compensation payable by *AEMO* to *Affected Participants* and *Market Customers* pursuant to clause 3.12.2 in respect of a *direction* for the provision of that *ancillary service*; plus

- (ii) the total of the compensation payable by *AEMO* to *Directed Participants* pursuant to clause 3.15.7(a) in respect of a *direction* for the provision of that *ancillary service*; plus
 - (iii) the total amount payable by *AEMO* to the independent expert pursuant to clause 3.12.3(c), if the *direction* the subject of the independent expert's determination was with respect to that *ancillary service*.
- (f) The *trading amount* must be calculated as follows:
- (1) subject to clause 3.15.8(f)(2) and (3) *AEMO* must use the appropriate formula set out in clause 3.15.6A(c8), (c9), (d), (e), (f), (g), (h) or (i) depending on which *ancillary service* was the subject of the *direction*;
 - (2) TNSCASP, TSRP, RTCRSP, RTCLSP or TSFCAS (as applicable) in the relevant formula is equal to the *ancillary service compensation recovery amount* for the relevant *ancillary service* in respect of the *direction*; and
 - (3) if TCE, TGE, TSGE, AGE, ATCE, ATGE, ATSGE or AAGE is used in the relevant formula, then the words 'the *trading interval*' in the definitions of those terms in the formula are to be read as 'all of the *trading intervals* during which the *direction* applied'.
- (g) Any compensation payable by *AEMO* under clause 3.12.2 and 3.15.7 not recovered under clauses 3.15.8(b) and 3.15.8(e) must be recovered from *Market Customers*, *Market Generators* and *Market Small Generation Aggregators*. *AEMO* must, in accordance with the *intervention settlement timetable*, calculate a figure for each *Market Customer*, *Market Generator* and *Market Small Generation Aggregator* in each *region* applying the following formula:

$$MCP = \frac{TGE + TSGE - TCE}{RATGE + RATSGE - RATCE} \times \frac{RB}{\Sigma RB} \times CRA \times -1$$

where:

MCP	=	the amount payable or receivable by a <i>Market Customer</i> , <i>Market Generator</i> or <i>Market Small Generation Aggregator</i> under this clause 3.15.8(g);
TGE	=	the generator energy for the <i>Market Generator</i> in that <i>region</i> of the relevant <i>trading interval</i> for the period of the <i>direction</i> ;
TSGE	=	the small generator energy for the <i>Market</i>

		<i>Small Generation Aggregator</i> in that <i>region</i> of the relevant <i>trading interval</i> for the period of the <i>direction</i> ;
TCE	=	the customer energy for the <i>Market Customer</i> in that <i>region</i> of the relevant <i>trading interval</i> for the period of the <i>direction</i> ;
RATGE	=	the aggregate of the generator energy for all <i>Market Generators</i> in that <i>region</i> of the relevant <i>trading interval</i> for the period of the <i>direction</i> ;
RATSGE	=	the aggregate of the small generator energy for all <i>Market Small Generation Aggregation</i> in that <i>region</i> of the relevant <i>trading interval</i> for the period of the <i>direction</i> ;
RATCE	=	the aggregate of the customer energy for all <i>Market Customers</i> in that <i>region</i> of the relevant <i>trading interval</i> for the period of the <i>direction</i> ;
RB	=	the regional benefit determined by <i>AEMO</i> under clause 3.15.8(b1) at the time of issuing the <i>direction</i> ; and
CRA	=	the <i>compensation recovery amount</i> .

(h) In clause 3.15.8(g):

- (1) **customer energy** in respect of a *Market Customer* for a *trading interval* means the sum of the *adjusted gross energy* figures calculated for that *trading interval* in respect of that *Market Customer's* relevant connection points;
- (2) a *connection point* is a "relevant connection point" of a *Market Customer* if:
 - (i) the *Market Customer* is *financially responsible* for the *connection point*; and
 - (ii) the *load* at that *connection point* has been classified (or is deemed to be classified) as a *market load*;
- (3) **generator energy** in respect of a *Market Generator* for a *trading interval* means the sum of the *adjusted gross energy* figures calculated for that *trading interval* in respect of that *Market Generator's* applicable connection points, provided that, if the sum of those figures

is negative, then the *Market Generator's* generator energy for that *trading interval* is zero;

- (4) a *connection point* is an "applicable connection point" of a *Market Generator* if:
 - (i) the *Market Generator* is financially responsible for the *connection point*; and
 - (ii) the *connection point* connects a *market generating unit* to the *national grid*;
- (5) **small generator energy** in respect of a *Market Small Generation Aggregator* for a *trading interval* means the sum of the *adjusted gross energy* figures calculated for that *trading interval* in respect of that *Market Small Generation Aggregator's* applicable connection points, provided that, if the sum of those figures is negative, then the *Market Small Generation Aggregator's* small generator energy for that *trading interval* is zero; and
- (6) a *connection point* is an "applicable connection point" of a *Market Small Generation Aggregator* if:
 - (i) the *Market Small Generation Aggregator* is financially responsible for the *connection point*; and
 - (ii) the *connection point* connects a *small generating unit* classified as a *market generating unit* to the *national grid*.

3.15.9 Reserve settlements

- (a) *AEMO's* costs incurred in contracting for the provision of *reserves* are to be met by fees imposed on *Market Customers* in accordance with this clause 3.15.9.
 - (b) Included in the statements to be provided under clauses 3.15.14 and 3.15.15, *AEMO* must give each *Market Participant* a statement setting out:
 - (1) the aggregate of the amounts payable by *AEMO* under *reserve contracts* in respect of the relevant *billing period*;
 - (2) any amounts determined as payable by *AEMO*:
 - (i) by the independent expert under clause 3.12.3; or
 - (ii) as a result of a *scheduled generating unit*, *scheduled network service* or *scheduled load* under a *scheduled reserve contract* being *dispatched* or *generating units* or *loads* under an *unscheduled reserve contract* being *activated*,
- in respect of the relevant *billing period*; and

- (3) the aggregate of the amounts receivable by *AEMO* under the *Rules* in respect of *reserve contracts* during the relevant *billing period*.
- (c) Separate statements must be provided under paragraph (b):
 - (1) for *reserve contracts* entered into by *AEMO* specifically in respect of the *Market Participant's region* in accordance with paragraph (d); and
 - (2) for *reserve contracts* other than those entered into for and allocated to a specific *region* or *regions*.
- (d) Where either:
 - (1) without the intervention in the *market* of *AEMO* a *region* would otherwise, in *AEMO's* reasonable opinion, fail to meet the minimum *power system security standards* or the *reliability standard*; or
 - (2) a *region* requires a level of *power system reliability* or *reserves* which, in *AEMO's* reasonable opinion, exceeds the level required to meet the *reliability standard*,

then *AEMO* must recover its net liabilities, or distribute its net profits, under the terms of *reserve contracts* entered into to meet these requirements, from or to the *Market Customers* in that *region* in accordance with paragraph (e).

- (e) In respect of *reserve contracts* entered into by *AEMO*, *AEMO* must calculate in relation to each *Market Customer* for each *region* in respect of each *billing period* a sum determined by applying the following formula:

$$MCP = \frac{E \times RRC}{\sum E}$$

where:

MCP is the amount payable by a *Market Customer* for a *region* in respect of a *billing period*;

E is the sum of all that *Market Customer's adjusted gross energy amounts* in a *region* (the "**relevant region**") in each *trading interval* which occurs between 0800 hours and 2000 hours (EST) on a *business day* in the *billing period* excluding any *loads* in that *region* in respect of which the *Market Customer* submitted a *dispatch bid* for any such *trading interval*;

RRC is the total amount payable by *AEMO* under *reserve contracts* which relate to the relevant *region* in the *billing period* as agreed under clause 3.20.3(f); and

$\sum E$ is the sum of all amounts determined as "E" in accordance with this paragraph (e) in respect of that *region*.

- (f) A *Market Customer* is liable to pay *AEMO* an amount equal to the sum calculated under paragraph (e) in respect of that *Market Customer*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (g) Operational and administrative costs incurred by *AEMO* in arranging for the provision of *reserves*, other than its liabilities under the terms of the *reserve contracts* into which it has entered, are to be recovered by *AEMO* from all *Market Participants* as part of the fees imposed in accordance with rule 2.11.
- (h) For the purposes of clause 3.15.19, a re-determination by a panel established under clause 3.12.2 is to be taken to be an agreement between *AEMO* and each of the *Market Participants* and *Scheduled Generators*.

3.15.10 Administered price cap or administered floor price compensation payments

- (a1) In this clause 3.15.10:

cost recovery region means the *region* in which:

- (1) the *dispatch price* was set by the *administered price cap* or *administered floor price*; or
- (2) the *ancillary service price* was set by the *administered price cap*.

in the eligibility period.

eligibility period has the same meaning as in clause 3.14.6(a).

- (a) If the *AEMC* awards compensation to a *Scheduled Generator*, *Non-Scheduled Generator*, *Market Participant*, *Scheduled Network Service Provider* or *Ancillary Service Provider* under clause 3.14.6, then *AEMO* must determine an amount which shall be payable by each *Market Customer* who purchased electricity from the *spot market* in the cost recovery region.
- (b) *AEMO* shall determine the amounts payable for each eligibility period by each of the *Market Customers* referred to in clause 3.15.10(a) as follows:

$$\frac{APC \times E_i}{\sum E_i}$$

where

APC is the total amount of any compensation payments awarded by the *AEMC* to *Scheduled Generators*, *Non-Scheduled Generators*, *Market Participants*, *Scheduled Network Service Providers* or *Ancillary Service Providers* in respect of that eligibility period in accordance with clause 3.14.6.

E_i is the sum of all of the *Market Customer's adjusted gross energy* amounts, determined in accordance with clauses 3.15.4 and 3.15.5, in respect of each *trading interval* in the eligibility period and each *connection point* for which the *Market Customer* is *financially responsible* in the cost recovery region i .

$\sum E_i$ is the sum of all amounts determined as " E_i " in accordance with this clause 3.15.10 for all *Market Customers* in the cost recovery region.

- (c) Within 25 *business days* of being notified by the AEMC that compensation is to be paid to a *Scheduled Generator, Non-Scheduled Generator, Market Participant, Scheduled Network Service Providers* or *Ancillary Service Provider* in accordance with clause 3.14.6, AEMO shall include in statements provided under clauses 3.15.14 and 3.15.15 separate details of any amounts payable by or to *Market Participants* as determined in accordance with this clause 3.15.10.

3.15.10A Goods and services tax

- (a) In this clause 3.15.10A:

"GST" has the meaning given in the GST Act; and

"GST Act" means the *A New Tax System (Goods and Services Tax) Act 1999* (C'th);

"supply" and "taxable supply" each have the meaning given in the GST Act,

and the definition of "supply" in Chapter 10 does not apply.

- (b) Despite anything else in the *Rules, Participant fees, spot prices, adjustments for directions, reserve settlements, administered price cap compensation payments, system security direction settlements, re-allocation transactions, compensation, interest, settlements residues, ancillary services settlements, settlements residue distributions (including auction proceeds), auction expense fees* and other prices, fees, charges and amounts payable to or by AEMO, the AER or the AEMC in respect of supplies under the *Rules* exclude GST. Accordingly:
- (1) where a *Registered Participant* makes a taxable supply to AEMO, the AER or the AEMC under or in connection with the *Rules* on or after 1 July 2000, AEMO, the AER or the AEMC (as applicable) must also pay the *Registered Participant* making the supply an additional amount equal to the consideration payable for the supply multiplied by the applicable GST rate;
 - (2) where AEMO, the AER or the AEMC makes a taxable supply to a *Registered Participant* under the *Rules* on or after 1 July 2000, the *Registered Participant* must also pay AEMO, the AER or the AEMC

(as applicable) an additional amount equal to the consideration payable for the supply multiplied by the applicable GST rate; and

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (3) *AEMO* must include in *preliminary statements, final statements, routine revised statements, special revised statements*, statements and invoices issued under the *Rules* the additional amounts contemplated by clauses 3.15.10A(b)(1) and (2).
- (c) However, if the additional amount paid or payable to a *Registered participant, AEMO*, the *AER* or the *AEMC* under clause 3.15.10A(b) in respect of a taxable supply differs from the actual amount of GST payable by or to the *Registered Participant, AEMO*, the *AER* or the *AEMC* (as applicable) under the GST Act in respect of the relevant supply, then adjustments must be made in accordance with clause 3.15.19 so as to ensure the additional amount paid under this clause in respect of the supply is equal to the actual amount of GST payable under the GST Act in respect of the supply.

3.15.10B Restriction contract amounts

- (a) If clause 3.12A.7(g) applies then *AEMO* must include in the next statement provided under clauses 3.15.14 and 3.15.15 immediately after the end of the relevant *mandatory restriction period* separate details of amounts payable:
 - (1) by *Market Customers* in the relevant *region* in which the *mandatory restrictions* apply an amount equal to:

$$EMCP = RSA \times \frac{(AGE)}{(AAGE)}$$

Where:

EMCP is the payment to be made by *Market Customers* to *AEMO*.

RSA is the *restriction shortfall amount*.

AGE is the *adjusted gross energy* of a *Market Customer* in that *region* for the *mandatory restriction period* expressed in MWh.

AAGE is the aggregate of the *adjusted gross energy* of all *Market Customers* in that *region* for the *mandatory restriction period* expressed in MWh;

- (2) by *Scheduled Generators* and *Scheduled Network Service Providers* to *AEMO* in accordance with clause 3.12A.7(a); and

- (3) the amounts payable by *AEMO* to the *Scheduled Generators* or *Scheduled Network Service Providers* pursuant to *accepted restriction offers*.
- (b) Immediately upon the later of the publication of the independent expert's final report in accordance with clause 3.12A.7(i)(8) and the determination of a *dispute resolution panel* pursuant to clause 3.12A.7(m), if any, *AEMO* must include in the next statements provided under clauses 3.15.14 and 3.15.15 separate details of any amounts payable:
 - (i) by a *Market Customer* equal to the amount as determined in accordance with clause 3.12A.7(g)(i) less the amount determined in accordance with clause 3.15.10B(a)(1), if such number is positive together with interest on such amount calculated by applying the *bank bill rate* on the date of this statement for the period from the date of the statement referred to in clause 3.15.10B(a) to the date of this statement under clause 3.15.10B(b); and
 - (ii) to a *Market Customer* equal to the amount determined in accordance with clause 3.15.10B(a)(1) less the amount determined in accordance with clause 3.12A.7(g)(i), if such number is positive together with interest on such amount calculated by applying the *bank bill rate* on the date of this statement for the period from the date of the statement referred to in clause 3.15.10B(a) to the date of this statement under clause 3.15.10B(b).
- (c) If clauses 3.12A.7(f) or 3.12A.7(h) apply then *AEMO* must include in the next statement provided under clauses 3.15.14 and 3.15.15 immediately after the end of the relevant *mandatory restriction period* separate details of any amounts payable:
 - (i) by or to *Market Customers* as determined in accordance with clauses 3.12A.7(e) or 3.12A.7(h) respectively;
 - (ii) by *Scheduled Generators* and *Scheduled Network Service Providers* to *AEMO* in accordance with clause 3.12A.7(a); and
 - (iii) the amounts payable by *AEMO* to the *Scheduled Generators* or *Scheduled Network Service Providers* pursuant to all *accepted restriction offers*.

3.15.10C Intervention Settlements

- (a) *AEMO* must include in the final statement provided under clause 3.15.14 and 3.15.15 for a *billing period* in which a *direction* was issued:
 - (1) for each *Affected Participant* and *Market Customer* in relation to that *direction* the amount calculated pursuant to clause 3.12.2(c);

- (2) for each *Directed Participant* in relation to that *direction* the amount calculated pursuant to clause 3.15.7(c) or clause 3.15.7A(a) by application of clause 3.15.7A(e), as the case may be;
 - (3) for each *Market Customer* in relation to that *direction* the amount calculated pursuant to clause 3.15.8(b) by application of clause 3.15.8 mutatis mutandis provided that the amount for the purposes of:
 - (i) clause 3.15.8(a)(1)(i) shall be the total amount payable to AEMO by *Affected Participants* and *Market Customers* calculated pursuant to clause 3.12.2(c);
 - (ii) clause 3.15.8(a)(1)(ii) shall be the amount calculated in accordance with that clause;
 - (iii) clause 3.15.8(a)(2)(i) shall be the total amount payable by AEMO to *Affected Participants* and *Market Customers* calculated pursuant to clause 3.12.2(c);
 - (iv) clause 3.15.8(a)(2)(ii) shall be the sum of the total amount payable by AEMO to *Directed Participants* calculated pursuant to clause 3.15.7(c) and 3.15.7A(a) by application of 3.15.7A(e); and
 - (v) clause 3.15.8(a)(2)(iii) shall be zero; and
 - (4) for each *Market Customer*, *Market Generator* and *Market Small Generation Aggregator* in relation to that *direction* an amount calculated pursuant to clause 3.15.8(e) by application of clause 3.15.8 mutatis mutandis provided that for the purposes of clause 3.15.8(f)(2) TNSCASP, TSRP, RTCRSP, RTCLSP and TSFCAS shall be the total compensation payable by AEMO for the relevant *ancillary service* calculated in accordance with clause 3.15.7(c) or clause 3.15.7A(a) by application of clause 3.15.7A(e), as the case may be.
- (b) AEMO must include in the first statement it provides under clauses 3.15.14 and 3.15.15 following a final determination of all total amounts payable or receivable by it pursuant to clause 3.12.2, clause 3.15.7(a) and clause 3.15.8, separate details of the amount:
- (1) receivable by each *Directed Participant* pursuant to clause 3.15.7(a) less the amount, if any, paid to that *Directed Participant* pursuant to clause 3.15.10C(a)(2);
 - (2) receivable by each *Affected Participant* or *Market Customer* pursuant to clause 3.12.2:
 - (i) less the amount paid to that *Affected Participant* or *Market Customer*, in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(1), if any; or

- (ii) plus the amount paid by that *Affected Participant* or *Market Customer* in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(1), if any;
- (3) payable by each *Affected Participant* or *Market Customer* pursuant to 3.12.2:
 - (i) less the amount paid by that *Affected Participant* or *Market Customer*, in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(1), if any; or
 - (ii) plus the amount paid to that *Affected Participant* or *Market Customer* in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(1), if any;
- (4) receivable by each *Market Customer* pursuant to clause 3.15.8(b):
 - (i) less the amount paid to that *Market Customer* in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(3), if any; or
 - (ii) plus the amount paid by that *Market Customer* in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(3), if any;
- (5) payable by each *Market Customer* pursuant to clause 3.15.8(b):
 - (i) less the amount paid by that *Market Customer* in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(3), if any; or
 - (ii) plus the amount paid to that *Market Customer* in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(3), if any;
- (6) if an *Affected Participant* or *Market Customer* is not entitled to any compensation pursuant to clause 3.12.2, the amount:
 - (i) receivable by that person equal to the amount paid by that person pursuant to clause 3.15.10C(a); or
 - (ii) payable by that person equal to the amount paid to that person pursuant to clause 3.15.10C(a);
- (7) payable by each *Market Customer*, *Market Generator* and *Market Small Generation Aggregator* equal to:
 - (i) the amount payable by the *Market Customer*, *Market Generator* or *Market Small Generation Aggregator*, as the case may be, pursuant to clause 3.15.8(e) by application of clause 3.15.8 mutatis mutandis provided that for the purposes of clause 3.15.8(f)(2) TNSCASP, TSRP, RTCRSP, RTCLSP and

- TSFCAS shall be the total compensation payable by *AEMO* for the relevant *ancillary service* calculated in accordance with clause 3.15.7A(a); less
- (ii) the amount paid by the *Market Customer*, *Market Generator* or *Market Small Generation Aggregator*, as the case may be, in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(4); and
- (8) payable by *Registered Participants* pursuant to clause 3.15.8(g).
- (c) If on application by the *AER* a court determines, in relation to a *direction*, that a *Directed Participant* has breached clause 4.8.9(c2) then:
- (1) the *Directed Participant* shall not be entitled to, and must repay, any compensation plus interest pursuant to clauses 3.15.7, 3.15.7A and 3.15.7B, in relation to that *direction*; and
 - (2) the *AER* must forward to *AEMO* a written notice of the court's determination.
 - (3) *AEMO* must include in the first relevant statement it provides under clauses 3.15.14 and 3.15.15 following receipt of the notice from the *AER* issued pursuant to clause 3.15.10C(c)(2) separate details of:
 - (i) an amount payable to *AEMO* by the *Directed Participant* equal to the total compensation received by that *Directed Participant* in accordance with clauses 3.15.7, 3.15.7A and 3.15.7B plus interest on that total compensation computed at the average *bank bill rate* for the period from the date of payment of such amount to the *Directed Participant* until the date of that first statement;
 - (ii) an amount payable by *AEMO* to each relevant *Market Customer* calculated by applying clause 3.15.8(b) mutatis mutandis except that:
 - (A) MCP shall equal the amount receivable by the *Market Customer*; and
 - (B) CRA shall equal that part of the amount, including interest, calculated pursuant to clause 3.15.10C(c)(3)(i) attributable to the provision of *energy* by the *Directed Participant*; and
 - (iii) an amount payable by *AEMO* to each relevant *Market Customer*, *Market Generator* and *Market Small Generation Aggregator* calculated by applying clause 3.15.8(f)(2) mutatis mutandis except that:
 - (A) all *trading amounts* determined by this clause 3.15.10C(c)(3)(iii) shall be positive; and

- (B) TNSCASP, TSRP, RTCRSP, RTCLSP, and TSFCAS shall all be an amount equal to that part of the amount, including interest, calculated pursuant to clause 3.15.10C(c)(3)(i) attributable to the provision of the relevant *ancillary service*.

3.15.11 Reallocation transactions

- (a) A *reallocation transaction* is a *transaction* undertaken with the consent of two *Market Participants* and AEMO, under which AEMO credits one *Market Participant* with a positive *trading amount* in respect of a *trading interval*, in consideration of a matching negative *trading amount* debited to the other *Market Participant* in respect of the same *trading interval*.
- (b) *Reallocation transactions* may be of any type permitted in the *reallocation procedures*.
- (c) A *reallocation transaction* is initiated by a *reallocation request* lodged with AEMO by or on behalf of two *Market Participants*.
- (d) A *reallocation request* must:
- (1) contain the information required by the *reallocation procedures*; and
 - (2) be lodged with AEMO in accordance with the *reallocation procedures* and the timetable for *reallocation requests* as published by AEMO from time to time (the **reallocation timetable**).
- (e) Upon receipt of a *reallocation request* AEMO must register the *reallocation request* within the time specified in the *reallocation procedures* and the *reallocation timetable* and may impose conditions on that registration as contemplated by the *reallocation procedures*.
- (f) After a *reallocation request* has been registered in respect of two *Market Participants*, AEMO may deregister the *reallocation request* if:
- (1) the *prudential requirements* are not satisfied by either of those *Market Participants*;
 - (2) either of the *Market Participants* fails to comply with any conditions imposed by AEMO in respect of the *reallocation request* at the time it was registered;
 - (3) both *Market Participants* notify AEMO in accordance with the *reallocation procedures* that they require the *reallocation request* to be terminated; or
 - (4) a *default event* occurs in respect of either of the *Market Participants* and AEMO exercises its powers under paragraph (1).

- (g) Deregistration of a *reallocation request* prevents *reallocation transactions* occurring in respect of all the *trading intervals* that occur after the time of deregistration.
- (h) AEMO must not deregister a *reallocation request* under paragraph (f) otherwise than in accordance with the *reallocation procedures*.
- (i) The *Market Participants* may agree to reverse the effect of a registered *reallocation request* by lodging a new *reallocation request* in accordance with the *reallocation procedures* and the reallocation timetable.
- (j) AEMO must include details of *reallocation transactions* in the *settlement statements* issued to all parties to those *reallocation transactions*.
- (k) Where there is a registration of a *reallocation request* in respect of a *trading interval* and that *trading interval* has occurred, a *reallocation transaction* occurs in accordance with that *reallocation request*.
- (l) If a *default event* occurs in relation to a party to a *reallocation request* when one or more of the *trading intervals* specified in the *reallocation request* has not occurred, AEMO may deregister the *reallocation request* by notice given at any time whilst the *default event* is subsisting.
- (m) The deregistration under paragraph (l) is effective immediately upon AEMO notifying both parties to a *reallocation request* of the deregistration and the deregistration:
 - (1) is effective for all *trading intervals* commencing after the time specified in the notice, and notwithstanding that the *default event* may be subsequently cured; and
 - (2) prevents the completion of the requested *reallocation transactions* in the *trading intervals* that commence at or after the time specified in the deregistration notice.
- (n) In addition to any other right AEMO may exercise following a *default event*, upon deregistration of a *reallocation request* AEMO may redetermine the maximum credit limit and *trading limit* for either or both of the parties to the *reallocation request*, having regard to the deregistration that has occurred.

3.15.11A Reallocation procedures

- (a) AEMO must develop and *publish* procedures in accordance with the *Rules consultation procedures*, to enable *Market Participants* to create and record *reallocation requests* and *reallocation transactions* in accordance with clause 3.15.11 in respect of electricity trading transactions other than those conducted through the *market* and/or establish mutual indemnification arrangements with other operators of markets for electricity-based trading (the *reallocation procedures*).

- (b) *AEMO* may, from time to time and in accordance with the *Rules consultation procedures*, amend or replace the *reallocation procedures*.
- (c) Paragraph (b) does not apply to amendments to the *reallocation procedures* that are of a minor or administrative nature and *AEMO* may make such amendments at any time.
- (d) *NEMMCO* must develop and *publish* the first *reallocation procedures* by 1 January 2008 and there must be such procedures available at all times after that date.
- (e) *AEMO* is not required to meet its obligations under paragraph (a) in any way which increases *AEMO*'s risks in the collection of moneys owed to it in accordance with any provisions of the *Rules*.

3.15.12 Settlement amount

- (a) Subject to clause 3.15.12(b), for each *billing period* *AEMO* must calculate a net *settlement amount* for each *Market Participant* by aggregating the *trading amounts* resulting for each *Market Participant* from each *transaction* in respect of each *trading interval* occurring in that *billing period* together with *Participant fees* determined in accordance with rule 2.11 and any other amounts payable or receivable by the *Market Participants* in that *billing period* under this Chapter 3. The *settlement amount* will be a positive or negative dollar amount for each *Market Participant*.
- (b) *AEMO* may calculate an estimate of the net *settlement amount* for each *Market Participant* (the "*estimated settlement amount*") if, within the time provided for the giving of *preliminary statements* in accordance with clause 3.15.14, *AEMO* is prevented from calculating the net *settlement amount* in accordance with clause 3.15.12(a) by factors which are beyond the control of *AEMO* and which deprive *AEMO* of the relevant data required to calculate the net *settlement amount* (the "**relevant data**"), including:
 - (1) a failure of:
 - (i) metering data processing;
 - (ii) communications; or
 - (iii) the settlements processing system; and
 - (2) any other events or circumstances which prevent the calculation of the actual net *settlement amount* by *AEMO*.
- (c) *AEMO* must develop the principles and the process to be applied in calculating the *estimated settlement amount*, and make any necessary modifications to those principles and that process, in accordance with the *Rules consultation process*.

3.15.13 Payment of settlement amount

Where the *settlement amount* for a *Market Participant* is negative the absolute value of the *settlement amount* is an amount payable by the *Market Participant* to AEMO pursuant to clause 3.15.15. Where the *settlement amount* for a *Market Participant* is positive the *settlement amount* is an amount receivable by the *Market Participant* from AEMO pursuant to clause 3.15.15, subject to the provisions of clause 3.15.22.

3.15.14 Preliminary statements

- (a) Subject to clause 3.15.14(b), within 5 *business days* after the end of each *billing period*, AEMO must give each *Market Participant* a draft of the statement to be given to the *Market Participant* under clause 3.15.15 together with supporting data relating to the *transactions* in that *billing period* and the prices at which electricity was bought and sold by the *Market Participant*.
- (b) If AEMO calculates an *estimated settlement amount* in accordance with clause 3.15.12(b), AEMO must:
 - (1) when giving a *preliminary statement* in accordance with this clause 3.15.14, provide a detailed report to affected *Market Participants* setting out the basis and calculations used for its estimation; and
 - (2) if requested to do so by affected *Market Participants*, consult with those *Market Participants* to ascertain whether or not any adjustments are required to the *estimated settlement amount* prior to the giving of a *final statement*.

3.15.15 Final statements

- (a) No later than 18 *business days* after the end of each *billing period*, AEMO must give to each *Market Participant* a *final statement* stating the amounts payable by the *Market Participant* to AEMO or receivable by the *Market Participant* from AEMO (subject to clause 3.15.22) in respect of the relevant *billing period*.
- (b) Unless AEMO has used an *estimated settlement amount* in accordance with clause 3.15.12, the statements issued under this clause 3.15.15 must include supporting data for all amounts payable or receivable.

3.15.15A Use of estimated settlement amounts by AEMO

- (a) Subject to clause 3.15.15A(b), if AEMO calculates an *estimated settlement amount* in accordance with clause 3.15.12(b), then clauses 3.15.13, 3.15.14 and 3.15.15 will have effect *mutatis mutandis* by applying the *estimated settlement amount* in place of a *settlement amount* for a *Market Participant* for the purposes of those clauses.
- (b) If AEMO receives relevant data:

- (1) after it has given the *preliminary statement* in accordance with clause 3.15.14 but before giving a *final statement*, then it must adjust the *estimated settlement amount* accordingly for the purposes of preparing the *final statement*; or
- (2) within 60 days after it has given a *final statement* to which the relevant data relates, then AEMO must adjust the relevant *estimated settlement amount* accordingly and issue a *revised statement* in accordance with clause 3.15.19(a).

3.15.16 Payment by market participants

On the 20th *business day* after the end of a *billing period*, or 2 *business days* after receiving a statement under clause 3.15.15, whichever is the later, and in accordance with the *timetable* each *Market Participant* must pay to AEMO in cleared funds the net amount stated to be payable by that *Market Participant* in that statement whether or not the *Market Participant* continues to dispute the net amount payable.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

3.15.17 Payment to market participants

Subject to clause 3.15.22 on the *day* on which AEMO is to be paid under clause 3.15.16, AEMO must pay to each *Market Participant* in cleared funds the net amount stated to be payable to that *Market Participant* in the relevant statement given to it under clause 3.15.15.

3.15.18 Disputes

- (a) In the event of a dispute between a *Market Participant* and AEMO concerning either the net amount (including any *estimated settlement amount*) stated in a *preliminary statement* provided under clause 3.15.14 to be payable by or to it or the supporting data, they must each use reasonable endeavours to resolve the dispute within 15 *business days* of the end of the relevant *billing period*.
- (b) Disputes in respect of *final statements* or the supporting data provided with them in accordance with clause 3.15.15 must be raised within 6 months of the relevant *billing period*.
- (c) Disputes raised under this clause 3.15.18:
 - (1) can only be raised by a *Market Participant* or AEMO issuing a written notice of dispute in the form prescribed by AEMO's *DMS* and otherwise in accordance with rule 8.2;
 - (2) must be resolved by agreement or pursuant to rule 8.2; and

- (3) are, for the purpose of this clause, deemed to have been raised on the day *AEMO* receives the written notice of dispute.
- (d) A *Market Participant* that may be materially affected by the outcome of a dispute under clause 3.15.18 may be joined to that dispute by the *Adviser* on request by that *Market Participant* or by *AEMO*.

3.15.19 Revised Statements and Adjustments

- (a) Where a dispute about a *final statement* has been either resolved by agreement between *AEMO* and the relevant *Market Participant* ("the **Disputant**") or determined under rule 8.2 and an adjustment to the *settlement amount* stated in the disputed *final statement* is required, or an adjustment is required under clause 3.15.10A, *AEMO* must:
 - (1) recalculate the *settlement amount* for that *Market Participant* and each other *Market Participant* who received a *final statement* for the relevant *billing period*:
 - (i) in accordance with the applicable procedures set out in the *Rules* and,
 - (ii) taking into account the adjustment;
 - (2) if the adjustment is required as a result of a dispute and the recalculated *settlement amount* for the Disputant is between 95% and 105% of the relevant *settlement amount*:
 - (i) calculate for each *Market Participant* the amount by which the relevant *settlement amount* must be adjusted to be equal to the recalculated *settlement amount* after taking into account any *routine* or *special revised statement*; and
 - (ii) for each *Market Participant* include that amount in the next *routine revised statement* given to those *Market Participants* for the relevant *billing period* practicable and if there is no *routine revised statement*, in accordance with clauses 3.15.19(a)(3)(ii) and (iii).
 - (3) if the adjustment is required under clause 3.15.10A, or the adjustment is required as a result of a dispute and the recalculated *settlement amount* for the Disputant is less than 95% or more than 105% of the relevant *settlement amount*:
 - (i) calculate for each *Market Participant* the amount by which the relevant *settlement amount* must be adjusted to be equal to the recalculated *settlement amount* after taking into account any *routine* or *special revised statement*;
 - (ii) give each *Market Participant* a *special revised statement* for the relevant *billing period* in addition to any *routine revised statement* given under clause 3.15.19(b); and

- (iii) give each *Market Participant* a notice advising of the reason why a *settlement statement* was given by AEMO under clause 3.15.19(a)(3).
- (b) For each *billing period* AEMO must give each *Market Participant* a *routine revised statement* approximately 20 weeks after the relevant *billing period* and approximately 30 weeks after the relevant *billing period*. Each *routine revised statement* must recalculate the *Market Participant's settlement amount* for that *billing period*:
 - (1) taking into account all amended *metering data*, amended *trading amounts*, amended *Participant fees* and any other amounts payable or receivable by *Market Participants* under this Chapter 3; and
 - (2) using the most recent version of AEMO's settlement calculation software applicable to that *billing period*.
- (c) Each *special* and *routine revised statement* issued under this clause must:
 - (1) state the revised *settlement amount* for the relevant *billing period*;
 - (2) be issued in accordance with the revised statement policy;
 - (3) be issued with revised supporting data for the *transactions* for the relevant *billing period* (except in the case of a *special revised statement* dealing with an adjustment required under clause 3.15.10A) and must include supporting data for all amounts payable or receivable.
- (d) If AEMO has issued a *routine revised statement* or *special revised statement* (the *revised statement*) to a *Market Participant* in respect of a *billing period* (the "**original billing period**"), AEMO must include in the next *final statement* to the *Market Participant* issued not less than 8 *business days* after the *revised statement* (the "**next statement**"):
 - (1) the amount necessary to put the *Market Participant* in the position it would have been in at the time payment was made under clause 3.15.16 or 3.15.17 (as applicable) in respect of the *final statement* for the original *billing period*, if the original *revised statement* had been given as the *final statement* for the *billing period*, but taking into account any adjustments previously made under this clause 3.15.19 as a result of any other *routine revised statement* or *special revised statement* in relation to the original *billing period*; and
 - (2) interest on the amount referred to in clause 3.15.19(d)(1) computed at the average *bank bill rate* for the period from the date on which payment was required to be made under clauses 3.15.16 and 3.15.17 in respect of the *final statement* for the original *billing period* to the date on which payment is required to be made under those clauses in respect of the next statement.

- (e) *AEMO* must develop and publish a policy for *routine* and *special revised statements*. *AEMO* may amend the policy at any time. *AEMO* must develop and amend the policy in accordance with the *Rules consultation procedures*. The policy must include:
 - (1) a calendar setting out when *routine revised statements* will be issued by *AEMO*;
 - (2) the process by which the calendar can be amended or varied by *AEMO* and the process by which *Market Participants* are notified of any amendment and variation; and
 - (3) a transitional process by which *AEMO* will issue any outstanding *routine revised statement*.

3.15.20 Payment of adjustments

- (a) Adjustments made and interest calculated and included in a *final statement* under clause 3.15.19 must be paid as part of the *settlement amount* shown on that *final statement* in accordance with either clause 3.15.16 or 3.15.17.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) Clause 3.15.22 does not apply to a *final statement* to the extent that the *final statement* incorporates an adjustment amount and interest pursuant to clause 3.15.19.
- (c) Disputes in respect of adjustment amounts and interest incorporated into a *final statement* pursuant to clause 3.15.19 must be:
 - (1) raised within 20 *business days* of the date of the *final statement* that they are incorporated into; and
 - (2) resolved by agreement or pursuant to the dispute resolution procedures set out in rule 8.2.

3.15.21 Default procedure

- (a) Each of the following is a *default event* in relation to a *Market Participant*:
 - (1) the *Market Participant* does not pay money due for payment to *AEMO* under the *Rules* by the appointed *time* on the due date;
 - (2) *AEMO* does not receive payment in full of any amount claimed by *AEMO* under any *credit support* in respect of a *Market Participant*, within 90 minutes after the due time for payment of that claim;
 - (3) the *Market Participant* fails to provide *credit support* required to be supplied under the *Rules* by the appointed time on the due date;

- (4) it is unlawful for the *Market Participant* to comply with any of its obligations under the *Rules* or any other obligation owed to AEMO or it is claimed to be so by the *Market Participant*;
- (5) it is unlawful for any *credit support provider* in relation to the *Market Participant* to comply with any of its obligations under the *Rules* or any other obligation owed to AEMO or it is claimed to be so by that *credit support provider*;
- (6) an authorisation from a government body necessary to enable the *Market Participant* or a *credit support provider* which has provided *credit support* for that *Market Participant* to carry on their respective principal business or activities ceases to be in full force and effect;
- (7) the *Market Participant* or a *credit support provider* which has provided *credit support* for that *Market Participant* ceases or threatens to cease to carry on its business or a substantial part of its business;
- (8) the *Market Participant* or a *credit support provider* which has provided *credit support* for that *Market Participant* enters into or takes any action to enter into an arrangement (including a scheme of arrangement), composition or compromise with, or assignment for the benefit of, all or any class of their respective creditors or members or a moratorium involving any of them;
- (9) the *Market Participant* or a *credit support provider* which has provided *credit support* for that *Market Participant* states that it is unable to pay from its own money its debts when they fall due for payment;
- (10) a receiver or receiver and manager is appointed in respect of any property of the *Market Participant* or a *credit support provider* which has provided *credit support* for that *Market Participant*;
- (11) an administrator, provisional liquidator, liquidator, trustee in bankruptcy or person having a similar or analogous function is appointed in respect of the *Market Participant* or a provider of *credit support* for the *Market Participant*;
- (12) an order is made, or a resolution is passed, for the winding up of the *Market Participant* or a provider of *credit support* for the *Market Participant*;
- (13) A notice under section 601AB(3) of the Corporations Act is given to the *Market Participant* or a *credit support provider* which has provided *credit support* for that *Market Participant* unless the registration of that *Market Participant* or *credit support provider* is reinstated under section 601AH of the Corporations Act;
- (14) the *Market Participant* or a *credit support provider* which has provided *credit support* for that *Market Participant* dies or is dissolved unless such notice of dissolution is discharged;

- (15) the *Market Participant* or a *credit support provider* which has provided *credit support* for that *Market Participant* is taken to be insolvent or unable to pay its debts under any applicable legislation.
- (b) Where a *default event* has occurred in relation to a *Market Participant*, *AEMO* may:
 - (1) issue a "*default notice*" specifying the alleged default and requiring the *Market Participant* to remedy the default by 1.00 pm (*Sydney time*) the next day following the date of issue of the *default notice*; and/or
 - (2) if it has not already done so, make claim upon any *credit support* held in respect of the obligations of the *Market Participant* for such amount as *AEMO* determines represents the amount of any money actually or contingently owing by the *Market Participant* to *AEMO* pursuant to the *Rules*.
- (c) If a *default event* that is not an *external administration default event* is not remedied by 1.00 pm (*Sydney time*) the next day following the date of issue of the *default notice* or any later deadline agreed to in writing by *AEMO*, or if *AEMO* receives notice from the *defaulting Market Participant* that it is not likely to remedy the default, then *AEMO* may issue a *suspension notice*. For the avoidance of doubt, nothing in paragraphs (c1) to (c6) limits *AEMO*'s discretion in relation to issuing a *suspension notice* under this paragraph (c).
 - (c1) If an *external administration default event* is not remedied by 1.00 pm (*Sydney time*) the next day following the date of issue of the *default notice* or any later deadline agreed to in writing by *AEMO*, or if *AEMO* receives notice from the *defaulting Market Participant* that it is not likely to remedy the default, then *AEMO* must:
 - (1) issue a *suspension notice* to the *defaulting Market Participant* under which the *Market Participant* is suspended from all activities in relation to each category of *Market Participant* for which it is registered (each a *registration category*); or
 - (2) make a *non-suspension decision* in relation to all activities in relation to each *registration category* of the *Market Participant*; or
 - (3) issue a *suspension notice* to the *defaulting Market Participant* under which the *Market Participant* is suspended from some specified activities or *registration categories* of the *Market Participant* and make a *non-suspension decision* in relation to the activities or *registration categories* that are not the subject of the suspension notice issued under this subparagraph (3).
 - (c2) *AEMO* may only make a *non-suspension decision* in relation to any activities or *registration categories* of a *defaulting Market Participant* if:

- (1) the external administrator has requested or consented to the *non-suspension decision* and has undertaken that the *defaulting Market Participant* will meet its relevant liabilities under the *Rules*; and
- (2) taking into account the following matters, *AEMO* considers that the *defaulting Market Participant* should not be suspended in relation to that activity or *registration category*:
 - (i) the likelihood that the *defaulting Market Participant* will comply with its obligations under the *Rules* relevant to that registration;
 - (ii) in the case where the *defaulting Market Participant* is a *Market Generator*, *Market Small Generator Aggregator* or *Market Network Service Provider*, the potential impact of the suspension of that registration on the *reliability* of the *power system*;
 - (iii) in the case where the *Market Participant* is not in a category referred to in subparagraph (ii), the potential impact of the suspension of that registration on the *reliability* of the *power system* if *AEMO* considers that matter to be relevant; and
 - (iv) any other matters *AEMO* considers relevant to the making of the *non-suspension decision*.
- (c3) *AEMO* may make a *non-suspension decision* conditional on the *defaulting Market Participant* continuing to satisfy specified obligations including, without limitation, conditions relating to compliance with the *Rules*.
- (c4) A *defaulting Market Participant* must comply with any conditions specified in a *non-suspension decision*.
- (c5) Promptly after making a *non-suspension decision* in relation to a *defaulting Market Participant*, *AEMO* must:
 - (1) notify the *defaulting Market Participant* of its decision and any conditions that must be satisfied by the *defaulting Market Participant* if the *non-suspension decision* is to remain in effect; and
 - (2) *publish* a notice specifying:
 - (i) that an *external administration default event* has occurred in respect of the *defaulting Market Participant*;
 - (ii) that *AEMO* has made a *non-suspension decision* in accordance with paragraph (c2);
 - (iii) the *registration categories* of the *defaulting Market Participant* affected by the *non-suspension decision* and the activities (or

subset of activities) of those *registration categories* that are the subject of the *non-suspension decision*; and

- (iv) that despite the *non-suspension decision*, AEMO may issue a *suspension notice* in relation to the *registration categories* and activities covered by the *non-suspension decision* in the circumstances set out in subparagraphs (c6)(1) to (3).
- (c6) Despite paragraph (c), if at any time after the issue of a *non-suspension decision*:
- (1) AEMO considers that the *defaulting Market Participant* has failed to satisfy any of the conditions that apply to the *non-suspension decision*;
 - (2) a further *default event* occurs in respect of the *defaulting Market Participant*; or
 - (3) AEMO is not satisfied that the *defaulting Market Participant* will meet its relevant liabilities under the *Rules*,

then AEMO may immediately issue a *suspension notice* to the *defaulting Market Participant* in relation to the *registration categories* and activities of the *defaulting Market Participant* covered by that *non-suspension decision*.

- (d) At the time of issue of a *suspension notice*, or as immediately thereafter as is practicable, AEMO must forward a copy of the *suspension notice* to the AER and to each *Market Participant* which is *financially responsible* for a *transmission network connection point* to which is allocated a *connection point* for which the *defaulting Market Participant* is *financially responsible*.
- (e) AEMO must lift a *suspension notice* if the *default event* is remedied and there are no other circumstances in existence which would entitle AEMO to issue a *suspension notice*.
- (f) AEMO must issue a public announcement that the *Market Participant* has been suspended from the *market* including details of the extent of the suspension, simultaneously with, or at any time after, a *suspension notice* is issued. AEMO must issue a public notice promptly after a *suspension notice* is lifted.
- (g) From the time of suspension that AEMO stipulates in a *suspension notice* to a *Market Participant* the *Market Participant* is ineligible to trade or enter into any *transaction* in the *market* to the extent specified in the notice, until such time that AEMO notifies the *Market Participant* and all other *Market Participants* of the date and time that the suspension has been lifted.
- (h) The *defaulting Market Participant* must comply with a *suspension notice*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (i) Following the issue of a *suspension notice*, AEMO may do all or any of the following to give effect to the *suspension notice*:
 - (1) reject any *dispatch bid* or *dispatch offer* submitted by the *defaulting Market Participant*;
 - (2) withhold the payment of any amounts otherwise due to the *defaulting Market Participant* under the *Rules*; or
 - (3) deregister or reject any *reallocation request* to which the *defaulting Market Participant* is a party.

The issue of a *suspension notice* which has not been lifted is a "**relevant disconnection event**" (ie. an event for which a *Registered Participant's* *market loads* may be *disconnected*) within the meaning of section 63(2) of the *National Electricity Law*.

3.15.22 Maximum total payment in respect of a billing period

- (a) For the purposes of this clause 3.15.22, the *maximum total payment* in respect of a *billing period* is equal to:
 - (1) the aggregate of the *energy trading amounts* as determined in accordance with clause 3.15.6 and *reallocation* amounts as determined in accordance with clause 3.15.11 received by AEMO from *Market Participants* in accordance with clause 3.15.16 in respect of that *billing period* in accordance with the *timetable* on the latest date for payment by *Market Participants* as described in clause 3.15.16 (called the **payment date**),

plus
 - (2) if there is one or more *Market Participants* in default, the aggregate amount which AEMO is able to obtain from the *credit support* and apply from security deposits provided by the *Market Participants* in default under rule 3.3 on the *payment date* in accordance with the *timetable*,

minus
 - (3) if there is one or more *Market Participants* in default, the aggregate of amounts payable to AEMO by those *Market Participants* in respect of that *billing period* in accordance with clause 3.15.16 but not received in accordance with the *timetable* on the latest date for payment as described in clause 3.15.16 (called the **payment date**),

plus
 - (4) if there is one or more *Market Participants* in default, the aggregate of *energy trading amounts* and *reallocation* amounts payable to AEMO under clauses 3.15.6 and 3.15.11 by those *Market Participants* in respect of that *billing period* in accordance with clause 3.15.16 but not

received in accordance with the *timetable* on the latest date for payment as described in clause 3.15.16 (called the **payment date**),

minus

- (5) *inter-regional and intra-regional settlements* surpluses as determined or allocated by AEMO in accordance with the procedure established under clause 3.6.5.
- (b) The maximum amount which AEMO is required to pay to *Market Participants* in respect of *spot market transactions* or *reallocation transactions* in respect of a *billing period* is equal to the *maximum total payment* in respect of that *billing period*.
- (c) If the *maximum total payment* in respect of a *billing period* is not sufficient to meet the aggregate of the net amounts payable by AEMO to each of the *Market Participants* to whom payments are to be made in relation to *spot market transactions* or *reallocation transactions* in respect of the *billing period* (the *aggregate payment due*), then the aggregate amount payable by AEMO to each relevant *Market Participant* for any of these *transactions* in respect of that *billing period* shall be reduced by applying the following formula:

$$AAP = SAP \times \frac{A}{B}$$

where:

AAP is the reduced amount actually payable by AEMO to the relevant *Market Participant* in respect of the relevant *billing period*;

SAP is the net amount that would have been payable to the relevant *Market Participant* in respect of *spot market transactions* or *reallocation transactions* in respect of the relevant *billing period* but for the application of this clause 3.15.22;

A is the *maximum total payment* in respect of the *billing period*; and

B is the *aggregate payment due* in respect of the *billing period*.

- (d) This clause 3.15.22 applies notwithstanding any other provision of this Chapter.

3.15.23 Maximum total payment in respect of a financial year

- (a) If in a *financial year* a *Market Participant* suffers a reduction in payment under clause 3.15.22 the provisions of this clause shall apply to adjust the payments made to each *Market Participant* in the *financial year*.
- (b) The ratio of the overall shortfall to the sum of the *aggregate payments due* for a financial year shall be determined by the following formula:

$$SS = \frac{A_1 + C}{B_1}$$

where:

SS is the ratio of the overall shortfall to the sum of the *aggregate payments due* for the *financial year*;

A₁ is the aggregate of the As referred to in clause 3.15.22, being the *maximum total payment* in respect of each *billing period* forming the *financial year*;

B₁ is the aggregate of the Bs referred to in clause 3.15.22, being the *aggregate payment due* in respect of each *billing period* forming the *financial year*; and

C is the aggregated late payments and *credit support* receipts in respect of *defaulting Market Participants* in the *financial year* plus interest received on such amounts under clause 3.15.25.

- (c) The shortfall for a *financial year* shall be applied pro rata to each *Market Participant* in the *financial year* by applying the following formula:

$$SS_1 = (SAP_1 SS) - AAP_1$$

where:

SS₁ is the shortfall or surplus payable by or due to the *Market Participant* in respect of the *financial year*;

SAP₁ is the aggregate of the SAPs referred to in clause 3.15.22 being the net amounts due to the *Market Participant* in respect of each *billing period* forming the *financial year*;

SS is determined in accordance with clause 3.15.23(b); and

AAP₁ is the aggregate of the AAPs referred to in clause 3.15.22, being the reduced amounts payable to the *Market Participant* in respect of each *billing period* forming the *financial year*.

- (d) AEMO must issue a statement stating the SS₁ amount payable to or receivable by the *Market Participant* in respect of this clause 3.15.23. If SS₁ is positive, such that an amount is payable by AEMO it will credit the sum to the *Market Participant's* account in the next *billing period*. If SS₁ is negative, such that an amount is payable by a *Market Participant*, AEMO will at its discretion either debit the sum to the *Market Participant* in the next *billing period* or issue an invoice for immediate payment of the amount.

3.15.24 Compensation for reductions under clause 3.15.23

- (a) If:

- (1) a *Market Participant* suffers a reduction in payment under clause 3.15.23; and
- (2) an amount is recovered by *AEMO* after the end of a *financial year* from the person whose default gave rise (in whole or in part) to the reduction, in respect of the default,

then, subject to clause 3.15.24(c), the *Market Participant* is entitled to be paid by *AEMO* out of the amount recovered the amount of the reduction suffered and interest for receiving the amount of the reduction later than it would otherwise have done.

- (b) The amount of the interest payable under clause 3.15.24(a) is to be determined in each case by *AEMO*.
- (c) If the amount recovered from the person whose default gave rise to the reduction is not sufficient to pay all *Market Participants* the amounts to which they are entitled under clause 3.15.23 then the amount recovered is to be distributed amongst them pro rata according to the reductions suffered. Such distribution to be made at any time following the end of a *financial year*.

3.15.25 Interest on overdue amounts

- (a) A *Market Participant* or *AEMO* must pay interest on any unpaid moneys due and payable by it under this Chapter.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) The rate of interest payable under this clause 3.15.25 is the *bank bill rate* calculated as simple interest on a daily basis from the date payment was due, up to and including the date of payment, with interest compounding monthly on the last *day* of each month whilst the unpaid moneys remain outstanding.

3.16 Participant compensation fund

3.16.1 Establishment of Participant compensation fund

- (a) *AEMO* must continue to maintain, in the books of the corporation, a fund called the *Participant compensation fund* for the purpose of paying compensation to *Scheduled Generators*, *Semi-Scheduled Generators* and *Scheduled Network Service Providers* as determined by the *dispute resolution panel* for *scheduling errors* under this Chapter 3.
- (b) *AEMO* must pay to the *Participant compensation fund* that component of *Participant fees* under rule 2.11 attributable to the *Participant compensation fund*.

- (c) The funding requirement for the *Participant compensation fund* for each *financial year* is the lesser of:
 - (1) \$1,000,000; and
 - (2) \$5,000,000 minus the amount which AEMO reasonably estimates will be the balance of the *Participant compensation fund* at the end of the relevant *financial year*.
- (d) The *Participant compensation fund* is to be maintained by AEMO and is the property of AEMO.
- (e) Any interest paid on money held in the *Participant compensation fund* will accrue to and form part of the *Participant compensation fund*.
- (f) AEMO must pay from the *Participant compensation fund* all income tax on interest earned by the *Participant compensation fund* and must pay from the *Participant compensation fund* all bank account debit tax, financial institutions duty and bank fees in relation to the *Participant compensation fund*.
- (g) Upon ceasing to be a *Scheduled Generator* or a *Semi-Scheduled Generator*, the relevant *Generator* is not entitled to a refund of any contributions made to the *Participant compensation fund*.
- (h) Upon ceasing to be a *Scheduled Network Service Provider*, a *Scheduled Network Service Provider* is not entitled to a refund of any contributions made to the *Participant compensation fund*.

3.16.2 Dispute resolution panel to determine compensation

- (a) Where a *scheduling error* occurs, a *Market Participant* may apply to the *dispute resolution panel* for a determination as to compensation under this clause 3.16.2.
- (b) Where a *scheduling error* occurs, the *dispute resolution panel* may determine that compensation is payable to *Market Participants* and the amount of any such compensation payable from the *Participant compensation fund*.
- (c) A determination by the *dispute resolution panel* as to compensation must be consistent with this clause 3.16.2.
- (d) A *Scheduled Generator* or *Semi-Scheduled Generator* who receives an instruction in respect of a *scheduled generating unit* or *semi-scheduled generating unit* (as the case may be) to operate at a lower level than the level at which it would have been instructed to operate had the *scheduling error* not occurred, will be entitled to receive in compensation an amount determined by the *dispute resolution panel*.
- (e) A *Scheduled Network Service Provider* who receives an instruction in respect of its *scheduled network services* to transfer less power on the

scheduled network service than it would have been instructed to transfer had the *scheduling error* not occurred, will be entitled to receive in compensation an amount determined by the *dispute resolution panel*.

- (f) A *Scheduled Generator* or *Semi-Scheduled Generator* who receives a *dispatch instruction* in respect of a *generating unit* to operate at a level consistent with a *dispatch offer price* (with reference to the relevant *regional reference node*) which is higher than the *dispatch price*, due to the operation of clause 3.9.2B, is entitled to receive in compensation an amount determined by the *dispute resolution panel*.
- (g) A *Scheduled Network Service Provider* who receives an instruction in respect of its *scheduled network services* to transfer power on the *scheduled network service* consistent with a *network dispatch offer price* but receives less net revenue than would be expected under clause 3.8.6A(f) due to adjustment of the *spot price* for a trading interval under clause 3.9.2B, is entitled to receive in compensation an amount determined by the *dispute resolution panel*.
- (h) In determining the level of compensation to which *Market Participants* are entitled in relation to a *scheduling error*, the *dispute resolution panel* must:
 - (1) Where the entitlement to compensation arises under clause 3.16.2(f), determine compensation on the basis of the actual *loading level* and not the *dispatch instruction* applicable to the relevant *scheduled generating unit* or *semi-scheduled generating unit* for that *dispatch interval*;
 - (2) Where the entitlement to compensation arises under clause 3.16.2(g), determine compensation on the basis of the actual *loading level* and not the *dispatch instruction* applicable to the relevant *scheduled network service* for that *dispatch interval*;
 - (3) Use the *spot price* as determined under rule 3.9, including any *spot prices* that have been adjusted in accordance with clause 3.9.2B;
 - (4) Take into account the current balance of the *Participant compensation fund* and the potential for further liabilities to arise during the year;
 - (5) Recognise that the aggregate liability in any year in respect of *scheduling errors* cannot exceed the balance of the *Participant compensation fund* that would have been available at the end of that year if no compensation payments for *scheduling errors* had been made during that year.
- (i) The manner and timing of payments from the *Participant compensation fund* are to be determined by the *dispute resolution panel*.
- (j) To the maximum extent permitted by law, AEMO is not liable in respect of a *scheduling error* except out of the *Participant compensation fund* as contemplated in this clause 3.16.2.

3.17 [Deleted]

3.18 Settlements Residue Auctions

3.18.1 Settlements residue concepts

- (a) An *auction participation agreement* is an agreement between *AEMO* and an *eligible person* concerning the participation by the *eligible person* in *auctions*.
- (b) A *settlements residue distribution agreement* or *SRD agreement* is an agreement between *AEMO* and an *eligible person* entered into following an *auction* under which:
 - (1) in all cases:
 - (i) *AEMO* agrees to issue a *SRD unit* to an *eligible person*;
 - (ii) the *eligible person* agrees to pay *AEMO* the *auction* clearing price for the *SRD unit*;
 - (2) where a secondary trading decision is made under clause 3.18.3A(a):
 - (i) the *eligible person* has a right to offer a *SRD unit* in future *auctions*;
 - (ii) if the *SRD unit* is cleared in a future *auction*, *AEMO* is required to cancel the *SRD unit*; and
 - (iii) the cancellation of a *SRD unit* by *AEMO* pursuant to subparagraph (ii) does not terminate the underlying *SRD agreement* between *AEMO* and the *eligible person* under which that *SRD unit* was issued, and, for the avoidance of doubt, does not affect the obligation of:
 - (A) the *eligible person* to pay *AEMO* for the *SRD unit* issued to it under the *SRD agreement*; or
 - (B) *AEMO* to pay the *eligible person* for cancellation of the *SRD unit* under the *SRD agreement*,
- (c) For the purposes of this rule 3.18:
 - (1) all the *regulated interconnectors* between any 2 adjacent *regions* are deemed to constitute a single *interconnector*; and
 - (2) the deemed *interconnector* referred to in paragraph (1) between any 2 adjacent *regions* consists of 2 *directional interconnectors*, one involving a transfer from *region A* to *region B*, and one involving a transfer from *region B* to *region A*.

- (d) Subject to clause 3.18.4, *AEMO* must use the portion of the *settlements residue* allocated to a *directional interconnector* remaining after applying the relevant *jurisdictional derogations* under chapter 9 (as determined by applying the principles referred to in clause 3.6.5) to:
 - (1) distribute *settlements residue* to relevant *eligible persons* holding *SRD units*; and
 - (2) recover the *auction expense fees*.
- (e) Where a person registered as a *Trader* is required to appoint an agent for the purposes of rule 2.5A(c)(2), *AEMO* and the *Trader* must ensure that the *auction participation agreement* and the *SRD agreement* entered into by the *Trader* and its agent provides that the *Trader* and the agent are jointly and severally liable in relation to the obligations of the *Trader* under those agreements.

3.18.2 Auctions and eligible persons

- (a) *AEMO* may conduct *auctions* to determine which *eligible persons* will be issued with *SRD units* under *SRD agreements* with *AEMO*.
- (b) *AEMO* may only enter into a *SRD agreement* with a person (called an *eligible person*) who satisfies the following criteria:
 - (1) the person is a *Market Customer*, a *Generator* or a *Trader*, or a person seeking to be eligible for registration as a *Trader* under rule 2.5A; and
 - (2) the person satisfies any criteria specified in the *auction rules*, which criteria must comply with paragraph(g).
- (c) *Auctions* must be conducted in accordance with this rule 3.18 and the *auction rules*.
- (d) *AEMO* may, with the approval of the *settlement residue committee*, suspend, or remove a suspension, on conducting *auctions* for one or more *directional interconnectors* for a specified period if *AEMO* believes it is not practicable to conduct those *auctions* or those *auctions* are unlikely to lead to the entry into of *SRD agreements* in relation to all of the *settlements residues* being auctioned.
- (e) *AEMO* may, after complying with the *Rules consultation procedures*, cease conducting *auctions*.
- (f) If *AEMO* takes any action under paragraph (d) or (e), then it must post a notice on its website specifying the action taken as soon as practicable after taking it.
- (g) Any criteria specified in the *auction rules* concerning persons with whom *AEMO* may enter into *SRD agreements* must be consistent with paragraph (b), not exclude any persons other than those specified in subparagraphs (1)

– (6) below and must exclude the persons specified in subparagraphs (1), (2), (5) and (6) below:

- (1) persons who have not entered into an *auction participation agreement*;
- (2) *Transmission Network Service Providers*;
- (3) **[Deleted]**
- (4) persons:
 - (i) who have previously defaulted on payment obligations under an *auction participation agreement* or a *SRD agreement*; or
 - (ii) in relation to whom a *default event* has occurred;
- (5) any person who *AEMO* considers is acting on behalf of or in concert with a person described in subparagraphs (1) or (2);
- (5a) any person who *AEMO* considers is acting on behalf of or in concert with a person described in subparagraph (4); or
- (6) any person who would be a **retail client** as defined in section 761GA of the Corporations Act 2001 (Cth), if they entered into an *SRD agreement* with *AEMO*.

(h) **[Deleted]**

3.18.3 Auction rules

- (a) In all cases, *AEMO* must develop rules (called *auction rules*) which set out:
 - (1) additional criteria which a person must satisfy to be an *eligible person* (which must include, without limitation, criteria requiring the person to enter into an *auction participation agreement* with *AEMO* in a form satisfactory to *AEMO*);
 - (2) the procedures for conducting *auctions* and the timing of *auctions*;
 - (3) the mechanism for calculating the *auction* clearing price in respect of each *directional interconnector* for each *auction*;
 - (4) the mechanism for calculating *auction expense fees*;
 - (5) the procedures and timetable for billing and settling *auction amounts*; and
 - (6) the standard form of any *auction participation agreement* referred to in subparagraph (1).
- (a1) Where a secondary trading decision is made under clause 3.18.3A(a), *AEMO* must amend the *auction rules* to set out:

- (1) a right for an *eligible person* that holds a *SRD unit* to offer that *SRD unit* in another *auction* in accordance with the *auction rules*;
 - (2) if an *eligible person* offers a *SRD unit* in an *auction*, a right for *AEMO* to cancel that *SRD unit* in accordance with the *SRD agreement* and the *auction rules*;
 - (3) the requirements for cancellation of *SRD units* by *AEMO*; and
 - (4) mechanisms for calculating and distributing *auction amounts*;
 - (5) a mechanism for calculating and determining the margin referred to in clause 3.18.4A(b), which must take into account the relevant prices at which the *eligible person* offers *SRD units* in an *auction* as well as the *auction* clearing prices at which the *eligible person* received *SRD units* in previous *auctions*; and
 - (6) the procedures *AEMO* will follow to obtain and manage the margins referred to in clause 3.18.4A.
- (b) In developing and amending the *auction rules*, *AEMO* must give effect to the following principles:
- (1) **[Deleted]**
 - (2) to the extent reasonably practicable, an *auction* must be structured in a way that maximises the value of the relevant *settlements residue*;
 - (3) the price for each *SRD unit* to be paid by *eligible persons* will be the same for all *SRD units* cleared in the same *auction* and will be equal to the *auction* clearing price in respect of the *directional interconnector* for the *auction*; and
 - (4) enhancing competition and efficiency by promoting interstate trade in electricity.
- (c) *AEMO* must make the *auction rules* available to *Registered Participants* and to any other person who requests a copy.
- (d) *AEMO* may amend the *auction rules*:
- (1) at any time, with the approval of the *settlement residue committee* and in accordance with the *Rules consultation procedures*; or
 - (2) if *AEMO* has consulted to the extent practicable in the circumstances in relation to the proposed amendment, the amendment has the support of at least three quarters of the members of the *settlement residue committee*, and *AEMO* considers the amendment is urgent.

3.18.3A Secondary trading of SRD units

- (a) AEMO may, with the approval of the *settlement residue committee*, decide to implement secondary trading of *SRD units* by *eligible persons* in accordance with this rule 3.18 and the *auction rules* at a specified date (**secondary trading decision**).
- (b) Before the date specified under paragraph (a), AEMO must amend the *auction rules* in accordance with clause 3.18.3(d)(1) to include the requirements specified in clause 3.18.3(a1).

3.18.4 Proceeds and fees

- (a) AEMO must distribute to the relevant *Network Service Provider*:
 - (1) subject to clauses 3.6.5(a)(4) and 3.6.5(a)(4A) and paragraph (a1), the *auction* clearing price for each *SRD unit* received by an *eligible person* in an *auction* in accordance with the *auction rules*; and
 - (2) subject to paragraphs (b) and (c), any portion of the *settlements residue* allocated to the *directional interconnector* in respect of which a *SRD unit* has not been issued under a *SRD agreement*,in accordance with the principles in clause 3.6.5 in relation to the allocation and distribution of *settlements residue* attributable to *regulated interconnectors*.
- (a1) Where a secondary trading decision is made under clause 3.18.3A(a), AEMO must pay an *eligible person* the *auction* clearing price for each *SRD unit* that is offered by that *eligible person* and subsequently cancelled by AEMO pursuant to clause 3.18.1(b)(2)(ii) and in accordance with the relevant *SRD agreement* and the *auction rules*.
- (b) The costs and expenses incurred by AEMO in establishing and administering the arrangements contemplated by this rule 3.18, in conducting *auctions* under this rule 3.18 and in entering into and administering *auction participation agreements* and *SRD agreements* under this rule 3.18 will be recovered from *settlements residue* by way of *auction expense fees*.
- (c) The *auction expense fees* are to be developed by AEMO in accordance with the *auction rules* and approved by the *settlement residue committee*, and recovered as follows:
 - (1) to the extent the *settlements residue* is distributed to *eligible persons* under clause 3.18.1(d), in accordance with the *auction rules*; and
 - (2) to the extent the *settlements residue* is distributed to *Network Service Providers* under clause 3.18.4(a)(2), as if the *settlements residue* was being distributed to *eligible persons* in accordance with the *auction rules*.

- (d) The *auction expense fees* for an *auction* are to be *published* before the *auction*.
- (e) *Eligible persons* and AEMO must pay *auction amounts* in accordance with the *auction rules*, and, for the avoidance of doubt, amounts payable by *eligible persons* to AEMO under *SRD agreements* and any amounts payable by AEMO to *eligible persons* under *SRD agreements* will not be regarded as amounts payable under the *Rules* for the purposes of rule 3.15.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (f) AEMO may nominate an electronic funds transfer facility for the purposes of paying *auction amounts* and, if it does so, *eligible persons*, *Network Service Providers* and AEMO must use that facility for paying and receiving *auction amounts*.

3.18.4A Secondary trading proceeds and margin

- (a) This clause 3.18.4A applies where a secondary trading decision is made under clause 3.18.3A(a).
- (b) When an *eligible person* offers a *SRD unit* in an *auction*, the *eligible person* must provide a margin to AEMO at the same time as it offers the *SRD unit*, in accordance with the requirements of the *auction rules* and the *SRD agreement*.

Note

Clause 3.18.3(a1)(5) requires the *auction rules* to set out a mechanism for calculating and determining the margin.

- (c) If an *eligible person* provides a margin under paragraph (b) and subsequently that *eligible person's SRD agreement* or *auction participation agreement* is terminated by AEMO, then AEMO must apply the margin provided by that *eligible person* to:
 - (1) any outstanding amounts owing to AEMO by that *eligible person*; or
 - (2) any amounts that would have been owing to AEMO by that *eligible person* under *SRD agreements* had the *SRD agreements* or *auction participation agreement* not been terminated,

in accordance with this rule 3.18 and the *auction rules*.

- (d) If the full amount payable by AEMO to *eligible persons* for cancellation of *SRD units* pursuant to clause 3.18.4(a1) is less than the amount available to AEMO from *auction* proceeds provided to AEMO by *eligible persons* (**shortfall**) then AEMO must recover that shortfall:

- (1) first, from the *auction* proceeds payable to the relevant *Network Service Provider* under clause 3.18.4(a)(1); and
 - (2) if the amount under paragraph (d)(1) is insufficient, then *AEMO* must recover the remaining amount that could not be recovered in accordance with clause 3.6.5, as if references to *negative settlements residue* amounts were references to the shortfall.
- (e) If an *eligible person's* *SRD agreement* or *auction participation agreement* is terminated by *AEMO*, then any *SRD units* which that person held immediately prior to the relevant agreement being terminated may be made available by *AEMO* in another *auction*.

3.18.5 Settlement residue committee

- (a) *AEMO* must establish a *settlements residue committee* .
- (b) The functions of the *settlement residue committee* are to:
 - (1) approve any suspension, or removal of a suspension, imposed by *AEMO* on the conducting of *auctions*;
 - (2) approve proposed amendments to the *auction rules* developed by *AEMO*;
 - (3) monitor, review and report on the *auctions* conducted by *AEMO* under this rule 3.18; and
 - (4) approve the costs and expenses incurred by *AEMO* in conducting *auctions* under this rule 3.18 and in entering into and administering *auction participation agreements* and *SRD agreements* under this rule 3.18.
- (c) The *settlement residue committee* is to consist of:
 - (1) an employee of *AEMO* appointed by *AEMO*, who will act as chairman of the committee;
 - (2) a person representing *Generators*;
 - (3) a person representing *Market Customers*;
 - (4) a person representing *Transmission Network Service Providers*;
 - (5) a person representing *Traders*;
 - (6) a person appointed jointly by the relevant *Ministers* of the *participating jurisdictions*; and
 - (7) a person appointed by the *AEMC* to represent *retail customers*.

- (d) *AEMO* may remove the person referred to in clause 3.18.5(c)(1) at any time for any reason.
- (e) The persons referred to in clauses 3.18.5(c)(2), (3), (4) and (5) must be appointed and removed by *AEMO* after consultation with the class of *Registered Participants* the person is to represent, and *AEMO* must:
 - (1) appoint a person agreed to by at least one third in number of the relevant class of *Registered Participants*; and
 - (2) commence consultation on the removal of such a person if requested to do so by a member of the relevant class of *Registered participants*, and must remove that person if so agreed by at least one third in number of the relevant class of *Registered Participants*.
- (f) The *Ministers* of the *participating jurisdictions* acting jointly may remove the person referred to in clause 3.18.5(c)(6) at any time for any reason.
- (g) The *AEMC* may remove the person referred to in clause 3.18.5(c)(7) at any time for any reason.
- (h) A person holds office as a member of the *settlement residue committee* until that person:
 - (1) resigns from office;
 - (2) if the person is the person referred to in clause 3.18.5(c)(1), is removed from office by *AEMO* in accordance with clause 3.18.5(d);
 - (3) if the person is a person referred to in clauses 3.18.5(c)(2), (3), (4) or (5), is removed from office by *AEMO* in accordance with clause 3.18.5(e)(2);
 - (4) if the person is the person referred to in clause 3.18.5(c)(6), is removed from office by the *Ministers* of the *participating jurisdictions* in accordance with clause 3.18.5(f); or
 - (5) if the person is the person referred to in clause 3.18.5(c)(7), is removed from office by the *AEMC* in accordance with clause 3.18.5(g),and such a person is eligible for re-appointment.
- (i) A person may resign as a member of the *settlement residue committee* by giving notice in writing to that effect to *AEMO*.

3.19 Market Management Systems Access Procedures

- (a) *AEMO* may develop and *publish Market Management Systems Access Procedures* in consultation with *Registered Participants* in accordance with the *Rules consultation procedures*, which procedures will govern how

Registered Participants , Metering Providers and Metering Data Providers can use the market management systems.

- (b) *AEMO may amend the Market Management Systems Access Procedures from time to time in consultation with Registered Participants in accordance with the Rules consultation procedures, and any such amendments must be published by AEMO.*
- (c) *AEMO and all Registered Participants, Metering Providers and Metering Data Providers must comply with the Market Management Systems Access Procedures.*

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) *A Registered Participant which complies with the Market Management Systems Access Procedures and promptly pays all relevant Participant fees as and when they fall due has a right to be connected to the market management systems.*
- (e) *If a Registered Participant fails to comply with the Market Management Systems Access Procedures, AEMO must:*
 - (1) *notify that Registered Participant describing the nature of the breach; and*
 - (2) *at a time following notification of the breach by AEMO under clause 3.19(e)(1) determined by AEMO having regard to a balancing of the need to provide a Registered Participant with the opportunity to remedy the breach and the nature of the breach, notify the AER that the Registered Participant has breached the Market Management Systems Access Procedures.*

3.20 Reliability and Emergency Reserve Trader

3.20.1 [Deleted]

3.20.2 Reliability and emergency reserve trader

- (a) *AEMO must take all reasonable actions to ensure reliability of supply and, where practicable, take all reasonable actions to maintain power system security by negotiating and entering into contracts to secure the availability of reserves under reserve contracts (reliability and emergency reserve trader or RERT) in accordance with:*
 - (1) *this rule 3.20;*
 - (2) *where relevant:*

- (i) clauses 1.11, 3.8.1, 3.8.14, 3.9.3, 3.12, 3.12A.5, 3.15.6, 3.15.9, 4.8.5A and 4.8.5B; and
 - (ii) any other provision of the *Rules* necessary to exercise the *RERT*;
- (3) the *RERT principles*; and
- (4) the *RERT guidelines*.
- (b) *AEMO* must have regard to the following principles (*RERT principles*) in exercising the *RERT* under paragraph (a):
 - (1) actions taken should be those which *AEMO* reasonably expects, acting reasonably, to have the least distortionary effect on the operation of the *market*; and
 - (2) actions taken should aim to maximise the effectiveness of *reserve contracts* at the least cost to end use consumers of electricity.
- (c) In having regard to the *RERT principles*, *AEMO* must have regard where relevant to the *RERT guidelines*.

3.20.3 Reserve contracts

- (a) *AEMO* may enter into one or more contracts with any person in relation to the capacity of:
 - (1) *scheduled generating units, scheduled network services or scheduled loads* (being *scheduled reserve contracts*); and
 - (2) *unscheduled reserves* (being *unscheduled reserve contracts*).
- (b) *AEMO* may determine to enter into *reserve contracts* to ensure that the reliability of *supply* in a *region* or *regions* meets the *reliability standard* for the *region* and, where practicable, to maintain *power system security*.
- (c) *AEMO* must consult with persons nominated by the relevant *participating jurisdictions* in relation to any determination to enter into contracts under paragraph (b).
- (d) *AEMO* must not enter into, or renegotiate, a *reserve contract* more than nine months prior to the date that *AEMO* reasonably expects that the *reserve* under that contract may be required to ensure reliability of *supply* and, where practicable, to maintain *power system security*. For the avoidance of doubt, *AEMO* may negotiate with potential tenderers in relation to *reserve contracts* at any time.
- (e) Subject to paragraph (d), *AEMO* may:
 - (1) enter into *reserve contracts*; or
 - (2) renegotiate existing *reserve contracts*,

in addition to the contracts already entered into by *AEMO* under this rule 3.20.

- (f) In entering into *reserve contracts* under paragraph (b) *AEMO* must agree with the relevant nominated persons referred to in paragraph (c) cost-sharing arrangements between the *regions* for the purpose of clause 3.15.9.
- (g) If, at any time *AEMO* determines that it is necessary to commence contract negotiations for the provision of additional *reserves*, *AEMO* must *publish* a notice of its intention to do so.
- (h) When contracting for the provision of *scheduled reserves* under *scheduled reserve contracts*, *AEMO* must not enter contracts in relation to capacity of *generating units*, *scheduled network services* or *scheduled loads* for which *dispatch offers* or *dispatch bids* have been submitted or are considered by *AEMO* to be likely to be submitted or be otherwise available for *dispatch* in the *trading intervals* to which the contract relates.

Terms and conditions of a contract

- (i) If *AEMO* seeks to enter into a *reserve contract* with a *Registered Participant* then the *Registered Participant* must *negotiate* with *AEMO* in good faith as to the terms and conditions of the contract.
- (j) *AEMO* may only enter into a *reserve contract* if the contract contains a provision that the other party to the contract has not and will not otherwise offer the *reserve* the subject of the contract in the *market* for the *trading intervals* to which the contract with *AEMO* relates except in accordance with the contract.

3.20.4 Dispatch pricing methodology for unscheduled reserve contracts

- (a) Subject to paragraph (c), *AEMO* must develop in accordance with the *Rules consultation procedures* and *publish* details of the methodology it will use to request that *generating units* or *loads* under *unscheduled reserve contracts* be *activated*.
- (b) *AEMO* may develop and *publish* the methodology developed in accordance with this clause 3.20.4 as part of the methodology *AEMO* is required to develop under clause 3.9.3(e).
- (c) *AEMO* may make minor and administrative amendments to the methodology developed in accordance with this clause 3.20.4 without complying with the *Rules consultation procedures*.

3.20.5 AEMO's risk management and accounts relating to the reliability safety net

- (a) *AEMO* may enter into insurance arrangements with an insurance provider with a view to minimising potential financial losses in respect of *AEMO's RERT* activities described in this rule 3.20.

- (b) *AEMO* must ensure that it maintains in its books separate accounts relating to the *RERT* functions and powers granted to *AEMO* under this rule 3.20.

3.20.6 Reporting on RERT by AEMO

- (a) If a *scheduled generating unit*, *scheduled network service* or *scheduled load* under a *scheduled reserve contract* with *AEMO* is *dispatched* or *generating units* or *loads* are activated under an *unscheduled reserve contract*, then *AEMO* must, as soon as practicable thereafter, *publish* a report detailing:
 - (1) the circumstances giving rise to the need for the *dispatch* of *scheduled reserves* or *activation* of *unscheduled reserves*;
 - (2) the basis on which it determined the latest time for that *dispatch* of *scheduled reserves* or *activation* of *unscheduled reserves* and on what basis it determined that a market response would not have avoided the need for the *dispatch* of *scheduled reserves* or the *activation* of *unscheduled reserves*;
 - (3) the changes in *dispatch* outcomes due to the *dispatch* of *scheduled reserves* or *activation* of *unscheduled reserves*; and
 - (4) the processes implemented by *AEMO* to *dispatch* the *scheduled reserves* or *activate* the *unscheduled reserves*,and if applicable:
 - (5) reasons why *AEMO* did not follow any or all of the processes set out in rule 4.8 either in whole or in part prior to the *dispatch* of *scheduled reserves* or the *activation* of *unscheduled reserves*; and
 - (6) the basis upon which *AEMO* considered it impractical to set *spot prices* and *ancillary service prices* in accordance with clause 3.9.3(b).
- (b) As soon as reasonably practicable after *AEMO* has, in accordance with clause 3.15.9, included the amounts arising under a *reserve contract* in a *final statement* provided under clause 3.15.15, *AEMO* must *publish* details of:
 - (1) the payments under the *reserve contract* for the relevant *billing periods*; and
 - (2) a breakdown of the recovery of those costs by each category of *Market Customer*, as determined by *AEMO*, in each *region*.
- (c) Within 30 days of the end of each *financial year* in which *AEMO* has exercised the *RERT*, *AEMO* must *publish* a report detailing:
 - (1) each occasion during the *financial year* on which it intervened to secure the availability of *reserves*;

- (2) each occasion during the *financial year* when a *scheduled generating unit*, *scheduled network service* or *scheduled load* under a *scheduled reserve contract* was *dispatched* or *generating units* or *loads* under an *unscheduled reserve contract* were *activated*; and
- (3) its costs and finances in connection with its *RERT* activities during the *financial year* according to appropriate accounting standards including profit and loss, balance sheet, sources and applications of funds.

3.20.7 AEMO's exercise of the RERT

- (a) Notwithstanding clauses 4.8.5A and 4.8.5B, if *AEMO* considers the latest time for exercising the *RERT* by:
 - (1) the *dispatch* of *scheduled reserves* it has available under *scheduled reserve contracts*; or
 - (2) the *activation* of *unscheduled reserves* it has available under *unscheduled reserve contracts*,has arrived, *AEMO* may *dispatch* such *scheduled reserves* or *activate* such *unscheduled reserves* to ensure that the reliability of supply in a *region* or *regions* meets the *reliability standard* and, where practicable, to maintain *power system security*.
- (b) *AEMO* must follow the relevant procedures in this rule 3.20 prior to *dispatching* a *scheduled generating unit*, *scheduled network service* or *scheduled load* the subject of a *scheduled reserve contract* or *activating* *generating units* or *loads* the subject of an *unscheduled reserve contract* unless it is not reasonably practicable to do so.
- (c) Subject to paragraph (b), *AEMO* must only *dispatch* a *scheduled generating unit*, a *scheduled network service* or a *scheduled load* the subject of a *scheduled reserve contract* or *activate* *generating units* or *loads* the subject of an *unscheduled reserve contract* in accordance with the procedures developed pursuant to paragraph (e).
- (d) In order to effect the *dispatch* of a *scheduled generating unit*, *scheduled network service* or *scheduled load* the subject of a *scheduled reserve contract* or the *activation* of *generating units* or *loads* the subject of an *unscheduled reserve contract* *AEMO* may:
 - (1) submit, update or vary *dispatch bids* or *dispatch offers* in relation to all or part of such a *scheduled generating unit*, *scheduled network service* or *scheduled load* which is the subject of a *scheduled reserve contract*; or
 - (2) change other inputs to the *dispatch process* to give effect to the *dispatch* of *scheduled generating units*, *scheduled network services* or *scheduled loads* the subject of a *scheduled reserve contract* or the

activation of generating units or loads the subject of an unscheduled reserve contract.

- (e) *AEMO must develop, publish, and may amend from time to time, in accordance with the Rules consultation procedures, procedures for the exercise of the RERT under this rule 3.20 that take into account the RERT principles and RERT guidelines. These procedures must include measures to be adopted in order to reduce the possibility that generating units or loads likely to be activated under unscheduled reserve contracts are otherwise engaged at the time the unscheduled reserve contracts are entered into by AEMO.*
- (f) *When exercising the RERT under this rule 3.20, AEMO must take into account the RERT guidelines.*
- (g) *NEMMCO must publish the first procedures referred to in paragraph (e) by 30 June 2009.*

3.20.8 RERT Guidelines

- (a) *For the purposes of this rule 3.20, the Reliability Panel must develop and publish guidelines (the RERT guidelines) for or with respect to:*
 - (1) *what information AEMO must take into account when deciding whether to exercise the RERT;*
 - (2) *the relevance of the RERT principles to the exercise of the RERT;*
 - (3) *the actions that AEMO may take to be satisfied that the reserve that is to be the subject of a reserve contract is not available to the market through any other arrangement;*
 - (4) *the process AEMO should undertake in contracting for reserves including the process for tendering for contracts for such reserves;*
 - (4A) *the process AEMO should undertake in contracting for reserves in relation to different notice situations specified in the RERT guidelines to ensure reliability of supply and, where practicable, to maintain power system security;*
 - (5) *any specific or additional assumptions about key parameters that AEMO must take into account in assessing the cost effectiveness of exercising the RERT;*
 - (6) *matters relevant to AEMO managing a portfolio of reserve contracts; and*
 - (7) *additional forecasts that AEMO should take into account prior to exercising the RERT.*
- (b) *The Reliability Panel must develop, publish and amend from time to time, the RERT guidelines in accordance with clauses 8.8.3(d) – (l).*

- (c) The *Reliability Panel* must *publish* the first *RERT guidelines* by 30 November 2008 and there must be such guidelines in place at all times after that date.

3.20.9 [Deleted]

Schedule 3.1 Bid and Offer Validation Data

- (a) The *bid and offer validation data* are the standard data requirements for verification and compilation of *dispatch bids* and *dispatch offers* on the *trading day* schedule.
- (b) *Scheduled Generators, Semi-Scheduled Generators* and *Market Participants* must notify *AEMO* of their *bid and offer validation data* in accordance with this schedule 3.1 in respect of each of their *scheduled loads, semi-scheduled generating units* and *scheduled generating units* at least six weeks prior to commencing participation in the *market*.
- (c) *Scheduled Generators, Semi-Scheduled Generators* and *Market Participants* must review their *bid and offer validation data* annually in accordance with the *timetable* advised by *AEMO* and provide details of any *changes* to *AEMO*.
- (d) A *Scheduled Generator, Semi-Scheduled Generator* or *Market Participant* must notify *AEMO* of any proposed change to its *bid and offer validation data* in accordance with clause 3.13.3(h) at least six weeks prior to the date of the proposed change and any proposed change may be subject to audit at *AEMO's* request and must be consistent with *AEMO's* register of *performance standards* referred to in rule 4.14(n) in respect of the relevant *plant*.
- (e) A copy of all *changes* to the data must be returned to each *Scheduled Generator, Semi-Scheduled Generator* and *Market Participant* for verification and resubmission by the *Scheduled Generator, Semi-Scheduled Generator* or *Market Participant* as necessary.
- (f) [Deleted]

Scheduled Generating Unit Data:

Data	Units of Measurement
Power station information:	
<i>power station name</i>	
Scheduled generating unit information:	
Note: Repeat the following items for each <i>scheduled generating unit</i> where there are two or more <i>scheduled generating units</i> in the <i>power station</i> .	
<i>scheduled generating unit name</i> Note: This may be the same name as the <i>power station name</i> when the <i>power station</i> has only one single or aggregated <i>scheduled generating unit</i> .	
<i>Dispatchable unit identifier</i>	
maximum generation of the <i>scheduled generating unit</i> , to which the <i>scheduled generating unit</i> may be dispatched.	MW (<i>generated</i>)
maximum ramp rate of the <i>scheduled generating unit</i>	MW/minute

Semi-Scheduled Generating Unit Data:

Data	Units of Measurement
Power station information:	
<i>power station name</i>	
Semi-scheduled generating unit information:	
Note: Repeat the following items for each <i>semi-scheduled generating unit</i> where there are two or more <i>semi-scheduled generating units</i> in the <i>power station</i> .	
<i>semi-scheduled generating unit name</i> Note: This may be the same name as the <i>power station name</i> when the <i>power station</i> has only one <i>semi-scheduled generating unit</i> .	
<i>Dispatchable unit identifier</i>	
maximum generation of the <i>semi-scheduled generating unit</i> , to which the <i>semi-scheduled generating unit</i> may be dispatched	MW (<i>generated</i>)
maximum ramp rate of the <i>semi-scheduled generating unit</i>	MW/minute

Scheduled Load Data:

Data	Units of Measurement
Load installation information:	
<i>load</i> installation name	
Scheduled load information:	
Note: Repeat the following items for each scheduled load where there are two or more scheduled loads.	
<i>scheduled load</i> name	
Note: This may be the same name as the <i>load</i> installation name when the <i>load</i> installation has only one <i>scheduled load</i> .	
<i>Dispatchable unit identifier</i>	
maximum <i>load</i> of the <i>scheduled load</i> , to which the <i>scheduled load</i> may be <i>dispatched</i>	MW
maximum ramp rate of the <i>scheduled load</i>	MW/minute

Scheduled Network Service Data:

Data	Units of Measurement
installation/link name	
<i>Dispatchable Unit Identifier</i>	
<i>connection point</i> identifiers for terminal nodes A and B	
maximum <i>power transfer capability</i> to node A	MW
maximum <i>power transfer capability</i> to node B	MW
maximum ramp rate of <i>power transfer capability</i> of the installation	MW/minute

Ancillary Service Generating Unit and Ancillary Service Load Data:

Data	Units of Measurement
Power station/load installation information:	
<i>power station/load</i> installation name	
Ancillary service generating unit and ancillary service load information	
Note: Repeat the following items for each <i>dispatchable unit identifier</i> where there are two or more of them in the <i>power station/installation</i> .	
Unit/load name	
<i>Dispatchable unit identifier</i>	
<i>market ancillary service</i> *	
maximum <i>market ancillary service</i> capacity*	MW
minimum enablement level*	MW
maximum enablement level*	MW
maximum lower angle*	Degrees
maximum upper angle*	Degrees

Note:

For those items marked with an asterisk, repeat the block of data for each *market ancillary service* offered.

Dispatch Inflexibility Profile:

[Deleted]

Aggregation Data:

[Deleted]

Schedule 3.2 [Deleted]

Schedule 3.3 [Deleted]

CHAPTER 4

4. Power System Security

4.1 Introduction

4.1.1 Purpose

- (a) This Chapter:
 - (1) provides the framework for achieving and maintaining a secure *power system*;
 - (2) provides the conditions under which *AEMO* can intervene in the processes of the *spot market* and issue *directions* to *Registered Participants* so as to maintain or re-establish a secure and reliable *power system*;
 - (3) has the following aims:
 - (i) to detail the principles and guidelines for achieving and maintaining *power system security*;
 - (ii) to establish the processes for the assessment of the adequacy of *power system reserves*;
 - (iii) to establish processes to enable *AEMO* to plan and conduct operations within the *power system* to achieve and maintain *power system security*; and
 - (iv) to establish processes for the actual *dispatch* of *scheduled generating units*, *semi-scheduled generating units*, *scheduled loads*, *scheduled network services* and *ancillary services* by *AEMO* and for *AEMO* to *enable inertia network services* or *system strength services*.
- (b) By virtue of this Chapter and the *National Electricity Law*, *AEMO* has responsibility to maintain and improve *power system security*. This Chapter also requires the *Jurisdictional System Security Coordinator* for each *participating jurisdiction* to advise *AEMO* of the requirements of the *participating jurisdiction* regarding *sensitive loads* and priority of *load shedding* and requires *AEMO* to provide copies of the relevant *load shedding procedures* and *EFCS settings schedules* to the *Jurisdictional System Security Coordinator*.

4.2 Definitions and Principles

This rule sets out certain definitions and concepts that are relevant to this Chapter.

4.2.1 [Deleted]

4.2.2 Satisfactory Operating State

The *power system* is defined as being in a *satisfactory operating state* when:

- (a) the *frequency* at all energised *busbars* of the *power system* is within the *normal operating frequency band*, except for brief excursions outside the *normal operating frequency band* but within the *normal operating frequency excursion band*;
- (b) the *voltage* magnitudes at all energised *busbars* at any *switchyard* or *substation* of the *power system* are within the relevant limits set by the relevant *Network Service Providers* in accordance with clause S5.1.4 of schedule 5.1;
- (c) the current flows on all *transmission lines* of the *power system* are within the ratings (accounting for time dependency in the case of emergency ratings) as defined by the relevant *Network Service Providers* in accordance with schedule 5.1;
- (d) all other *plant* forming part of or impacting on the *power system* is being operated within the relevant operating ratings (accounting for time dependency in the case of emergency ratings) as defined by the relevant *Network Service Providers* in accordance with schedule 5.1;
- (e) the configuration of the *power system* is such that the severity of any potential fault is within the capability of circuit breakers to *disconnect* the faulted circuit or equipment; and
- (f) the conditions of the *power system* are stable in accordance with requirements designated in or under clause S5.1.8 of schedule 5.1.

4.2.3 Credible and non-credible contingency events and protected events

- (a) A ***contingency event*** means an event affecting the *power system* which *AEMO* expects would be likely to involve the failure or removal from operational service of one or more *generating units* and/or *transmission elements*.
- (b) A ***credible contingency event*** means a *contingency event* the occurrence of which *AEMO* considers to be reasonably possible in the surrounding circumstances including the *technical envelope*. Without limitation, examples of *credible contingency events* are likely to include:
 - (1) the unexpected automatic or manual *disconnection* of, or the unplanned reduction in capacity of, one operating *generating unit*; or
 - (2) the unexpected *disconnection* of one major item of *transmission plant* (e.g. *transmission line*, *transformer* or *reactive plant*) other than as a result of a three phase electrical fault anywhere on the *power system*.

- (c) **[Deleted]**
- (d) **[Deleted]**
- (e) A ***non-credible contingency event*** is a *contingency event* other than a *credible contingency event*. Without limitation, examples of *non-credible contingency events* are likely to include:
 - (1) three phase electrical faults on the *power system*; or
 - (2) simultaneous disruptive events such as:
 - (i) multiple *generating unit* failures; or
 - (ii) double circuit *transmission line* failure (such as may be caused by tower collapse).
- (f) A ***protected event*** means a *non-credible contingency event* that the *Reliability Panel* has declared to be a *protected event* under clause 8.8.4, where that declaration has come into effect and has not been revoked. *Protected events* are a category of *non-credible contingency event*.

4.2.3A Re-classifying contingency events

- (a) *Abnormal conditions* are conditions posing added risks to the *power system* including, without limitation, severe weather conditions, lightning, storms and bush fires.
- (b) *AEMO* must take all reasonable steps to ensure that it is promptly informed of *abnormal conditions*, and when *abnormal conditions* are known to exist *AEMO* must:
 - (1) on a regular basis, make reasonable attempts to obtain all information relating to how the *abnormal conditions* may affect a *contingency event*; and
 - (2) identify any *non-credible contingency event* which is more likely to occur because of the existence of the *abnormal conditions*.
- (c) As soon as practicable after *AEMO* identifies a *non-credible contingency event* which is more likely to occur because of the existence of *abnormal conditions*, *AEMO* must provide *Market Participants* with a notification specifying:
 - (1) the *abnormal conditions*;
 - (2) the relevant *non-credible contingency event*;
 - (3) whether *AEMO* has reclassified this *non-credible contingency event* as a *credible contingency event* under clause 4.2.3A(g);

- (4) information (other than *confidential information*) in its possession that is relevant to its consideration under clause 4.2.3A(e), the source of that information and the time that information was received or confirmed by *AEMO*;
 - (5) the time at which the notification has been issued; and
 - (6) the time at which an updated notification is expected to be issued, where this might be necessary.
- (d) *AEMO* must update a notification issued in accordance with clause 4.2.3A(c) as it becomes aware of new information that is material to its consideration under clause 4.2.3A(e), and in any event no later than the time indicated in the original notification under clause 4.2.3A(c)(6), until such time as it issues a notification specifying that the *abnormal conditions* have ceased to have a material effect on the likely occurrence of the *non-credible contingency event*.
- (e) If *AEMO* identifies a *non-credible contingency event* which is more likely to occur because of the existence of *abnormal conditions* it must, on a regular basis, consider whether the occurrence of that *non-credible contingency event* is reasonably possible, having regard to all the facts and circumstances identified in accordance with clause 4.2.3A(b).
- (f) In undertaking its consideration in accordance with clause 4.2.3A(e), *AEMO* must have regard to the criteria referred to in clause 4.2.3B.

Note:

Clause 4.2.3A(f) will not come into effect until *NEMMCO* has established the criteria referred to in clause 4.2.3B.

- (g) If, after undertaking a consideration in accordance with clause 4.2.3A(e), *AEMO* decides that the existence of the *abnormal conditions* make the occurrence of a *non-credible contingency event* reasonably possible, it must reclassify that event to be a *credible contingency event* and must notify *Market Participants* as soon as practicable.
- (h) If, after reclassifying a *non-credible contingency event* to be a *credible contingency event* in accordance with clause 4.2.3A(g), *AEMO* considers that the relevant facts and circumstances have changed so that the occurrence of that *credible contingency event* is no longer reasonably possible, *AEMO* may reclassify that *credible contingency event* to be a *non-credible contingency event*. If *AEMO* does so, it must notify *Market Participants* as soon as practicable.
- (i) Every six months, *AEMO* must issue a report setting out its reasons for all decisions to re-classify *non-credible contingency events* to be *credible contingency events* under clause 4.2.3A(g) during the relevant period. The report:

- (1) must include an explanation of how *AEMO* applied the criteria established in accordance with clause 4.2.3B for each of those decisions; and
- (2) may also include *AEMO*'s analysis of re-classification trends during the relevant period and its appraisal of the appropriateness and effectiveness of the relevant criteria that were applied in the case of each reclassification decision.

4.2.3B Criteria for re-classifying contingency events

- (a) Within six months of the commencement of this clause, *NEMMCO* must establish criteria that it must use when considering whether the existence of *abnormal conditions* make the occurrence of a *non-credible contingency event* reasonably possible under clause 4.2.3A(e).
- (b) *AEMO* must review the criteria established under clause 4.2.3B(a) every two years after the date of establishment.
- (c) *AEMO* may amend the criteria established under clause 4.2.3B(a).
- (d) In establishing, reviewing or amending the criteria under this clause, *AEMO* must:
 - (1) first consult with relevant stakeholders including *Market Participants*, *Transmission Network Service Providers*, *Jurisdictional System Security Coordinators* and relevant emergency services agencies;
 - (2) ensure that the criteria include a requirement to have regard to the particulars of any risk(s) to the *power system* associated with the various types of *abnormal conditions* that might arise; and
 - (3) *publish* the criteria on its website as soon as practicable after the criteria have been established or amended.

4.2.4 Secure operating state and power system security

- (a) The *power system* is defined to be in a *secure operating state* if, in *AEMO*'s reasonable opinion, taking into consideration the appropriate *power system security* principles described in clause 4.2.6:
 - (1) the *power system* is in a *satisfactory operating state*; and
 - (2) the *power system* will return to a *satisfactory operating state* following the occurrence of any *credible contingency event* or *protected event* in accordance with the *power system security standards*.
- (b) Without limitation, in forming the opinions described in clause 4.2.4(a), *AEMO* must:

- (1) consider the impact of each of the potentially *constrained interconnectors*; and
- (2) use the *technical envelope* as the basis of determining events considered to be *credible contingency events* at that time.

4.2.5 Technical envelope

- (a) The *technical envelope* means the technical boundary limits of the *power system* for achieving and maintaining the *secure operating state* of the *power system* for a given demand and *power system* scenario.
- (b) AEMO must determine and revise the *technical envelope* (as may be necessary from time to time) by taking into account the prevailing *power system* and *plant* conditions as described in clause 4.2.5(c).
- (c) In determining and revising the *technical envelope* AEMO must take into account matters such as:
 - (1) AEMO's forecast of total *power system load*;
 - (2) the provision of the applicable *contingency capacity reserves*;
 - (3) operation within all *plant* capabilities of *plant* on the *power system*;
 - (4) *contingency capacity reserves* available to handle any *credible contingency event*;
 - (5) advised *generation* minimum *load constraints*;
 - (6) *constraints* on *transmission networks*, including short term limitations;
 - (7) *ancillary service* requirements and *inertia network service* and *system strength service* availability;
 - (8) **[Deleted]**
 - (9) the existence of proposals for any major equipment or *plant* testing, including the checking of, or possible changes in, *transmission plant* availability; and
 - (10) applicable *performance standards*.
- (d) AEMO must, when determining the secure operating limits of the *power system*, assume that the applicable *performance standards* are being met, subject to:
 - (1) a *Registered Participant* notifying AEMO, in accordance with rule 4.15(f), that a *performance standard* is not being met; or
 - (2) AEMO otherwise becoming aware that a *performance standard* is not being met.

4.2.6 General principles for maintaining power system security

The *power system security* principles are as follows:

- (a) To the extent practicable, the *power system* should be operated such that it is and will remain in a *secure operating state*.
- (b) Following a *contingency event* (whether or not a *credible contingency event*) or a significant change in *power system* conditions, AEMO should take all reasonable actions:
 - (1) to adjust, wherever possible, the operating conditions with a view to returning the *power system* to a *secure operating state* as soon as it is practical to do so, and, in any event, within thirty minutes; or
 - (2) if any principles and guidelines have been *published* under clause 8.8.1(a)(2a), to adjust, wherever possible, the operating conditions, in accordance with such principles and guidelines, with a view to returning the *power system* to a *secure operating state* within at most thirty minutes.
- (c) *Emergency frequency control schemes* should be available and in service to:
 - (1) restore the *power system* to a *satisfactory operating state* following *protected events*; and
 - (2) significantly reduce the risk of *cascading outages* and *major supply disruptions* following significant multiple *contingency events*.
- (d) **[Deleted]**
- (e) Sufficient *system restart ancillary services* should be available in accordance with the *system restart standard* to allow the restoration of *power system security* and any necessary restarting of *generating units* following a *major supply disruption*.
- (f) Sufficient *inertia* should be available in each *inertia sub-network* to meet the applicable *inertia requirements*.
- (g) Sufficient *three phase fault level* should be maintained at each *fault level node* to meet the applicable *system strength requirements*.

4.2.7 Reliable Operating State

The *power system* is assessed to be in a *reliable operating state* when:

- (a) AEMO has not *disconnected*, and does not expect to *disconnect*, any points of *load connection* under clause 4.8.9;
- (b) no *load shedding* is occurring or expected to occur anywhere on the *power system* under clause 4.8.9; and

- (c) in AEMO's reasonable opinion the *power system* meets, and is projected to meet, the *reliability standard*, having regard to the *reliability standard implementation guidelines*.

4.2.8 Time for undertaking action

The provisions of clause 1.7.1(l) do not apply to this Chapter and an event which is required under this Chapter to occur on or by a stipulated *day* must occur on or by that *day* whether or not a *business day*.

4.3 Power System Security Responsibilities and Obligations

4.3.1 Responsibility of AEMO for power system security

The AEMO *power system security responsibilities* are:

- (a) to maintain *power system security*;
- (b) to monitor the operating status of the *power system*;
- (c) to co-ordinate the *System Operators* in undertaking certain of its activities and operations and monitoring activities of the *power system*;
- (d) to ensure that *high voltage* switching procedures and arrangements are utilised by *Network Service Providers* to provide adequate protection of the *power system*;
- (e) to assess potential infringement of the *technical envelope* or *power system operating procedures* which could affect the security of the *power system*;
- (f) to ensure that the *power system* is operated within the limits of the *technical envelope*;
- (g) to ensure that all *plant* and equipment under its control or co-ordination is operated within the appropriate operational or emergency limits which are advised to AEMO by the respective *Network Service Providers* or *Registered Participants*;
- (h) to assess the impacts of technical and any operational *plant* on the operation of the *power system*;
- (i) to arrange the *dispatch* of *scheduled generating units*, *semi-scheduled generating units*, *scheduled loads*, *scheduled network services* and *ancillary services*(including *dispatch* by remote control actions or specific directions) in accordance with the *Rules*, allowing for the dynamic nature of the *technical envelope*;
- (j) to determine any potential *constraint* on the *dispatch* of *generating units*, *loads*, *market network services* and *ancillary services* and to assess the effect of this *constraint* on the maintenance of *power system security*;

- (k) to assess the availability and adequacy, including the dynamic response, of *contingency capacity reserves* and *reactive power reserves* in accordance with the *power system security standards* and to ensure that appropriate levels of *contingency capacity reserves* and *reactive power reserves* are available:
 - (1) to ensure the *power system* is, and is maintained, in a *satisfactory operating state*; and
 - (2) to arrest the impacts of a range of significant multiple *contingency events* (affecting up to 60% of the total *power system load*) or *protected events* to allow a prompt restoration or recovery of *power system security*, taking into account under-frequency initiated *load shedding* capability provided under *connection agreements*, by *emergency frequency control schemes* or otherwise;
- (l) to monitor demand and *generation* capacity in accordance with the *reliability standard implementation guidelines* and, if necessary, initiate action in relation to a *relevant AEMO intervention event*;
- (m) to publish as appropriate, information about the potential for, or the occurrence of, a situation which could significantly impact, or is significantly impacting, on *power system security*, and advise of any *low reserve* condition for the relevant periods determined in accordance with the *reliability standard implementation guidelines*;
- (n) to refer to *Registered Participants*, as *AEMO* deems appropriate, information of which *AEMO* becomes aware in relation to significant risks to the *power system* where actions to achieve a resolution of those risks are outside the responsibility or control of *AEMO*;
- (o) to utilise resources and services provided or procured as *ancillary services*, *system strength services* or *inertia network services* or otherwise to maintain or restore the *satisfactory operating state* of the *power system*;
- (p) to procure adequate *system restart ancillary services* in accordance with clause 3.11.9 to enable *AEMO* to co-ordinate a response to a *major supply disruption*;
- (pa) to coordinate the provision of *emergency frequency control schemes* by *Network Service Providers* and to determine the settings and intended sequence of response by those schemes;
- (pb) to determine the boundaries of *inertia sub-networks* and the *inertia requirements* for each *inertia sub-network* and to *enable inertia network services*;
- (pc) to determine the *system strength requirements* for each *region* and to *enable system strength services*;

- (q) to interrupt, subject to clause 4.3.2(l), *Registered Participant connections* as necessary during emergency situations to facilitate the re-establishment of the *satisfactory operating state* of the power system;
- (r) to issue a *direction* or *clause 4.8.9 instruction* (as necessary) to any *Registered Participant*;
- (s) to co-ordinate and direct any rotation of widespread interruption of demand in the event of a major *supply* shortfall or disruption;
- (t) to liaise with *participating jurisdictions* should there be a need to manage an extensive disruption, including the use of emergency services powers in a *participating jurisdiction*;
- (u) to determine the extent to which the levels of *contingency capacity reserves* and *reactive power reserves* are or were appropriate through appropriate testing, auditing and simulation studies;
- (v) to investigate and review all major *power system* operational incidents and to initiate action plans to manage any abnormal situations or significant deficiencies which could reasonably threaten *power system security*. Such situations or deficiencies include without limitation:
 - (1) *power system frequencies* outside those specified in the definition of *satisfactory operating state*;
 - (2) *power system voltages* outside those specified in the definition of *satisfactory operating state*;
 - (3) actual or potential *power system* instability; and
 - (4) unplanned/unexpected operation of major *power system* equipment; and
- (w) to ensure that each *System Operator* satisfactorily interacts with *AEMO*, other *System Operators* and *Distribution System Operators* for both *transmission* and *distribution network* activities and operations, so that *power system security* is not jeopardised by operations on the *connected transmission networks* and *distribution networks*.

4.3.2 System security

- (a) *AEMO* must use its reasonable endeavours, as permitted under the *Rules*, including through the provision of appropriate information to *Registered Participants* to the extent permitted by law and under the *Rules*, to achieve the *AEMO power system security responsibilities* in accordance with the *power system security* principles described in clause 4.2.6.
- (b) Where an obligation is imposed on *AEMO* under this Chapter to arrange or control any act, matter or thing or to ensure that any other person undertakes or refrains from any act, that obligation is limited to a requirement for *AEMO* to use reasonable endeavours as permitted under the *Rules*, including

to give such directions as are within its powers, to comply with that obligation.

- (c) If *AEMO* fails to arrange or control any act, matter or thing or the acts of any other person notwithstanding the use of *AEMO*'s reasonable endeavours, *AEMO* will not be taken to have breached such obligation.
- (d) *AEMO* must make accessible to *Registered Participants* such information as:
 - (1) *AEMO* considers appropriate;
 - (2) *AEMO* is permitted to disclose in order to assist *Registered Participants* to make appropriate *market* decisions; and
 - (3) *AEMO* is able to disclose to enable *Registered Participants* to consider initiating procedures to manage the potential risk of any necessary action by *AEMO* to restore or maintain *power system security*,

provided that, in doing so, *AEMO* must use reasonable endeavours to ensure that such information is available to those *Registered Participants* who request the information on equivalent bases.

- (e) The *Jurisdictional System Security Coordinator* for a *participating jurisdiction* may nominate an individual to be the principal point of contact with *AEMO* for the *Jurisdictional System Security Coordinator*.
- (f) The *Jurisdictional System Security Coordinator* for each *participating jurisdiction* must provide *AEMO* with:
 - (1) a schedule of *sensitive loads* in that jurisdiction, specifying:
 - (i) the priority, in terms of security of *supply*, that each *load* specified in the schedule has over the other *loads* specified in the schedule; and
 - (ii) the *loads* (if any) for which the approval of the *Jurisdictional System Security Coordinator* must be obtained by *AEMO* under clause 4.3.2(l); and
 - (2) a schedule setting out the order in which *loads* in the *participating jurisdiction*, other than *sensitive loads*, may be shed by *AEMO* for the purposes of undertaking any *load shedding* under rule 4.8.
- (g) A *Jurisdictional System Security Coordinator* may from time to time amend the schedules provided to *AEMO* under clause 4.3.2(f) and must provide to *AEMO* a copy of the amended schedules.
- (h) *AEMO* must develop, update and maintain:

- (1) a set of procedures for each *participating jurisdiction* under which *loads* will be shed (by means other than an *emergency frequency control scheme* included in an *EFCS settings schedule*) and restored in accordance with the priorities set out in the schedules for that *participating jurisdiction* (which procedures for a *participating jurisdiction* shall be known as the *load shedding procedures* for that jurisdiction); and
 - (2) schedules for each *participating jurisdiction* specifying, for each *emergency frequency control scheme* affecting each *region* in that *participating jurisdiction*, settings for operation of the scheme including the matters specified in paragraphs (m) to (p) (which schedule for a *participating jurisdiction* shall be known as the *EFCS settings schedule* for that jurisdiction).
- (ha) In developing and updating *EFCS settings schedules*, AEMO must consult with:
- (1) affected *Network Service Providers*;
 - (2) the relevant *Jurisdictional System Security Coordinators*, in the case of information in the schedule relating to an *under frequency scheme*; and
 - (3) affected *Generators* in the case of information in the schedule relating to an *over frequency scheme*.
- (i) AEMO must provide the *Jurisdictional System Security Coordinator* for a *participating jurisdiction* with a copy of the *load shedding procedures* and the *EFCS settings schedule* for that *participating jurisdiction*, as amended from time to time.
- (j) The *load shedding procedures* and the *EFCS settings schedule* for a *participating jurisdiction* must be consistent with the schedules of the *participating jurisdiction* provided under clause 4.3.2(f) and must, without limitation, include a requirement that:
- (1) automatic *disconnection* of a *sensitive load* under clause 4.3.5(a) is not to occur until the occurrence of a specified *power system frequency* referred to in the *load shedding procedures* or *EFCS settings schedule*;
 - (2) any such *sensitive load* (or part thereof) which would otherwise have been part of a block of *interruptible load* in an *under-frequency* band specified in clause 4.3.5(b), must be replaced in that band in relation to the *participating jurisdiction* with an equivalent amount of *interruptible load* nominated by other *Market Customers* in the relevant *participating jurisdiction*;
 - (3) after *supply* is interrupted to a *load*, *supply* to that *load* must be restored as soon as this can be achieved and in accordance with the schedules of *loads* referred to in clause 4.3.2(f); and

- (4) in the case of the *load shedding procedures*, in the event of a major *supply* shortfall, the rotation of any *load shedding* requirements within *regions* (or parts of *regions*) in the *participating jurisdiction* must be in accordance with the *load shedding procedures*.
- (k) Notwithstanding any other provision of the *Rules*, *AEMO* must use its reasonable endeavours to ensure that the *power system* is operated in a manner that maintains security of *supply* to any *sensitive loads* prescribed by the *Jurisdictional System Security Coordinator* for each *participating jurisdiction* under clause 4.3.2(f).
- (l)
 - (1) Notwithstanding any other provision of the *Rules*, in the event that *AEMO*, in its reasonable opinion for reasons of public safety or for *power system security*, needs to interrupt *supply* to any *sensitive loads*, *AEMO* may only give a direction requiring that interruption:
 - (i) in accordance with the *load shedding procedures*; and
 - (ii) if it is a *sensitive load* of a type described in clause 4.3.2(f)(1)(ii), once the *Jurisdictional System Security Coordinator* for the relevant *participating jurisdiction* has given *AEMO* its approval (which approval must not be unreasonably withheld).
 - (2) Other than to ensure the maintenance of *power system security* or public safety, after *disconnection*, notwithstanding any other provision of the *Rules*, *AEMO* must not take any steps to prevent the reconnection of a *sensitive load* of the type described in clause 4.3.2(f)(1)(ii) without the approval of the *Jurisdictional System Security Coordinator* for the relevant *participating jurisdiction* (which approval must not be unreasonably withheld).
 - (3) *AEMO* must seek the approval of the relevant *Jurisdictional System Security Coordinator* for the order in which a *sensitive load* is to be shed and restored under an *EFCS settings schedule* (which approval must not be unreasonably withheld).
- (m) For each *under frequency scheme*, the applicable *EFCS settings schedule* must set out the manner in which *loads* are to be shed and restored.
- (n) For each *over frequency scheme*, the applicable *EFCS setting schedule* must set out the manner in which *generating units* will be interrupted or have output reduced.
- (o) *AEMO* must determine the matters referred to in paragraph (n) in a manner *AEMO* considers is best calculated to be consistent with the *power system security* principles in clause 4.2.6. To that end, *AEMO* may determine a sequence and settings that will:

- (1) first, restore the *power system* to a *secure operating state*; and
 - (2) then, restore the *power system* to a *reliable operating state*.
- (p) Subject to paragraph (i), *EFCS settings schedules* are *confidential information*.

4.3.3 The role of System Operators

- (a) For the purpose of complying with its obligations under clause 4.3.2, *AEMO* may, from time to time, in addition to any other power or right under the *Rules*:
- (1) engage such agents or appoint such delegates as it considers appropriate to carry out on its behalf some or all of its rights, functions and obligations under this Chapter (such persons being known as *System Operators* upon registration with *AEMO*); and
 - (2) organise, enter into and manage any contractual arrangements with appropriately competent service providers.
- (b) *AEMO* must make accessible to *Registered Participants* information as to:
- (1) the engagement or appointment of any agent, delegate or service provider under clause 4.3.3;
 - (2) the identity of that agent, delegate or service provider; and
 - (3) the scope of the engagement or appointment, including without limitation, the activities in relation to which the engagement or appointment applies.
- (c) A *Registered Participant* must ensure that, where *AEMO* has engaged or appointed an agent, delegate or service provider under clause 4.3.3 in relation to certain of its rights, functions or obligations, any communications from the *Registered Participant* to *AEMO* under this Chapter concerning the rights, functions or obligations within the scope of the agent's, delegate's or service provider's engagement or appointment are made through that agent, delegate or service provider to the extent notified to the *Registered Participant* by *AEMO*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) A *System Operator* must carry out the rights, functions and obligations in respect of which it has been engaged or appointed by *AEMO* in accordance with the provisions of the *Rules*.

- (e) A *System Operator* must, to the extent that the *System Operator* is aware or ought reasonably to have been aware, keep *AEMO* fully and timely informed as to:

- (1) the state of the security of the *power system*;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (2) any present or anticipated risks to *power system security*; and

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (3) any action contemplated or initiated to address a risk to *power system security* or to restore or maintain the *power system* in a *satisfactory operating state*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (f) *AEMO* must ensure that any agent engaged, or delegate appointed, under clause 4.3.3(a)(1) is registered by it as a *System Operator*.
- (g) Notwithstanding that *AEMO* may have engaged or appointed an agent, delegate or service provider under clause 4.3.3 to carry out a right, function or obligation of *AEMO*, *AEMO* remains liable under the *Rules* for performance of that right, function or obligation.

4.3.4 Network Service Providers

- (a) Each *Network Service Provider* must use reasonable endeavours to exercise its rights and obligations in relation to its *networks* so as to co-operate with and assist *AEMO* in the proper discharge of the *AEMO power system security responsibilities*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) Each *Network Service Provider* must use reasonable endeavours to ensure that *interruptible loads* are provided as specified in clause 4.3.5 and clause S5.1.10 of schedule 5.1 (including without limitation, through the inclusion of appropriate provisions in *connection agreements*).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b1) Each *Network Service Provider* must, in accordance with clause S5.1.10.1a of schedule 5.1, cooperate with *AEMO* in relation to, design, procure, commission, maintain, monitor, test, modify and report to *AEMO* in respect of, each *emergency frequency control scheme* which is applicable in respect of the *Network Service Provider's transmission or distribution system*.
- (b2) Where an *EFCS settings schedule* applies to an *emergency frequency control scheme*, a *Network Service Provider* must only apply, or allow the application of, settings for the *emergency frequency control scheme* that are consistent with the applicable *EFCS settings schedule*.
- (c) Each *Network Service Provider* must arrange and maintain, in accordance with the standards described in clause 4.3.4(e), controls, monitoring and secure communication systems to facilitate a manually initiated, rotational *load shedding* and restoration process which may be necessary if there is, in *AEMO's* opinion, a prolonged major *supply* shortage or extreme *power system* disruption.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) Each *Network Service Provider* must advise *AEMO* of any *ancillary services* or similar services provided under any *connection agreement* or *network support agreement* to which it is a party, and in respect of *network support and control ancillary services* provided under any *network support agreement* must provide to *AEMO* and update *AEMO* if there has been a material change to the information provided to *AEMO*, details of the following:
 - (1) a description of the *network support and control ancillary service*, including:
 - (i) the nature of the *network support and control ancillary service*;
 - (ii) the purpose for which the *network support and control ancillary service* has been acquired;
 - (iii) *connection points* at which the *network support and control ancillary service* is to be provided (to the extent that this information can be reasonably anticipated and provided);
 - (iv) the quantity or range of quantity of the *network support and control ancillary service* that can be provided, described in a manner relevant to the stated purpose (to the extent that this information can be reasonably anticipated and provided);

- (v) the period of any notice that has to be given to the provider of the *network support and control ancillary service* for it to be enabled;
 - (vi) the response time to any instruction for use once the *network support and control ancillary service* has been enabled; and
 - (vii) the communication protocols related to the enabling and use of the *network support and control ancillary service* and the notification of changes to its availability;
- (2) the availability of the *network support and control ancillary service*, including:
 - (i) the period over which the *network support and control ancillary service* will be available;
 - (ii) any possible restrictions on the availability of the *network support and control ancillary service*; and
 - (iii) whether the *network support and control ancillary service* is available for the use of parties other than the *Network Service Provider*;
- (3) advice on any changes to the formulation of network limits to reflect the enabling or use of the *network support and control ancillary service*; and
- (4) if the *network support and control ancillary service* is to be *dispatched* by AEMO, the form of instructions for the *dispatch* of the *network support and control ancillary service* by AEMO.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d1) Where *NSCAS* is to be acquired by the *Network Service Provider*, the *Network Service Provider* must develop, in consultation with AEMO, the arrangements for the enabling and use of the *network support and control ancillary service*, and those arrangements must be consistent with meeting the relevant *NSCAS need*.
- (d2) A *Network Service Provider* who enters into a *network support agreement* must negotiate in good faith with AEMO on the form of instructions it will provide to AEMO under paragraph (d)(4) to *dispatch* the *network support and control ancillary service* to ensure those instructions are both comprehensive and practicable for AEMO to implement in *central dispatch* if required.
- (e) AEMO must develop, and may amend, standards in consultation with *Network Service Providers* in accordance with the *Rules consultation*

procedures which must be met by *Network Service Providers* in arranging and maintaining the controls, monitoring and secure communication systems referred to in clause 4.3.4(c).

- (f) Until the standards contemplated by clause 4.3.4(e) are issued by *AEMO*, each *Network Service Provider* must maintain the control, monitoring and secure communication systems referred to in clause 4.3.4(c) that were in place at 13 December 1998 so as to achieve substantially the same performance and functionality as they did over the 12 months prior to 13 December 1998.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (g) Each *Network Service Provider* must plan or operate its *transmission system* or *distribution system* in accordance with the *power system* stability guidelines described in clause 4.3.4(h).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (g1) Each *Network Service Provider* must ensure that emergency controls are installed in accordance with clause S5.1.8 of schedule 5.1.
- (h) *AEMO* must develop, and may amend, guidelines for *power system* stability but only in consultation with *Registered Participants* in accordance with the *Rules consultation procedures*, and must *publish* the guidelines for *power system* stability.
- (i) The *power system* stability guidelines developed in accordance with clause 4.3.4(h) must detail the policies governing *power system* stability so as to facilitate the operation of the *power system* within stable limits.
- (j) Each *Transmission Network Service Provider* that is an *Inertia Service Provider* must make *inertia network services* available to *AEMO* in accordance with clause 5.20B.4(b).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (k) Each *Transmission Network Service Provider* that is an *Inertia Service Provider* must give *AEMO* information about *inertia support activities* and *inertia network services* made available by the *Inertia Service Provider* in accordance with clauses 5.20B.5 and 5.20B.6 and must update *AEMO* if there is a material change to that information.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (l) Each *Transmission Network Service Provider* that is a *System Strength Service Provider* must make *system strength services* available to AEMO in accordance with clause 5.20C.3(b).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (m) Each *Transmission Network Service Provider* that is a *System Strength Service Provider* must give AEMO information about *system strength services* made available by the *System Strength Service Provider* in accordance with clause 5.20C.4 and must update AEMO if there is a material change to that information.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (n) If in AEMO's reasonable opinion, there is a risk that an alteration to a *network element*, or the *connection* of any new or additional equipment to a *network*, will:
 - (1) adversely affect *network capability*, *power system security*, quality or reliability of *supply*, *inter-regional power transfer capability*; or
 - (2) the use of a *network* by a *Network User*,

AEMO may request the relevant *Network Service Provider* to provide the information specified in paragraph (o) and the relevant *Network Service Provider* must provide the information requested.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (o) For the purposes of paragraph (n), AEMO may request the relevant *Network Service Provider* to provide the following information:
 - (1) to AEMO and any other relevant *Network Service Provider*:
 - (i) information about the *protection systems* of the equipment;
 - (ii) information about the control systems of the equipment including:

- (A) a set of functional block diagrams, including all functions between feedback signals and output;
 - (B) the parameters of each functional block, including all settings, gains, time constants, delays, deadbands and limits;
 - (C) the characteristics of non-linear elements;
 - (D) encrypted models in a form suitable for the software simulation products nominated by AEMO in the *Power System Model Guidelines*;
- (iii) any other information specified in the *Power System Model Guidelines*, *Power System Design Data Sheet* and *Power System Setting Data Sheet*;
- (2) to AEMO, model source code (in the circumstances required by the *Power System Model Guidelines*) associated with the model in subparagraph (ii)(D) in an unencrypted form suitable for at least one of the software simulation products nominated by AEMO in the *Power System Model Guidelines*, and in a form that would allow conversion for use with other software simulation products nominated by AEMO in the *Power System Model Guidelines*.
- (p) The information provided under paragraph (o) must contain sufficient detail for AEMO and any other relevant *Network Service Provider(s)* to perform *power system* simulation studies in accordance with the requirements and circumstances specified in the *Power System Model Guidelines*.
- (q) All information provided to AEMO and the relevant *Network Service Provider(s)* under paragraph (o) must be treated as *confidential information* by those recipients.

4.3.5 Market Customer obligations

- (a) All *Market Customers* having expected peak demands at *connection points* in excess of 10 MW, must provide automatic *interruptible load* of the type described in clause S5.1.10 of schedule 5.1. The level of this automatic *interruptible load* must be a minimum of 60% of their expected demand, or such other minimum *interruptible load* level as may be periodically determined by the *Reliability Panel*, to be progressively automatically *disconnected* following the occurrence of a *power system under-frequency* condition described in the *power system security standards*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) *Market Customers* must provide their *interruptible load* in manageable blocks spread over a number of steps within under-frequency bands from 49.0 Hz down to 47.0 Hz as nominated by *AEMO*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) Any *load shedding* capability the subject of an *ancillary services agreement* or *enabled* as a *market ancillary service* can be counted as automatic *interruptible load* provided for the purposes of clause 4.3.5.

4.4 Power System Frequency Control

4.4.1 Power system frequency control responsibilities

AEMO must use its reasonable endeavours to:

- (a) control the *power system frequency*; and
- (b) ensure that the *frequency operating standards* set out in the *power system security standards* are achieved.

4.4.2 Operational frequency control requirements

To assist in the effective control of *power system frequency* by *AEMO* the following provisions apply:

- (a) *AEMO* may give *dispatch instructions* in respect of *scheduled generating units*, *semi-scheduled generating units*, *scheduled loads*, *scheduled network services* and *market ancillary services* pursuant to rule 4.9;
- (b) Each *Generator* must ensure that all of its *generating units* meet the technical requirements for frequency control in clause S5.2.5.11;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) *AEMO* must use its reasonable endeavours to arrange to be available and specifically allocated to *regulating duty* such *generating plant* as *AEMO* considers appropriate which can be automatically controlled or directed by *AEMO* to ensure that all normal *load* variations do not result in *frequency* deviations outside the limitations specified in clause 4.2.2(a); and
- (d) *AEMO* must use its reasonable endeavours to ensure that adequate *facilities* are available and are under the direction of *AEMO* to allow the managed recovery of the *satisfactory operating state* of the *power system*.

4.4.3 Generator protection requirements

Generators must, in accordance with schedule 5.2 and Chapter 5, provide any necessary automatically initiated protective device or systems to protect their *plant* and associated *facilities* against abnormal *voltage* and extreme *frequency* excursions of the *power system*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

4.4.4 Instructions to enable inertia network services

- (a) Where a *contingency event* that would result in the *islanding* of an *inertia sub-network* has been classified as a *credible contingency event* or defined as a *protected event*:
 - (1) *AEMO* may require a range and quantity of *inertia network services* to be *enabled* that will provide *inertia* to the *inertia sub-network* to the level required under subparagraph (2) while the *contingency event* remains classified or defined in that way; and
 - (2) the level of *inertia* referred to in subparagraph (1) is:
 - (i) the *minimum threshold level of inertia* for the *inertia sub-network*; or
 - (ii) if the *minimum threshold level of inertia* for the *inertia sub-network* has been adjusted for *inertia support activities* under clause 5.20B.5(a), that adjusted level of *inertia*.
- (b) Where an *inertia sub-network* is *islanded*:
 - (1) *AEMO* may *enable* a range and quantity of *inertia network services* that will provide *inertia* to the *inertia sub-network* to the level required under subparagraph (2) while the *inertia sub-network* remains *islanded*; and
 - (2) the level of *inertia* referred to in subparagraph (1) is:
 - (i) the *secure operating level of inertia* for the *inertia sub-network*; or
 - (ii) if the *secure operating level of inertia* for the *inertia sub-network* has been adjusted for *inertia support activities* under clause 5.20B.5(a), that adjusted level of *inertia*.
- (c) In selecting the *inertia network services* to be *enabled* under paragraph (a) or (b), *AEMO* must use reasonable endeavours to select services in the order of priority specified by the *Inertia Service Provider* in its schedule of *inertia network services* given to *AEMO* under clause 5.20B.6(a).

- (d) For the purposes of paragraphs (a) and (b), *AEMO* may at any time give an instruction to an *Inertia Service Provider* who is providing *inertia network services* or a *Registered Participant* who has agreed with an *Inertia Service Provider* to provide *inertia network services* stating that *AEMO* requires *inertia network services* to be *enabled*. Where *inertia network services* are provided by an *inertia generating unit*, the instruction must be given in accordance with the procedures for giving *dispatch instructions* under the *Rules*. Otherwise, the instruction must be given in accordance with the arrangements for giving instructions applicable to the *inertia network service* approved by *AEMO* under clause 5.20B.6(e).
- (e) *AEMO* may at any time give an instruction stating that *AEMO* requires the provision of an *inertia network service* to cease. The instruction must be given in the manner provided for in paragraph (d).
- (f) An instruction to *enable* or cease providing *inertia network services* must include:
 - (1) specific reference to the *inertia network service* to which the instruction applies;
 - (2) the time the instruction is issued; and
 - (3) the time at which the service is to be *enabled* or cease, if that is different from the time the instruction is issued.
- (g) An *Inertia Service Provider* or *Registered Participant* providing *inertia network services* must comply with an instruction given under paragraph (d) or (e).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (h) An *Inertia Service Provider* or *Registered Participant* providing *inertia network services* must ensure that appropriate personnel or electronic facilities are available at all times to receive and immediately act upon instructions issued by *AEMO* to *enable* the *inertia network service* or cease providing it.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

4.4.5 Instructions to enable system strength services

- (a) *AEMO* may at any time *enable* a range and quantity of *system strength services* to maintain the minimum *three phase fault level* at a *fault level node* when the *three phase fault level* at the *fault level node* would

otherwise be below the minimum *three phase fault level* or when reasonably considered necessary by *AEMO* to maintain the *power system* in a *secure operating state*.

- (b) In selecting the *system strength services* to be *enabled* under paragraph (a), *AEMO* must use reasonable endeavours to select services in the order of priority specified by the *System Strength Service Provider* in its schedule of *system strength services* given to *AEMO* under clause 5.20C.4(a).
- (c) For the purposes of paragraph (a), *AEMO* may at any time give an instruction to a *System Strength Service Provider* who is providing *system strength services* or a *Registered Participant* who has agreed with a *System Strength Service Provider* to provide *system strength services* stating that *AEMO* requires *system strength services* to be *enabled*. Where the *system strength services* are provided by a *system strength generating unit*, the instruction must be given in accordance with the procedures for giving *dispatch instructions* under the *Rules*. Otherwise, the instruction must be given in accordance with the arrangements for giving instructions applicable to the *system strength service* approved by *AEMO* under clause 5.20C.4(e).
- (d) *AEMO* may at any time give an instruction stating that *AEMO* requires the provision of a *system strength service* to cease. The instruction must be given in the manner provided for in paragraph (c).
- (e) An instruction to *enable* or cease providing *system strength services* must include:
 - (1) specific reference to the *system strength service* to which the instruction applies;
 - (2) the time the instruction is issued; and
 - (3) the time at which the service is to be *enabled* or cease, if that is different from the time the instruction is issued.
- (f) A *System Strength Service Provider* or a *Registered Participant* providing *system strength services* must comply with an instruction given under paragraph (c) or (d).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (g) A *System Strength Service Provider* or a *Registered Participant* providing *system strength services* must ensure that appropriate personnel or electronic facilities are available at all times to receive and immediately act upon instructions issued by *AEMO* to enable the *system strength service* or cease providing it.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

4.5 Control of Power System Voltage

4.5.1 Power system voltage control

- (a) *AEMO* must determine the adequacy of the capacity of the *power system* to produce or absorb *reactive power* in the control of the *power system voltages*.
- (b) *AEMO*, in consultation with *Network Service Providers*, must assess and determine the limits of the operation of the *power system* associated with the avoidance of *voltage* failure or collapse under any *credible contingency event* or *protected event* scenario.
- (c) The limits of operation of the *power system* must be translated by *AEMO*, in consultation with *Network Service Providers*, into key location operational *voltage* settings or limits, *transmission line* capacity limits, *reactive power* production (or absorption) capacity or other appropriate limits to enable their use by *AEMO* in the maintenance of *power system security*.
- (d) The determination referred to in clause 4.5.1(b) must include a review of the dynamic stability of the *voltage* of the *power system*.
- (e) *AEMO* must use its reasonable endeavours to maintain *voltage* conditions throughout the *power system* so that the *power system* remains in a *satisfactory operating state*.
- (f) *AEMO* must use reasonable endeavours to arrange the provision of *reactive power facilities* and *power system voltage* stabilising facilities through:
 - (1) *ancillary services agreements* in accordance with rule 3.11; or
 - (2) negotiation and agreement with appropriate *Network Service Providers* on the use of their *networks* and the provision of *ancillary services* under *network support agreements*; or
 - (3) obligations on the part of *Registered Participants* under their *connection agreements*.
- (g) Without limitation, such *reactive power facilities* may include:
 - (1) *synchronous generator voltage controls* (rotor current adjustment) usually associated with *tap-changing transformers*;
 - (2) *synchronous condensers* (compensators);

- (3) *static VAR compensators (SVC);*
- (4) *shunt capacitors;*
- (5) *shunt reactors.*

4.5.2 Reactive power reserve requirements

- (a) *AEMO must use its reasonable endeavours to ensure that sufficient reactive power reserve is available at all times to maintain or restore the power system to a satisfactory operating state after the most critical contingency event as determined by previous analysis or by periodic contingency analysis by AEMO.*
- (b) *If voltages are outside acceptable limits, and the means of voltage control set out in this rule 4.5 are exhausted, AEMO must take all reasonable actions, including to direct changes to demand (through selective load shedding from the power system), additional generation operation or reduction in the transmission line flows but only to the extent necessary to restore the voltages to within the relevant limits. A Registered Participant must comply with any such direction.*

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

4.5.3 Audit and testing

AEMO must arrange, co-ordinate and supervise the conduct of appropriate tests to assess the availability and adequacy of the provision of reactive power to control and maintain power system voltages under both satisfactory operating state and contingency event conditions.

4.6 Protection of Power System Equipment

4.6.1 Power system fault levels

- (a) *AEMO, in consultation with Network Service Providers, must:*
 - (1) *determine the fault levels at all busbars of the power system as described in clause 4.6.1(b); and*
 - (2) *determine the three phase fault level at fault level nodes.*
- (b) *AEMO must ensure that there are processes in place that will allow the determination of fault levels for normal operation of the power system and in anticipation of all credible contingency events and protected events that AEMO considers may affect the configuration of the power system, so that AEMO can identify:*

- (1) any *busbar* which could potentially be exposed to a fault level which exceeds the fault *current ratings* of the circuit breakers associated with that *busbar*; and
- (2) any *fault level node* where the *three phase fault level* is likely to be below the minimum *three phase fault level*.

4.6.2 Power system protection co-ordination

AEMO must use its reasonable endeavours to co-ordinate in consultation with the *Network Service Providers*, the protection of *transmission system plant* and equipment that *AEMO* reasonably considers could affect *power system security*.

4.6.3 Audit and testing

AEMO must use its reasonable endeavours to co-ordinate such inspections and tests as *AEMO* thinks appropriate to ensure that the protection of the *power system* is adequate to protect against damage to *power system plant* and equipment.

4.6.4 Short-term thermal ratings of power system

- (a) *AEMO* may act so as to use, or require or recommend actions which use, the full extent of the thermal ratings of *transmission elements* to maintain *power system security*, including the short-term ratings (being time dependent ratings), as defined by the *Network Service Providers* from time to time.
- (b) *AEMO* must use its reasonable endeavours not to exceed the ratings defined by the *Network Service Providers* and not to require or recommend action which causes those ratings to be exceeded, to the extent that *AEMO* is or ought reasonably to be aware of such ratings.

4.6.5 Partial outage of power protection systems

- (a) Where there is an *outage* of one *protection system* of a *transmission line*, *AEMO* must determine, in consultation with the relevant *Network Service Provider*, the most appropriate action. Depending on the circumstances the determination may be:
 - (1) to leave the *transmission element* in service for a limited duration;
 - (2) to take the *transmission element* out of service immediately;
 - (3) to install a temporary *protection system*;
 - (4) to accept a degraded performance from the *protection system*, with or without additional operational measures or temporary protection measures to minimise *power system* impact; or
 - (5) to operate the *transmission element* at a lower capacity.

- (b) If there is an *outage* of both *protection systems* on a *transmission line* and *AEMO* determines this to be an unacceptable risk to *power system security*, *AEMO* must take the *transmission element* out of service as soon as possible and advise the appropriate *Network Service Provider* immediately this action is undertaken.
- (c) The *Network Service Provider* must comply with a determination made by *AEMO* under this clause 4.6.5 unless, in the reasonable opinion of the *Network Service Provider*, it would threaten the safety of any person or cause material damage.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

4.6.6 System strength impact assessment guidelines

- (a) *AEMO* must make, *publish* and may amend *system strength impact assessment guidelines* that set out the methodology to be used by *Network Service Providers* when undertaking *system strength impact assessments* under clause 5.3.4B in relation to a proposed new *connection* of a *generating system* or *market network service facility* or an alteration to a *generating system* to which clause 5.3.9 applies.
- (b) The *system strength impact assessment guidelines* must:
 - (1) provide for a two-stage assessment process comprising:
 - (i) a preliminary assessment to screen for the need for a full assessment; and
 - (ii) a full assessment;
 - (2) require the full assessment to be carried out using a *power system* model that is reasonably appropriate for conducting *system strength impact assessments* and applicable to the location the *transmission network* or *distribution network* at which the *facility* is or may be *connected* and specified by *AEMO* from time to time for this purpose;
 - (3) exclude from the assessment of an *adverse system strength impact* the impact on any *protection system* for a *transmission network* or *distribution network*;
 - (4) provide guidance about the different *network* conditions and *dispatch* patterns and other relevant matters that should be examined when undertaking a full assessment;
 - (5) specify the nature of the impacts that *AEMO* considers to be *adverse system strength impacts* and that must be avoided or overcome by undertaking *system strength connection works* or implementing a *system strength remediation scheme* in accordance with clause 5.3.4B;

- (6) provide guidance about the matter that must be considered when determining whether a *connection* or alteration will result in an *adverse system strength impact*;
 - (7) include if applicable any thresholds below which an impact may be disregarded when determining the need for a *system strength remediation scheme* or *system strength connection works* under clause 5.3.4B; and
 - (8) provide general guidance about options for *system strength remediation schemes* and *system strength connection works*.
- (c) Subject to paragraph (d), *AEMO* must comply with the *Rules consultation procedures* when making or amending the *system strength impact assessment guidelines*.
- (d) *AEMO* may make minor or administrative amendments to the *system strength impact assessment guidelines* without complying with the *Rules consultation procedures*.
- (e) *AEMO* must provide the model referred to in subparagraph (b)(2) to a *Local Network Service Provider* or, subject to paragraph (f), to a *Generator* or *Connection Applicant* who requests the model in connection with a *system strength impact assessment*.
- (f) If *AEMO* receives a request under paragraph (e) from a *Generator* or a *Connection Applicant*:
 - (1) *AEMO* must treat the request as if it were information reasonably required by a *Registered Participant* under clause 3.13.3(k)(2) and *AEMO* is only required to provide the model referred to in subparagraph (b)(2) (or the source code for that model) in the form contemplated by clause 3.13.3(l)(2); and
 - (2) *AEMO* may require a *Connection Applicant* who is not a *Registered Participant* to give an undertaking in a form satisfactory to *AEMO* to comply with rule 8.6 as if the *Connection Applicant* were a *Registered Participant* as a condition of providing a model to the *Connection Applicant* under paragraph (e).

4.7 Power System Stability Co-ordination

4.7.1 Stability analysis co-ordination

- (a) *AEMO* must, in cooperation with the relevant *Network Service Providers*, apply the *power system* stability guidelines described in clause 4.3.4(h) to the conduct of all necessary calculations associated with the stable operation of the *power system* and use its reasonable endeavours to coordinate the determination of the settings of equipment used to maintain *power system* stability. The *Network Service Providers* must submit to *AEMO* for approval

the settings of any *transmission* equipment used to maintain the stable operation of the *power system*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) *AEMO* must arrange and endorse the installation of *power system* devices which are approved by *AEMO* to be necessary to assist the stable operation of the *power system*.

4.7.2 Audit and testing

AEMO must arrange, co-ordinate and supervise the conduct of such inspections and tests as it deems appropriate to assess the availability and adequacy of the devices installed to maintain *power system* stability.

4.8 Power System Security Operations

4.8.1 Registered Participants' advice

A *Registered Participant* must promptly advise *AEMO* or a relevant *System Operator* at the time that the *Registered Participant* becomes aware, of any circumstance which could be expected to adversely affect the secure operation of the *power system* or any equipment owned or under the control of the *Registered Participant* or a *Network Service Provider*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

4.8.2 Protection or control system abnormality

- (a) If a *Registered Participant* becomes aware that any relevant *protection system* or *control system* is defective or unavailable for service, that *Registered Participant* must advise *AEMO*. If *AEMO* considers it to be a threat to *power system security*, *AEMO* may direct that the equipment protected or operated by the relevant *protection system* or *control system* be taken out of operation or operated as *AEMO* directs.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) A *Registered Participant* must comply with a direction given by *AEMO* under clause 4.8.2(a).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

4.8.3 AEMO's advice on power system emergency conditions

- (a) *AEMO* must *publish* all relevant details promptly after *AEMO* becomes aware of any circumstance with respect to the *power system* which, in the reasonable opinion of *AEMO*, could be expected to materially adversely affect *supply* to or from *Registered Participants*.
- (b) Without limitation, such circumstances may include:
 - (1) electricity *supply* capacity shortfall, being a condition where there are insufficient *generation* or *supply* options available to securely *supply* the total load in a *region*;
 - (2) unexpected disruption of *power system security*, which may occur when:
 - (i) an unanticipated major *power system* or *generation plant contingency event* occurs; or
 - (ii) significant environmental or similar conditions, including weather, storms or fires, are likely to, or are affecting, the *power system*; or
 - (3) a *major supply disruption*.

4.8.4 Declaration of conditions

AEMO may declare the following conditions in relation to a period of time, either present or future:

- (a) *Low reserve* condition – when *AEMO* considers that the balance of *generation* capacity and demand for the period being assessed does not meet the *reliability standard* as assessed in accordance with the *reliability standard implementation guidelines*.
- (b) *Lack of reserve (LOR)* condition – when *AEMO* determines, in accordance with the *reserve level declaration guidelines*, that the probability of *load shedding* (other than the reduction or *disconnection* of *interruptible load*) is, or is forecast to be, more than remote.

4.8.4A Reserve level declaration guidelines

- (a) *AEMO* must make and publish guidelines (*reserve level declaration guidelines*) that set out how *AEMO* will determine a *lack of reserve* condition.
- (b) The *reserve level declaration guidelines* must:

- (1) describe how *AEMO* continually assesses the probability of *capacity reserves* being insufficient to avoid *load shedding* (other than the reduction or *disconnection* of *interruptible load*) given reasonably foreseeable conditions and events (**probability assessment**);
 - (2) describe how the probability assessment applies in relation to different periods of time;
 - (3) specify at least three probability levels at which *AEMO* will declare a corresponding *lack of reserve* condition in relation to a specified period of time, indicating an increasing probability of *load shedding* (other than the reduction or *disconnection* of *interruptible load*); and
 - (4) be reviewed by *AEMO* at least once every four years.
- (c) The probability assessment described in the *reserve level declaration guidelines* must be consistent with *good electricity industry practice* and must take into account:
 - (1) actual and forecast *power system* conditions and environmental or other similar conditions;
 - (2) the likelihood of the occurrence and impact on the *power system* of events that are foreseeable in nature but unpredictable in timing; and
 - (3) a prudent allowance for forecasting error.
- (d) *AEMO* may amend, and any person may submit a written request (with reasons) for *AEMO* to amend, the *reserve level declaration guidelines* from time to time.
- (e) When amending the *reserve level declaration guidelines* under paragraph (d), *AEMO* must comply with the *Rules consultation procedures*, except that rule 8.9 is to be read as if:
 - (1) paragraphs (g) to (j) do not apply;
 - (2) paragraph (k)(4) does not apply;
 - (3) paragraph (k)(5) is amended to require summaries of each issue, that the *consulting party* reasonably considers to be material, contained in valid written submission received from Consulted Persons or in meetings, and the *consulting party's* response to each such submission;
 - (4) the references in paragraphs (m) and (n) to "the procedures set out in this clause" are to be read as if they were references to "the procedures set out in this clause, as amended by clause 4.8.4A(e)(1) to (3)".

4.8.4B Lack of reserve framework reporting

- (a) In this clause 4.8.4B:

reporting period means the period beginning on 16 January 2018 and ending on 31 March 2018, and each calendar quarter thereafter.

- (b) *AEMO* must publish a report (**lack of reserve framework report**) within one month following the end of each reporting period.
- (c) The purpose of the lack of reserve framework report is to inform *Registered Participants* about the implementation of the *reserve level declaration guidelines* and to provide *AEMO*'s high level analysis of how the *lack of reserve* framework is operating during the relevant reporting period.
- (d) Each lack of reserve framework report must include:
 - (1) *AEMO*'s observations of any trends in when and why *lack of reserve* conditions are being declared under the *reserve level declaration guidelines*; and
 - (2) a summary of the leading factors or causes of any *lack of reserve* conditions declared,

during the relevant reporting period.

4.8.5 Managing declarations of conditions

- (a) *AEMO* must as soon as reasonably practicable *publish* any declaration under clause 4.8.4.
 - (a1) The *publication* of any such declaration must, to the extent reasonably practicable, include the following:
 - (1) the nature and extent of the *low reserve* or *lack of reserve* condition; and
 - (2) the time period over which the *low reserve* or *lack of reserve* condition applies.
- (b) If *AEMO* makes a declaration under clause 4.8.4, *AEMO* must use its reasonable endeavours to follow the processes set out in clauses 4.8.5A and 4.8.5B.
- (c) Following a declaration under clause 4.8.4, *AEMO* must as soon as reasonably practicable *publish* notice of:
 - (1) any cancellation of that declaration; or
 - (2) any significant change in the *low reserve* or *lack of reserve* condition due to changed positions of *Scheduled Network Service Providers*, *Market Customers*, *Semi-Scheduled Generators* and *Scheduled Generators* or due to other reasons.

4.8.5A Determination of the latest time for AEMO intervention

- (a) *AEMO* must immediately *publish* a notice of any foreseeable circumstances that may require *AEMO* to implement a *AEMO intervention event*.
- (b) A notice referred to in paragraph (a) must include the forecast circumstances creating the need for the *AEMO intervention event*.
- (c) *AEMO* must, as soon as reasonably practicable after the *publication* of a notice in accordance with paragraph (a), estimate and *publish* the latest time at which it would need to intervene through a *AEMO intervention event* should the response from the *market* not be such as to obviate the need for the *AEMO intervention event*.
- (d) In order to estimate the time referred to in paragraph (c), *AEMO* may request information from a *Scheduled Network Service Provider*, *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Customer* and may specify the time within which that information is to be provided.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (e) The information that *AEMO* may request in accordance with paragraph (d) may include, but is not limited to:
 - (1) *plant* status;
 - (2) any expected or planned *plant outages* and the MW capacity affected by the *outage*, proposed start date and time and expected end date and time associated with the *outage* and an indication of the possibility of deferring the *outage*; and
 - (3) estimates of the relevant costs to be incurred by the *Scheduled Network Service Provider*, *Scheduled Generator* or *Market Customer* should it be the subject of a *direction*, but only if *AEMO* considers it reasonably likely that such *Scheduled Network Service Provider*, *Scheduled Generator* or *Market Customer* will be subject to a *direction*.
- (f) A *Scheduled Network Service Provider*, *Scheduled Generator* or *Semi-Scheduled Generator* or *Market Customer* must use reasonable endeavours:
 - (1) to comply with a request for information under paragraph (d); and
 - (2) to provide *AEMO* with the information required in the time specified by *AEMO*.

- (g) *AEMO* must regularly review its estimate of the latest time at which it would need to intervene through an *AEMO intervention event*, and *publish* any revisions to the estimate.
- (h) *AEMO* must treat any information provided in response to a request under paragraph (d) as *confidential information* and use it for the sole purpose of assessing to which *Scheduled Network Service Provider*, *Market Customer* or *Scheduled Generator* it should issue *directions*.

4.8.5B Notifications of last time of AEMO intervention

If the latest practicable time for an *AEMO intervention event*, as estimated by *AEMO* under clause 4.8.5A, is reached and, taking into account *relevant AEMO intervention events*, the circumstances described under clause 4.8.5A(a) have not been alleviated, *AEMO* must to the extent reasonably practicable immediately:

- (1) *publish* a notice that *AEMO*:
 - (i) considers the time for the negotiation of further *reserve contracts* in accordance with rule 3.20 has elapsed; and
 - (ii) intends to implement an *AEMO intervention event*; and
- (2) amend the *pre-dispatch schedule* to ensure that it is a physically realisable schedule for all periods in which *AEMO* intends to implement an *AEMO intervention event*.

4.8.6 [Deleted]

4.8.7 Managing a power system contingency event

- (a) During the period when the *power system* is affected by a *contingency event* *AEMO* must carry out actions, in accordance with the guidelines set out in the *power system security standards* and its obligations concerning *sensitive loads*, to:
 - (1) identify the impact of the *contingency event* on *power system security* in terms of the capability of *generating units* or *transmission* or *distribution networks*; and
 - (2) identify and implement the actions required in each affected *region* to restore the *power system* to its *satisfactory operating state*.
- (b) When *contingency events* lead to potential or actual electricity *supply* shortfall events, *AEMO* must follow the procedures outlined in clause 4.8.9.

4.8.8 [Deleted]

4.8.9 Power to issue directions and clause 4.8.9 instructions

- (a) Notwithstanding any other provision of rule 4.8:

- (1) *AEMO* may require a *Registered Participant* to do any act or thing if *AEMO* is satisfied that it is necessary to do so to maintain or re-establish the *power system* to a *secure operating state*, a *satisfactory operating state*, or a *reliable operating state*; and
 - (2) *AEMO* may authorise a person to do any of the things contemplated by section 116 of the *National Electricity Law* if *AEMO* is satisfied that it is necessary to do so for reasons of public safety or the security of the electricity system.
- (a1) If *AEMO*, or a person authorised by *AEMO*, requires a *Registered Participant* to:
- (1) take action as contemplated by clause 4.8.9(a) or section 116 of the *National Electricity Law* in relation to *scheduled plant* or a *market generating unit*, *AEMO* is taken to have issued a *direction*; or
 - (2) take some other action contemplated by clause 4.8.9(a) or section 116 of the *National Electricity Law*, *AEMO* is taken to have issued a *clause 4.8.9 instruction*.
- (a2) *AEMO* must use reasonable endeavours to ensure that persons authorised by *AEMO* under clause 4.8.9(a)(2) follow all relevant processes in clause 4.8 prior to issuing a *direction*, unless it is not reasonably practical to do so.
- (b) *AEMO* must develop, and may amend from time to time, in accordance with the *Rules consultation procedures*, procedures for the issuance of *directions*. Such procedures must reflect the following principles:
- (1) *AEMO* must use its reasonable endeavours to minimise any cost related to *directions* and compensation to *Affected Participants* and *Market Customers* pursuant to clause 3.12.2 and compensation to *Directed Participants* pursuant to clauses 3.15.7 and 3.15.7A;
 - (2) a *direction* should be revoked as soon as *AEMO* determines that the *direction* is no longer required;
 - (3) *AEMO* must take into account any applicable guidelines issued by the *Reliability Panel*;
 - (4) *AEMO* must observe its obligations under clause 4.3.2 concerning *sensitive loads*;
 - (5) *AEMO* must expressly notify a *Directed Participant* that *AEMO*'s requirement or that of another person authorised by *AEMO* pursuant to clause 4.8.9(a) is a *direction*.
- (c) A *Registered Participant* must use its reasonable endeavours to comply with a *direction* or *clause 4.8.9 instruction* unless to do so would, in the *Registered Participant*'s reasonable opinion, be a hazard to public safety, or materially risk damaging equipment, or contravene any other law.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c1) Subject to clause 4.8.9(c) a *Registered Participant* must use its best endeavours to comply with a *direction* or *clause 4.8.9 instruction* in accordance with the timeframe specified by *AEMO* in the *direction* or *clause 4.8.9 instruction*.
- (c2) A *Market Participant* must not by any act or omission, whether intentionally or recklessly, cause or significantly contribute to the circumstances causing a *direction* to be issued, without reasonable cause.
- (d) A *Registered Participant* must immediately notify *AEMO* of its inability to comply or its intention not to comply with a *direction* or *clause 4.8.9 instruction*.
- (e) If a *Registered Participant* does not comply with a *direction* or *clause 4.8.9 instruction*, it must within 2 *business days* of the *direction* or *clause 4.8.9 instruction* deliver to *AEMO* and the *AER* a report detailing the reasons for the non compliance together with all relevant facts.
- (f) *AEMO* must *publish* a report in accordance with clause 3.13.6A.
- (g) Any *Registered Participant* who is aware of a failure to comply with a *direction* or *clause 4.8.9 instruction* or who believes any such failure has taken place must notify *AEMO* and the *AER* in writing and as soon as practicable of that fact.
- (h) If *AEMO* issues a *direction* or *clause 4.8.9 instruction*, *AEMO* may, to give effect to the *direction* or *clause 4.8.9 instruction*:
 - (1) submit, update or vary *dispatch bids*, *dispatch offers* or *rebids* in relation to the *plant* of *Directed Participants* and *Affected Participants*;
 - (2) change other inputs to the *dispatch process*; or
 - (3) select a *Market Participant* or *Market Participants* to become *Affected Participants* to implement clause 3.8.1(b)(11).
- (i) When issuing *clause 4.8.9 instructions* to implement *load shedding* across *interconnected regions*, *AEMO* must use reasonable endeavours to implement *load shedding* in an equitable manner as specified in the *power system security standards*, taking into account the *power transfer capability* of the relevant *networks*.
- (j) When issuing *clause 4.8.9 instructions* to implement *load shedding*, *AEMO* must comply with its obligations under clauses 4.3.2(e) to (l) and Part 8 of the *National Electricity Law*.

4.8.9A System security directions

- (a) Notwithstanding any other provision of the *Rules*, a *Registered Participant* must follow any *direction* issued by or on behalf of *AEMO* and with which that *Registered Participant* is required to comply under Chapter 4 or section 116 of the *National Electricity Law*.
- (b) Any event or action required to be performed pursuant to a *direction* issued under Chapter 4 or section 116 of the *National Electricity Law* on or by a stipulated *day* is required by the *Rules* to occur on or by that *day*, whether or not a *business day*.
- (c) Any failure to observe such a *direction* will be deemed to be a breach of the *Rules*.
- (d) *AEMO* or any *Registered Participant* who is aware of any such failure must notify the *AER* in writing of the failure.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

4.8.10 Disconnection of generating units and market network services

- (a) Where, under the *Rules*, *AEMO* has the authority or responsibility to *disconnect* a *generating unit* or a *market network service*, then it may do so (either directly or through any agent) as described in rule 5.9.
- (b) The relevant *Generator* or *Market Network Service Provider* must provide all reasonable assistance to *AEMO* for the purpose of such *disconnection*.

4.8.11 [Deleted]

4.8.12 System restart plan and local black system procedures

- (a) *AEMO* must prepare, and may amend, a *system restart plan* for the purpose of managing and coordinating system restoration activities during any *major supply disruption*.
- (a1) The *system restart plan* must cover the entire *national grid* but may consist of one or more separable components.
- (a2) For the purposes of section 54A(2) of the *National Electricity Law*, *AEMO* may disclose the whole or any component of the *system restart plan* to:
 - (1) a *Jurisdictional System Security Coordinator*;
 - (2) a *Network Service Provider*;
 - (3) a *Generator* contracted to provide *SRAS*;

- (4) any other *Registered Participant* whose assistance *AEMO* considers is necessary for the implementation of the *system restart plan*,

for the purposes of preparing for, and participating in, system restoration activities during a *major supply disruption*.

- (a3) A *Jurisdictional System Security Coordinator* to whom the whole or any component of the *system restart plan* is provided to under paragraph (a2)(1) is deemed to be a *Registered Participant* for the purposes of Part C of Chapter 8.
- (b) The *system restart plan* is *confidential information*.
- (c) The *system restart plan* must be consistent with the *system restart standard*.
- (d) Each *Generator* and *Network Service Provider* must develop *local black system procedures* in accordance with the guidelines referred to in clause 4.8.12(e). A *Generator's* or *Network Service Provider's local black system procedures* must be consistent with any *ancillary services agreement* to provide *system restart ancillary services* to which that *Generator* or *Network Service Provider* is a party. On request from *AEMO*, or as a result of a significant change of circumstances, a *Generator* or *Network Service Provider* must review, and amend if appropriate, its *local black system procedures*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (e) Subject to clause 4.8.12(f), *AEMO* must develop and *publish*, and may amend, guidelines for the preparation of *local black system procedures* in consultation with *Generators* and *Network Service Providers*.
- (f) *Local black system procedures* must:
 - (1) provide sufficient information to enable *AEMO* to understand the likely condition and capabilities of *plant* following any *major supply disruption* such that *AEMO* is able to effectively co-ordinate the safe implementation of the *system restart plan*; and
 - (2) appropriately incorporate any relevant *energy support arrangements* to which a *Generator* or *Network Service Provider* may be party.
- (g) Each *Generator* and *Network Service Provider* must submit its *local black system procedures*, including any amendments to those procedures, to *AEMO* for approval. In considering whether to grant approval, *AEMO* must take into account the consistency of the *local black system procedures* with:
 - (1) the guidelines referred to in clause 4.8.12(e); and
 - (2) relevant components of the *system restart plan*.

- (h) *AEMO* may request amendments to *local black system procedures*, including, without limitation, imposing conditions in respect of any *energy support arrangement* as *AEMO* reasonably considers necessary to ensure the integrity of the *system restart plan*. When requesting amendments to the *local black system procedures*, *AEMO* must provide reasons for those requested amendments.
- (i) Requests by *AEMO* for amendments under clause 4.8.12(h) must be by notice in writing to a *Generator* or *Network Service Provider*. Reasonable requests by *AEMO* for amendments under clause 4.8.12(h) must be complied with by a *Generator* or *Network Service Provider*.
- (j) *AEMO* and *Network Service Providers* must jointly develop communication protocols to facilitate the exchange of all information relevant to the roles played by *AEMO*, *Network Service Providers*, *Generators* and *Customers* in the implementation of the *system restart plan*.

4.8.13 [Deleted]

4.8.14 Power system restoration

- (a) *AEMO* must notify a *Registered Participant* if, in *AEMO*'s reasonable opinion, there is a *major supply disruption* which is affecting, or which may affect, that *Registered Participant*.
- (b) If *AEMO* advises a *Generator* or *Network Service Provider* of a *major supply disruption*, or if the terms of the relevant *local black system procedures* require the *Generator* or *Network Service Provider* to take action, then the *Generator* or *Network Service Provider* must comply with the requirements of the *local black system procedures* as quickly as is practicable.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) Where in *AEMO*'s reasonable opinion the *system restart plan* cannot be implemented to effectively ameliorate the actual *power system* conditions created by a *major supply disruption*, *AEMO* may adapt or vary the *system restart plan* as it considers reasonably necessary to suit those actual *power system* conditions.
- (d) If there is a *major supply disruption*, a *Generator* or *Network Service Provider* must comply with *AEMO*'s *directions* or *clause 4.8.9 instructions* regarding the restoration of the *power system*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (e) If there is a *major supply disruption*, a *Market Customer* must comply with *AEMO's directions* with respect to the timing and magnitude of *load restoration*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

4.8.15 Review of operating incidents

- (a) For the purposes of this clause 4.8.15:

Reviewable operating incident means:

- (1) an incident comprising:
 - (i) a *non-credible contingency event* or multiple *contingency events* on the *transmission system*; or
 - (ii) a *black system* condition; or
 - (iii) an event where the *frequency* of the *power system* is outside limits specified in the *power system security standards*; or
 - (iv) an event where the *power system* is not in a *secure operating state* for more than 30 minutes; or
 - (v) an event where *AEMO* issues a *clause 4.8.9 instruction* for *load shedding*,

being an incident identified, in accordance with guidelines determined by the *Reliability Panel* under rule 8.8, to be of significance to the operation of the *power system* or a significant deviation from normal operating conditions; or

- (2) an incident where *AEMO* has been responsible for the *disconnection* of *facilities* of a *Registered Participant* under the circumstances described in clause 5.9.5; or
- (3) any other operating incident identified, in accordance with guidelines determined by the *Reliability Panel* under rule 8.8, to be of significance to the operation of the *power system* or a significant deviation from normal operating conditions;

but does not include an incident in respect of which *AEMO* is required to conduct a review under clause 3.14.3(c).

- (b) *AEMO* must conduct a review of every reviewable operating incident in order to assess the adequacy of the provision and response of *facilities* or services, and the appropriateness of actions taken to restore or maintain *power system security*.

- (c) *AEMO* must prepare a report on the review of a reviewable operating incident, and where that report relates to an incident described in clause 4.8.15(a)(1) or (3), *AEMO* must make the report available to *Registered Participants* and to the public.
- (ca) With respect to a report that has been prepared by *AEMO* in accordance with clause 4.8.15(a)(1) or (3) that relates to an operating incident involving a *non-credible contingency event*, the report must include details of how the re-classification criteria published under clause 4.2.3B were assessed and applied in the context of that *non-credible contingency event*.
- (d) Where *AEMO* has been responsible for the *disconnection* of *facilities* of a *Registered Participant* under the circumstances described in clause 5.9.5, *AEMO* must provide a report on that review to the *Registered Participant*, the *AEMC* and the *AER* advising of the circumstances requiring that action.
- (e) A *Registered Participant* must co-operate in any review conducted by *AEMO* including making available relevant records and information.
- (f) *AEMO* may request a *Registered Participant* to provide such information relating to the performance of equipment of that *Registered Participant* during and after reviewable operating incidents, as *AEMO* reasonably requires for the purposes of analysing or reporting on the incident.
- (g) A *Registered Participant* must provide the information requested by *AEMO* under clause 4.8.15(f) within 20 *business days* unless *AEMO* agrees to a longer period, taking into account:
 - (1) the particular circumstances of the reviewable operating incident; and
 - (2) any request made under clause 4.8.15(h).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (h) *AEMO* must as soon as practicable, provide to a *Registered Participant* such information relating to the performance of equipment of the *Registered Participant* during and after a reviewable operating incident as the *Registered Participant* reasonably requests and in relation to which *AEMO* is required to conduct a review under this clause 4.8.15.
- (i) At any time when no guidelines are in force under rule 8.8, *AEMO* may conduct a review of any incident referred to in clause 4.8.15(a)(1) that *AEMO* considers to be of significance to the operation of the *power system* or a significant deviation from normal operating conditions, and this clause 4.8.15 applies to and in respect of the review as if the incident were a reviewable operating incident.

4.9 Power System Security Related Market Operations

4.9.1 Load forecasting

- (a) *AEMO* must produce (at the intervals indicated and in accordance with the *timetable*) an indicative *load* forecast for each *region* for the periods indicated below:
 - (1) each *day*, a forecast for the *day* ahead, such forecast divided into half-hourly *load* forecasts for each *trading interval*;
 - (2) each *day*, a forecast for 2 to 7 *days* (inclusive) ahead, the forecasts for each *day* divided into half-hourly *load* forecasts for each *trading interval*;
 - (3) every week, a forecast for the 24 *months* ahead of the *day* on which the forecast is produced, with a daily profile based on an estimated weekly *peak load* condition with allowances for weekends and holidays.
- (b) These forecasts must provide an indicative estimate of the total *generation* capacity required to meet the forecast *load* (called "**forecast load (as generated)**"), and an equivalent estimation of the *supply* required to be delivered to the relevant *transmission network* (called "**forecast load (sent out)**").
- (c) The following factors must be taken into account in the development of the *load* forecasts, to the extent that such are relevant to the particular forecast:
 - (1) the annual *load* forecasts and *load* profiles collected by the *Network Service Providers* from all *Registered Participants* as required by schedule 5.7, including *load* management expectations and expected *sent out generation* from *embedded generating units*;
 - (2) historic *load* data, including *transmission* losses and *power station* in-house use of the *generated* output;
 - (3) weather forecasts and the current and historic weather conditions and pattern;
 - (4) the incidence of major events or activities which are known to *AEMO*;
 - (5) anticipated pumped storage *loads*;
 - (6) official economic activity forecasts from *participating jurisdictions*; and
 - (7) other information provided by *Registered Participants*.
- (d) *AEMO* must develop a methodology to create the indicative *load* forecasts.
- (e) **[Deleted]**

- (f) **[Deleted]**
- (g) The *load* forecasts produced by *AEMO* are indicative only as *AEMO* has no direct influence over *Market Participants* in their decisions about their level of demand and, accordingly, no person may claim any loss or damage from *AEMO* as a result of any difference between *load* forecasts and actual *load*.

4.9.2 Instructions to Scheduled Generators and Semi-Scheduled Generators

- (a) To implement *central dispatch* or, where *AEMO* has the power to direct or to instruct a *Scheduled Generator* or *Semi-Scheduled Generator* either under Chapter 3 or this Chapter, then for the purpose of giving effect to that direction or instruction, *AEMO* may at any time give an instruction to the *Generator* in relation to any of its *generating units* (a *dispatch instruction*), in accordance with clause 4.9.5(b), nominating:
 - (1) whether the facilities for *generation* remote control by *AEMO*, if available, must be in service;
 - (2) in the case of a *scheduled generating unit*, the level or schedule of power to be supplied by the *generating unit* over the specified period; and
 - (3) in the case of a *semi-scheduled generating unit*, the maximum level of power to be supplied by the *generating unit* over the specified period.
- (b) Subject to paragraph (c), *AEMO* may at any time give an instruction to a *Generator* in relation to any of its *generating units* with a *nameplate rating* of 30MW or more, or its *systems* of combined *nameplate rating* of 30 MW or more, nominating that:
 - (1) the *generating unit* or *generating system* transformer is to be set to a nominated tap position (if it has on-load tap changing capability);
 - (2) the *generating unit's* or *generating system's voltage control system* set-point is to be set to give a nominated *voltage*; or
 - (3) the *generating unit* or *generating system* is to be operated to supply or absorb a nominated level of *reactive power* at its *connection point*.
- (c) Unless otherwise provided under an *ancillary services agreement*, a *network support agreement* or a *connection agreement*, *AEMO* must not give an instruction under paragraph (b) that requires a *generating unit* or *generating system* to supply or absorb *reactive power* at a level outside the *plant's* relevant *performance standard*.
- (d) A *Scheduled Generator* or *Semi-Scheduled Generator* must, with respect to its *generating units* that have an availability offer of greater than 0 MW (whether *synchronised* or not), ensure that appropriate personnel are available at all times to receive and immediately act upon *dispatch instructions* issued by *AEMO* to the relevant *Generator*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

4.9.2A Dispatch Instructions to Scheduled Network Service Providers

- (a) Where *AEMO* has the power to direct or to instruct a *Scheduled Network Service Provider* either under Chapter 3 or this Chapter then, for the purpose of giving effect to that direction or instruction, *AEMO* may at any time give an instruction to a *Scheduled Network Service Provider* in relation to any of its *scheduled network services* (a *dispatch instruction*), in accordance with clause 4.9.5(b), nominating:
 - (1) whether the facilities for remote control by *AEMO*, if available, must be in service; and
 - (2) the level or schedule of power to be transferred by the *scheduled network service* over the specified period.
- (b) A *Scheduled Network Service Provider* must, with respect to its *scheduled network services* that have an availability offer of greater than 0 MW, ensure that appropriate personnel are available at all times to receive and immediately act upon *dispatch instructions* issued by *AEMO* to the *Scheduled Network Service Provider*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

4.9.3 Instructions to Registered Participants

- (a) *AEMO* may, at any time, give instructions to *Registered Participants* to reduce their *load* for electricity consistent with *dispatch bids* made in accordance with Chapter 3 (*dispatch instructions*).
- (b) A *Market Customer* must, with respect to *scheduled loads* in relation to which a *dispatch bid* has been submitted for a particular *trading interval*, ensure that appropriate personnel or electronic facilities are available at all times to receive and immediately act upon *dispatch instructions* issued by *AEMO* to the *Market Customer*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

4.9.3A Ancillary services instructions

- (a) *AEMO* may at any time give an instruction (a *dispatch instruction*) to a *Market Participant* which has classified one or more of its *generating units* or *loads* as an *ancillary service generating unit* or an *ancillary service load*:
 - (1) stating that the relevant *generating unit* or *load* has been selected for the provision of a *market ancillary service*;
 - (2) stating the *market ancillary service* concerned; and
 - (3) nominating the range to be *enabled*.
- (b) *AEMO* may at any time give an instruction (a *dispatch instruction*) to:
 - (1) an *NMAS provider* with whom *AEMO* has an *ancillary services agreement* in relation to the provision of *non-market ancillary services* under that *ancillary services agreement* or which *AEMO* is otherwise entitled to give under that *ancillary service agreement*; or
 - (2) a *Network Service Provider* in relation to the provision of any *non-market ancillary services* or similar services provided under any *connection agreement* or *network support agreement*.
- (c) A *Market Participant* which has:
 - (1) classified one or more of its *generating units* or *loads* as an *ancillary service generating unit* or an *ancillary service load*; and
 - (2) submitted a *market ancillary service offer* in respect of that *generating unit* or *load*,

must ensure that appropriate personnel or electronic facilities are available at all times to receive and immediately act upon *dispatch instructions* issued to the *Market Participant* by *AEMO*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) An *NMAS provider* with whom *AEMO* has an *ancillary services agreement* must ensure that appropriate personnel or electronic facilities are available in accordance with that agreement at all times to receive and immediately act upon *dispatch instructions* issued to that *NMAS provider* by *AEMO*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

4.9.3B Compliance with dispatch instructions

- (a) A *dispatch instruction* applies from the time it is given (or any later time specified in the *dispatch instruction*) until the earlier of:
 - (1) the cessation time specified in the *dispatch instruction* (if any); or
 - (2) the time when the next *dispatch instruction* applies.

4.9.4 Dispatch related limitations on Scheduled Generators and Semi-Scheduled Generators

A *Scheduled Generator* or *Semi-Scheduled Generator* (as the case may be) must not, unless in the *Generator's* reasonable opinion, public safety would otherwise be threatened or there would be a material risk of damaging equipment or the environment:

- (a) send out any *energy* from the *generating unit*, except:
 - (1) in accordance with a *dispatch instruction*;
 - (2) in response to remote control signals given by *AEMO* or its agent;
 - (3) in connection with a test conducted in accordance with the requirements of this Chapter or Chapter 5; or
 - (4) in the case of a *scheduled generating unit*:
 - (i) in accordance with the *self-commitment* procedures specified in clause 4.9.6 up to the *self-dispatch level*; or
 - (ii) as a consequence of operation of the *generating unit's* automatic *frequency response mode* to power system conditions;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) adjust the *transformer tap position* or *excitation control system voltage* set-point of a *scheduled generating unit* or *semi-scheduled generating unit* except:
 - (1) in accordance with a *dispatch instruction*;
 - (2) in response to remote control signals given by *AEMO* or its agent;
 - (3) if, in the *Generator's* reasonable opinion, the adjustment is urgently required to prevent material damage to the *Generator's plant* or associated equipment, or in the interests of safety; or
 - (4) in connection with a test conducted in accordance with the requirements of rule 5.7;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) *energise a connection point* in relation to a *generating unit* without obtaining approval from *AEMO* immediately prior to *energisation*;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) *synchronise* or *de-synchronise* a *scheduled generating unit* with a *nameplate rating* of 30MW or more, without prior approval from *AEMO* or other than in response to a *dispatch instruction* except:
 - (1) *de-synchronisation* as a consequence of the operation of automatic protection equipment; or
 - (2) where such action is urgently required to prevent material damage to *plant* or equipment or in the interests of safety;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (e) change the *frequency response mode* of a *scheduled generating unit* without the prior approval of *AEMO*; or

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (f) remove from service or interfere with the operation of any *power system* stabilising equipment installed on that *generating unit*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

4.9.4A Dispatch related limitations on Scheduled Network Service Providers

A *Scheduled Network Service Provider* must not, unless in the *Scheduled Network Service Provider's* reasonable opinion public safety would otherwise be threatened or there would be a material risk of damaging equipment or the environment:

- (a) *energise a connection point* in relation to a *scheduled network service* without prior approval from AEMO. This approval must be obtained immediately prior to *energisation*; or

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) *synchronise a scheduled network service* to, or *de-synchronise a scheduled network service* from, the *power system* without prior approval from AEMO except *de-synchronisation* as a consequence of the operation of automatic protection equipment or where such action is urgently required to prevent material damage to *plant* or equipment or in the interests of safety.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

4.9.5 Form of dispatch instructions

- (a) A *dispatch instruction* for a *scheduled generating unit*, *semi-scheduled generating unit*, *scheduled network service* or *scheduled load* must include the following:
 - (1) specific reference to the *generating unit* (including any aggregated *generating unit*), *scheduled network service* or *scheduled load* or other *facility* to which the *dispatch instruction* applies;
 - (2) the desired outcome of the *dispatch instruction* (if applicable) such as *active power*, *reactive power*, *transformer tap* or other outcome;
 - (3) in the case of a *dispatch instruction* under clause 4.9.2, the *ramp rate* (if applicable) which is to be followed by the *generating unit* or a specific target time to reach the outcome specified in the *dispatch instruction*;
 - (4) the time the *dispatch instruction* is issued;
 - (5) if the time at which the *dispatch instruction* is to take effect is different from the time the *dispatch instruction* is issued, the start time; and
 - (6) in the case of a *dispatch instruction* for a *semi-scheduled generating unit*:
 - (i) a notification as to whether the *dispatch interval* to which the *dispatch instruction* relates is a *semi-dispatch interval* or a *non semi-dispatch interval*; and
 - (ii) the *dispatch level*.

- (a1) A *dispatch instruction* for an *ancillary service* must include:
- (1) specific reference to the *generating unit* or *load* to which the *dispatch instruction* applies;
 - (2) the desired outcome of the *dispatch instruction*;
 - (3) the time the *dispatch instruction* is issued; and
 - (4) if the time at which the *dispatch instruction* is to take effect is different from the time the *dispatch instruction* is issued, the start time.
- (b) The *dispatch instruction* must be provided as provided in clause 3.8.21.

4.9.6 Commitment of scheduled generating units

- (a) Self-commitment:
- (1) In relation to any *scheduled generating unit*, the *Scheduled Generator* must confirm with *AEMO* the expected *synchronising* time at least one hour before the expected actual *synchronising* time, and update this advice 5 minutes before *synchronising* unless otherwise agreed with *AEMO*. *AEMO* may require further notification immediately before *synchronisation*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (2) The *Scheduled Generator* must advise *AEMO* when a *generating unit* reaches the *self-dispatch level* (being a *self-dispatch level* that is greater than zero MW) and must not increase output above that level unless instructed otherwise by *AEMO* to increase output or unless the increase in output results from the *generating unit* being placed under remote control to be loaded in accordance with Chapter 3.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) Instructions by *AEMO* to commit a *generating unit* for service:
- (1) A *dispatch instruction* for a *scheduled generating unit* to commit given by *AEMO* in response to a *dispatch offer* must be consistent with the start-up time specified in the latest *dispatch offer* in relation to the *generating unit*.

- (2) When *AEMO* issues a *dispatch instruction* to a *generating unit* for *commitment*, *AEMO* must nominate the time at which the *generating unit* is to be *synchronised*.
- (3) After a *dispatch instruction* for *commitment* of a *generating unit* has been issued, the relevant *Scheduled Generator* must promptly advise *AEMO* of any inability to meet the nominated time to *synchronise*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (4) Unless instructed otherwise by *AEMO*, at the time a *dispatch instruction* to *commit* takes effect, the relevant *generating unit* must remain on *self-dispatch level* until *AEMO* issues a further *dispatch instruction*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

4.9.7 De-commitment, or output reduction, by Scheduled Generators

- (a) In relation to any *scheduled generating unit*, the *Scheduled Generator* must confirm with *AEMO* the expected *de-synchronising* time at least one hour before the expected actual *de-synchronising* time, and update this advice 5 minutes before *de-synchronising* unless otherwise agreed with *AEMO*. *AEMO* may require further notification immediately before *de-synchronisation*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) The *Scheduled Generator* must not de-commit a *generating unit* unless it has confirmed with *AEMO*:

- (1) the time to commence decreasing the output of the *generating unit*;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (2) the *ramp rate* to decrease the output of the *generating unit*;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (3) the time to *de-synchronise* the *generating unit*; and

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (4) the output from which the *generating unit* is to be *de-synchronised*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

4.9.8 General responsibilities of Registered Participants

- (a) A *Registered Participant* must comply with a *dispatch instruction* given to it by *AEMO* unless to do so would, in the *Registered Participant's* reasonable opinion, be a hazard to public safety or materially risk damaging equipment.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) A *Scheduled Generator* must ensure that each of its *scheduled generating units* is at all times able to comply with the latest *generation dispatch offer* under Chapter 3 in respect of that *generating unit*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b1) A *Scheduled Network Service Provider* must ensure that each of its *scheduled network services* is at all times able to comply with the latest *network dispatch offer* under Chapter 3 in respect of that *market network service*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) A *Registered Participant* must ensure that each of its *facilities* is at all times able to comply with any relevant *dispatch bid* under Chapter 3 in respect of

the *facility* (as adjusted by any subsequent restatement of that bid under Chapter 3).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) A *Market Participant* which has classified a *generating unit* or *load* as an *ancillary service generating unit* or an *ancillary service load*, as the case may be, must ensure that the *ancillary service generating unit* or *ancillary service load* is at all times able to comply with the latest *market ancillary service offer* for the relevant *trading interval*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (e) A *Semi-Scheduled Generator* must ensure that each of its *semi-scheduled generating units* is at all times able to comply with its latest *generation dispatch offer*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

4.9.9 Scheduled Generator plant changes

A *Scheduled Generator* must, without delay, notify *AEMO* of any event which has changed or is likely to change the operational availability of any of its *scheduled generating units*, whether the relevant *generating unit* is *synchronised* or not, as soon as the *Scheduled Generator* becomes aware of the event.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

4.9.9A Scheduled Network Service Provider plant changes

A *Scheduled Network Service Provider* must, without delay, notify *AEMO* of any event which has changed or is likely to change the operational availability of any of its *scheduled network services* as soon as the *Scheduled Network Service Provider* becomes aware of the event.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

4.9.9B Ancillary service plant changes

A *Market Participant* which has classified a *generating unit* or *load* as an *ancillary service generating unit* or an *ancillary service load* must, without delay, notify *AEMO* of any event which has changed or is likely to change the availability of a *market ancillary service*, or the capability of the *generating unit* or *load* to respond in the manner contemplated by the *market ancillary service specification*, as soon as the *Market Participant* becomes aware of the event.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

4.9.9C Inertia network service availability changes

An *Inertia Service Provider* must, without delay, notify *AEMO* of any event which has changed or is likely to change the availability of any *inertia support activity* or *inertia network service* made available by the *Inertia Service Provider* to *AEMO*, as soon as the *Inertia Service Provider* becomes aware of the event.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

4.9.9D System strength service availability changes

A *System Strength Service Provider* must, without delay, notify *AEMO* of any event which has changed or is likely to change the availability of any *system strength services* made available by the *System Strength Service Provider* to *AEMO* under clause 5.20C.3, as soon as the *System Strength Service Provider* becomes aware of the event.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

4.10 Power System Operating Procedures

4.10.1 Power system operating procedures

(a) The *power system operating procedures* are:

- (1) any instructions which may be issued by *AEMO* from time to time covering *market* operations and relating to the operation of the *power system*;
- (2) any guidelines issued from time to time by *AEMO* in relation to *power system security*;

- (3) *regional specific power system operating procedures* covering the operational activities and associated responsibilities of the relevant *Network Service Provider* and any *Registered Participants* connected to the relevant *transmission network* and operational activities for operational elements of the *transmission network* which interface with *Scheduled Generators* and other *Registered Participants* including, but not limited to, those relating to *sensitive loads* and *emergency frequency control schemes*;
 - (4) the *load shedding procedures* and *EFCS settings schedules*; and
 - (5) any other procedures, instructions or guidelines which *AEMO* nominates to be and advises to *Registered Participants* as being *power system operating procedures* from time to time.
- (b) *AEMO* must compile the *regional specific power system operating procedures* in conjunction with the relevant *Network Service Providers* and the relevant *Jurisdictional System Security Coordinators* to the extent required under clause 4.10.1(a)(3).
- (c) *AEMO* must ensure that the various elements of the *power system operating procedures* are consistent with the *load shedding procedures* and *EFCS settings schedules*.

4.10.2 Transmission network operations

- (a) *AEMO* must exercise any power granted to it by the *Rules* or the *power system operating procedures* to:
 - (1) approve the manner in which operations are carried out on a *transmission network* by the relevant *Network Service Provider*; or
 - (2) instruct the relevant *Network Service Provider* to take any action on the *transmission network*,

in accordance with the appropriate *power system operating procedures*.

- (b) A *Registered Participant* must observe the requirements of the relevant *power system operating procedures*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) Any equipment interfacing with a *transmission network* must be operated in accordance with the requirements of Chapter 5, any applicable *connection agreement*, *ancillary services agreement*, *network support agreement*, *inertia services agreement*, *system strength services agreement* and the associated *power system operating procedures*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) *Registered Participants* must ensure that *transmission network* operations performed on their behalf are undertaken by authorised persons advised in writing to *AEMO*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (e) *AEMO* must ensure the regular review and update of the *regional specific power system operating procedures*.

4.10.3 Operating interaction with distribution networks

- (a) *AEMO* and each *Distribution System Operator* must maintain effective communications concerning the conditions of its *distribution network* and the *transmission network* or other *distribution network* to which that *distribution network* is *connected* and to co-ordinate activities where operations are anticipated to affect other *transmission* or *distribution networks*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) *AEMO* must use its reasonable endeavours to give at least 3 *days'* notice to all affected *Distribution System Operators* prior to a *Transmission Network Service Provider* carrying out switching related to a *transmission network* which could reasonably be expected to affect security of *supply* to any *distribution network*.

4.10.4 Switching of a Distributor's high voltage networks

- (a) A *Distribution System Operator* must use reasonable endeavours to give *AEMO* at least 3 *days'* prior notice of plans to carry out switching related to the *high voltage* network which could reasonably be expected to materially affect power flows at points of *connection* to a *transmission network*. The *Distribution System Operator* must also notify *AEMO* immediately prior to carrying out any such switching.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) A *Distribution System Operator* must provide confirmation to *AEMO* of any such switching immediately after it has occurred.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

4.10.5 Switching of reactive power facilities

- (a) *AEMO* may instruct a *Distribution System Operator* to place *reactive power facilities* belonging to or controlled by that *Distribution System Operator* into or out of service for the purposes of maintaining *power system security* where prior arrangements concerning these matters have been made between *AEMO* and the *Distribution System Operator*.
- (b) Without limitation to its obligations under such prior arrangements, a *Distribution System Operator* must use reasonable endeavours to comply with such an instruction given by *AEMO* or its authorised agent.

4.10.6 Automatic reclose

- (a) A *Network Service Provider* or a *Distribution System Operator* may request *AEMO* to disable or enable *automatic reclose equipment* in relation to a particular *transmission* or *distribution network* circuit or a feeder connecting its *distribution network* to a *transmission network* which has *automatic reclose equipment* installed on it.
- (b) If a *Distribution System Operator* makes such a request, then *AEMO* must use reasonable endeavours to comply with the request as soon as reasonably practical.
- (c) *AEMO* is not responsible for the consequences of automatic reclosure in relation to a circuit or a feeder and the *Distribution System Operator* must indemnify *AEMO* against any loss or damage arising out of *AEMO* complying with such a request unless the loss or damage is due to the failure by *AEMO* to comply with the request within a reasonable period of time.

4.10.7 Inspection of facilities by AEMO

AEMO may inspect a *facility* of a *Registered Participant* as specified in clause 5.7.1.

4.11 Power System Security Support

4.11.1 Remote control and monitoring devices

- (a) All remote control, operational *metering* and monitoring devices and local circuits as described in schedules 5.2, 5.3 and 5.3a, must be installed and maintained in accordance with the standards and protocols determined and advised by *AEMO* (for use in the *control centres*) for each:

- (1) *scheduled generating unit and semi-scheduled generating unit connected to the transmission or distribution network; and*
- (2) *substation connected to the network.*

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) The provider of any *ancillary services, system strength services or inertia network services* must arrange the installation and maintenance of all *remote control equipment and remote monitoring equipment* in accordance with the standards and protocols determined and advised by *AEMO* for use in the relevant *control centre*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) The control and monitoring devices must include provision for indication of *active power and reactive power* output, provision for signalling the status and any associated alarm condition relevant to achieving adequate control of the *transmission network*, and provision for indication of *generating plant* active and reactive output.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) Where reasonably necessary to allow *AEMO* to discharge its *market and power system security* functions *AEMO* may, by notice in writing, require a *Network Service Provider*, a *Generator* or a *Market Network Service Provider* to:
 - (1) install *remote monitoring equipment* which, in *AEMO*'s reasonable opinion, is adequate to enable *AEMO* to remotely monitor the performance of a *transmission system or distribution system, generating unit* (including its *dynamic performance*) or a *market network service facility* as appropriate; and
 - (2) upgrade, modify or replace any *remote monitoring equipment* already installed in a *facility* provided that the existing *remote monitoring equipment* is, in the reasonable opinion of *AEMO*, no longer fit for the intended purpose.
- (e) A *Network Service Provider, Generator or Market Network Service Provider* who receives a notice in accordance with clause 4.11.1(d), must comply with the notice within 120 *business days* or such further period that *AEMO* requires.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (f) [Deleted]
- (g) A *Generator* or *Market Network Service Provider* wishing to receive *dispatch instructions* electronically from *AEMO's automatic generation control system* under clause 3.8.21(d) must comply with *AEMO's* reasonable requirements in respect of how the remote control signals are issued by the *automatic generation control system* and transmitted to the *facility*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

4.11.2 Operational control and indication communication facilities

- (a) Each *Network Service Provider* must provide and maintain, in accordance with the standards referred to in clause 4.11.2(c), the necessary primary and, where nominated by *AEMO*, back-up communications facilities for control, operational *metering* and indication from the relevant local sites to the appropriate interfacing termination as nominated by *AEMO*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) *AEMO* must provide and maintain the communication facilities between control centres of each *Transmission Network Service Provider*, on the one hand, and the *AEMO co-ordinating centre*, on the other hand.
- (c) *AEMO* must develop, and may amend, standards in consultation with *Network Service Providers* in accordance with the *Rules consultation procedures* which must be met by *Network Service Providers* in providing and maintaining the facilities referred to in clause 4.11.2(a).
- (d) Until the standards contemplated by clause 4.11.2(c) are issued by *AEMO*, each *Network Service Provider* must maintain the primary and back-up communications facilities referred to in clause 4.11.2(a) that were in place at 13 December 1998 so as to achieve substantially the same performance and functionality as they did over the 12 months prior to 13 December 1998.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

4.11.3 Power system voice/data operational communication facilities

- (a) *Network Service Providers, System Operators, Distribution System Operators, Generators and Market Participants* must advise *AEMO* of each nominated person for the purposes of giving or receiving *operational communications* in relation to each of its *facilities*. The persons so nominated must be those responsible for undertaking the operation of the relevant equipment of the relevant *Registered Participant*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) Contact personnel details which must be forwarded to *AEMO* include:

- (1) title of contact personnel;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (2) the telephone numbers of those personnel;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (3) the telephone numbers of other available communication systems in relation to the relevant *facility*;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (4) a facsimile number for the relevant *facility*; and

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (5) an electronic mail address for the relevant *facility*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) Each *Registered Participant* must provide, for each nominated person, two independent telephone communication systems fully compatible with the equipment installed at the appropriate *control centre* nominated by *AEMO*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) Each *Registered Participant* must maintain both telephone communication systems in good repair and must investigate faults within 4 hours, or as otherwise agreed with *AEMO*, of a fault being identified and must repair or procure the repair of faults promptly.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (e) Each *Registered Participant* must establish and maintain a form of electronic mail facility as approved by *AEMO* for communication purposes (such approval may not be unreasonably withheld).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (f) *AEMO* must advise all *Registered Participants* of nominated persons for the purposes of giving or receiving *operational communications*.
- (g) Contact personnel details to be provided by *AEMO* include title, telephone numbers, a facsimile number and an electronic mail address for the contact person.

4.11.4 Records of power system operational communication

- (a) *AEMO* and the *System Operators* must record each telephone *operational communication* in the form of log book entries or by another auditable method which provides a permanent record as soon as practicable after making or receiving the *operational communication*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) Records of *operational communications* must include the time and content of each communication and must identify the parties to each communication.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) Voice recordings of telephone *operational communications* may be undertaken by *AEMO* and the *System Operators*. *AEMO* and the *System Operators* must ensure that, when a telephone conversation is being recorded under this clause, the persons having the conversation receive an audible indication that the conversation is being recorded. Voice recordings may be used as an alternative to written logs.
- (d) *AEMO* and the *System Operators* must retain all *operational communications* records including voice recordings for a minimum of 7 years.
- (e) In the event of a dispute involving an *operational communication*, the records of that *operational communication* maintained by, or on behalf of, *AEMO* will constitute prima facie evidence of the contents of the *operational communication*.
- (f) Any recordings made in accordance with this clause 4.11.4 must be made in accordance with the provisions of all applicable privacy laws.

4.11.5 Agent communications

- (a) A *Registered Participant* may appoint an agent (called a *Registered Participant Agent*) to co-ordinate operations of one or more of its *facilities* on its behalf, but only with the prior written consent of *AEMO*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) A *Registered Participant* which has appointed a *Registered Participant Agent* may replace that *Registered Participant Agent* but only with the prior written consent of *AEMO*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) *AEMO* may only withhold its consent to the appointment of a *Registered Participant Agent* under clause 4.11.5(a) or (b) if it reasonably believes that the relevant person is not suitably qualified or experienced to operate the relevant *facility*.
- (d) For the purposes of the *Rules*, acts or omissions of a *Registered Participant Agent* are deemed to be acts or omissions of the relevant *Registered Participant*.

- (e) *AEMO* and its representatives (including authorised agents) may:
 - (1) rely upon any communications given by a *Registered Participant Agent* as being given by the relevant *Registered Participant*; and
 - (2) rely upon any communications given to a *Registered Participant Agent* as having been given to the relevant *Registered Participant*.
- (f) *AEMO* and the *System Operators* are not required to consider whether any instruction has been given to a *Registered Participant Agent* by the relevant *Registered Participant* or the terms of those instructions.

4.12 Nomenclature Standards

- (a) A *Network Service Provider* must use the *nomenclature standards* for *transmission* equipment and apparatus as agreed with *AEMO* or, failing agreement, as determined by *AEMO*.

Note

This rule is classified as a civil penalty provision under the National Electricity (South Australia) Regulations.

- (b) A *Registered Participant* must use reasonable endeavours to ensure that its *representatives* comply with the *nomenclature standards* in any *operational communications* with *AEMO*.
- (c) A *Registered Participant* must ensure that nameplates on its equipment relevant to operations at any point within the *power system* conform to the requirements set out in the *nomenclature standards*.

Note

This rule is classified as a civil penalty provision under the National Electricity (South Australia) Regulations.

- (d) A *Registered Participant* must use reasonable endeavours to ensure that nameplates on its equipment relevant to operations at any point within the *power system* are maintained to ensure easy and accurate identification of equipment.
- (e) A *Registered Participant* must ensure that technical drawings and documentation provided to *AEMO* comply with the *nomenclature standards*.

Note

This rule is classified as a civil penalty provision under the National Electricity (South Australia) Regulations.

- (f) *AEMO* may, by notice in writing, request a *Registered Participant* to change the existing numbering or nomenclature of *transmission* equipment and apparatus of the *Registered Participant* for purposes of uniformity, and the *Registered Participant* must comply with such a request provided that if the

existing numbering or nomenclature conforms with the *nomenclature standards*, AEMO must pay all reasonable costs incurred in complying with the request.

Note

This rule is classified as a civil penalty provision under the National Electricity (South Australia) Regulations.

4.13 [Deleted]

4.14 Acceptance of Performance Standards

- (a) [Deleted]
- (b) [Deleted]
- (c) [Deleted]
- (d) [Deleted]
- (e) [Deleted]
- (f) [Deleted]
- (g) [Deleted]
- (h) [Deleted]
- (i) [Deleted]
- (j) [Deleted]
- (k) [Deleted]
- (l) [Deleted]
- (m) [Deleted]
- (n) AEMO must establish and maintain a register of the *performance standards* applicable to *plant* as advised by *Registered Participants* in accordance with clause 5.3.7(g)(1) or established in accordance with rule 4.14.
- (o) AEMO or, in respect of a matter concerning the quality of *supply* to *Network Users*, AEMO in consultation with the relevant *Network Service Provider*, must, when determining the applicable *performance standard* for a particular requirement based on any provision of schedules 5.1, 5.2, 5.3 and 5.3a, require a *Registered Participant* to meet or exceed the *minimum access standard* but must not require the *Registered Participant* to exceed the relevant *automatic access standard* for that requirement.

- (p) A *performance standard* may be amended at any time by agreement between AEMO, the relevant *Registered Participant* and the *Network Service Provider* if:
 - (1) where the *performance standard* was established under a transitional arrangement in rule 4.16 or 4.17, the amendment is consistent with the actual *plant* capability agreed between AEMO, the relevant *Registered Participant* and the *Network Service Provider*, even if it is less than the relevant *minimum access standard* that applied to applications to *connect* at the time of agreement; or
 - (2) the amendment satisfies all requirements for *negotiated access standards* under clause 5.3.4A(b); or
 - (3) the amendment satisfies all requirements to be an *automatic access standard*.
- (q) AEMO must not withhold agreement under rule 4.14(p) on a matter that is not an AEMO *advisory matter* under clause 5.3.4A(a), unless the proposed amendment would adversely affect *power system security*.
- (r) The *Network Service Provider* may as a condition of considering an amendment proposed under rule 4.14(p) require payment of a fee to meet the reasonable costs anticipated to be incurred by the *Network Service Provider*, other *Network Service Providers* and AEMO, in the assessment of the proposed amendment.
- (s) The *Network Service Provider* must require payment of a fee under rule 4.14(r) if so requested by AEMO.
- (t) On payment of the required fee referred to in rule 4.14(r), the *Network Service Provider* must pay the costs anticipated to be incurred by the other *Network Service Providers* and AEMO, as appropriate.

4.15 Compliance with Performance Standards

- (a) A *Registered Participant* must:
 - (1) ensure that its *plant* meets or exceeds the *performance standard* applicable to its *plant*; and
 - (2) ensure that its *plant* is not likely to cause a material adverse effect on *power system security* through its failure to comply with a *performance standard*; and
 - (3) immediately ensure that its *plant* ceases to be likely to cause a material adverse effect on *power system security* through its failure to comply with a *performance standard*, if:
 - (i) the *Registered Participant* reasonably believes that by failing to comply with a *performance standard*, its *plant* is likely to cause a material adverse effect on *power system security*; or

- (ii) *AEMO* advises the *Registered Participant* that by failing to comply with a *performance standard*, the *Registered Participant's plant* is likely to cause a material adverse effect on *power system security*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) A *Registered Participant* who engages in the activity of planning, owning, controlling or operating a *plant* to which a *performance standard* applies must institute and maintain a compliance program which complies with rule 4.15(c). The compliance program must be instituted, as soon as reasonably practicable, but no later than:
 - (1) 6 months after the day that *AEMO* gives notice to the *Registered Participant* of registration of the *performance standard* under rule 4.14(n); or
 - (2) 6 months after the day on which the *plant* commences operation.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) A compliance program instituted and maintained under rule 4.15(b) must:
 - (1) be consistent with the *template for generator compliance programs*; and
 - (2) include procedures to monitor the performance of the *plant* in a manner that is consistent with *good electricity industry practice*; and
 - (3) be modified to be consistent with any amendments made under clause 8.8.3(ba) to the *template for generator compliance programs*, by no later than 6 months after amendments to the *template for generator compliance programs* are *published* or by a date determined by the *Reliability Panel*; and
 - (4) provide reasonable assurance of ongoing compliance with each applicable *performance standard*.
- (ca) The *template for generator compliance programs* must:
 - (1) cover all *performance standards*; and
 - (2) define suitable testing and monitoring regimes for each *performance standard* so that a *Registered Participant* can select a regime that complies with the obligations set out in rules 4.15(a), 4.15(b) and 4.15(c) for their particular *plant*.

- (d) The *AER* may request that a *Registered Participant*, who is required to institute and maintain a compliance program in accordance with rule 4.15(b) or clause 5.7.4(a1), deliver to the *AER*:
 - (1) the compliance program records setting out the written results of the performance monitoring conducted in accordance with rule 4.15(f) or clause 5.7.4(a2)(1); and
 - (2) any other records maintained in accordance with clause 5.7.3 or clause 5.7.4, if applicable.
- (e) Each *Registered Participant* must maintain the compliance program records and any other records developed or maintained under clause 5.7.3 or clause 5.7.4 for 7 years and deliver such records to the *AER*, in accordance with rule 4.15(d), within 5 *business days* of the date of the request or such further period as the *AER* requires.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (f) A *Registered Participant* who engages in the activity of planning, owning, controlling or operating a *plant* to which a *performance standard* applies must immediately notify *AEMO* if:
 - (1) the *Registered Participant* becomes aware that the *plant* is breaching a *performance standard* applicable to the *plant*; or
 - (2) the *Registered Participant* reasonably believes that the *plant* is likely to breach a *performance standard* applicable to the *plant*,

and *AEMO* must forward a copy of that notice to the *AER* and the relevant *Network Service Provider* no later than 5 *business days* from the day on which *AEMO* received the notice.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (g) A notice in accordance with rule 4.15(f) must detail:
 - (1) the reason for the actual or likely non-conformance of the *plant* with the *performance standard*;
 - (2) the actual or likely time of commencement of non-conformance of the *plant* with the *performance standard*;
 - (3) the expected duration of non-conformance of the *plant* with the *performance standard*; and

- (4) the expected performance of the *plant* in comparison with the *performance standard*.
- (h) A *Registered Participant* who has notified *AEMO* in accordance with rule 4.15(f), must notify *AEMO* and the relevant *Network Service Provider* that its *plant* has returned to compliance with the *performance standard* immediately following the *Registered Participant* becoming aware of the return of the *plant* to compliance with the *performance standard*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (i) If:
 - (1) a *Registered Participant* notifies *AEMO* in accordance with rule 4.15(f); or
 - (2) *AEMO* otherwise reasonably believes that the *plant* of a *Registered Participant*, in respect of which a *performance standard* applies, is in breach of that *performance standard*,then:
 - (3) *AEMO* must, in accordance with rule 4.15(j), notify the *Registered Participant* and the relevant *Network Service Provider* of its determination on the period within which the *Registered Participant* must rectify the breach; and
 - (4) *AEMO* must notify the *AER* of a breach notified in accordance with rule 4.15(i)(1) or of its reasonable belief of a breach in accordance with rule 4.15(i)(2), as the case may be; and
 - (5) the *Registered Participant* must rectify the breach within that period, unless the *Registered Participant* seeks a review from the *AER* of the rectification period under rule 4.15(n).
- (j) *AEMO* must, when determining the period within which a *Registered Participant* is required to rectify a *performance standard* breach in accordance with rule 4.15(i), take into consideration:
 - (1) the time that *AEMO*, in its reasonable opinion, considers necessary to provide the *Registered Participant* with the opportunity to remedy the breach; and
 - (2) the impact on the operation of the *NEM*, including on the *power system* and the *spot market*, resulting from the breach; and
 - (3) any actions required by *AEMO* in response to the breach.
- (k) **[Deleted]**

- (l) **[Deleted]**
- (m) **[Deleted]**
- (n) If *AEMO* notifies a *Registered Participant* of a rectification period under rule 4.15(i) and that *Registered Participant* considers that *AEMO* has not reasonably applied the criteria under rule 4.15(j) with respect to the rectification period, the *Registered Participant* may, no later than 20 *business days* from the day of receiving *AEMO*'s notification on the rectification period, make an application to the *AER* requesting a review of *AEMO*'s notification and the *Registered Participant*'s reasons for a review.
- (o) If the *AER* receives an application under rule 4.15(n), the *AER* must review the application, no later than 30 *business days* from receiving the application, and either:
 - (1) accept the rectification period determined by *AEMO*; or
 - (2) determine the rectification period on the *Registered Participant*,
and provide reasons in writing for its determination to the *Registered Participant*, *AEMO* and the relevant *Network Service Provider*.
- (p) The *Registered Participant* must comply with any determination on the rectification period made under rule 4.15(o) from the day of receiving the *AER*'s determination.
- (q) If the *plant* of a *Registered Participant* remains operating in a manner that is in breach of a *performance standard* for a period greater than that determined in accordance with rule 4.15(i) or 4.15(o), *AEMO* must notify the *AER* and the relevant *Network Service Provider*.

4.16 Transitioning arrangements for establishment of performance standards

4.16.1 Definitions

In this rule 4.16 and in rule 4.17:

actual capability of an eligible plant in respect of a performance requirement means the capability of the eligible plant in relation to that performance requirement when it is being operated under normal conditions in accordance with *good electricity industry practice*.

agreed performance standard means a standard of performance that:

- (a) is established as a result of that standard being accepted by *NEMMCO* in accordance with:
 - (1) the Old rule 4.14(d)(1); or
 - (2) clause 4.14(d)(1) of the National Electricity Code; and

(b) is in respect of a performance requirement.

Amending Rule means the National Electricity Amendment (Performance Standards Compliance of Generators) Rule 2008.

deemed performance standard means a standard of performance that:

(a) is deemed to apply in accordance with:

- (1) the Old rule 4.14(h); or
- (2) clause 4.14(h) of the National Electricity Code; and

(b) is in respect of a performance requirement.

eligible plant means a *generating unit* (including a pumping generating unit) and *plant* associated with that *generating unit* in relation to which:

- (a) a person was registered as a *Generator* as at the *performance standards commencement date*; or
- (b) a *connection agreement* applied as at the *performance standards commencement date*.

Generator notice means a notice given by a *Generator* to NEMMCO in accordance with clause 4.16.3(c).

Generator reply notice means a notice given by a *Generator* to NEMMCO in accordance with clause 4.16.3(k).

initiating party has the meaning given to it in clause 4.17.2(a).

mandatory standard means a standard of performance in respect of a performance requirement that is not the subject of a *minimum access standard* or an *automatic access standard*.

National Electricity Code means the code of conduct called the National Electricity Code approved, in accordance with section 6(1) of the Old National Electricity Law, as the initial Code for the purposes of that Law, and as amended from time to time in accordance with its terms and the Old National Electricity Law.

NEMMCO notice means a notice given by NEMMCO to a *Generator* in accordance with clause 4.16.3(d).

NEMMCO reply notice means a notice given by NEMMCO to a *Generator* in accordance with clause 4.16.3(i).

Old National Electricity Law means the Schedule to the National Electricity (South Australia) Act 1996 (SA) as in force from time to time before the commencement of section 12 of the National Electricity (South Australia) (New National Electricity Law) Amendment Act 2005 (SA).

Old rule 4.14(d)(1) means the rule 4.14(d)(1) in the version of the *Rules* which was in force immediately prior to the commencement of the Amending Rule.

Old rule 4.14(h) means the rule 4.14(h) in the version of the *Rules* which was in force immediately prior to the commencement of the Amending Rule.

performance requirement means in the case of:

- (a) any *generating unit* (including a pumping generating unit) and *plant* associated with that *generating unit* – a requirement referred to in clause S5.2.5, S5.2.6, S5.2.8 or S5.2.9; and
- (b) a pumping generating unit and *plant* associated with that pumping generating unit – a requirement referred to in clause S5.3.3, S5.3.5, S5.3.6, S5.3.7 or S5.3.8.

performance standard requirements means the requirements set out in clause 4.16.5(c).

performance standards committee means the committee established by NEMMCO under clauses 4.17.1.

performance standards expert means a person engaged by NEMMCO under clause 4.17.1(j).

pumping generating unit means a *generating unit* that can also operate as a hydro-electric pump.

receiving party has the meaning given to it in clause 4.17.2(a).

register means the register of *performance standards* established and maintained by NEMMCO under rule 4.14(n).

registered performance standard in respect of an eligible plant means a *performance standard* (including any agreed performance standard or deemed performance standard) that is included in the register as being applicable to that eligible plant and that is in respect of a performance requirement.

4.16.2 Exclusions

For the avoidance of doubt:

- (a) this rule 4.16 does not apply in relation to any *performance standard* for an eligible plant where that *performance standard* applies to that eligible plant by virtue of clause 5.3.4A; and
- (b) nothing in this rule 4.16 is to be taken to preclude a *performance standard* that applies to an eligible plant by virtue of those clauses being amended or replaced in accordance with the *Rules*, in which case the *performance standard* as so amended or replaced supersedes the *performance standard* that applies to that eligible plant by virtue of this rule 4.16 or rule 4.17 (as the case may be).

4.16.3 Notification and acceptance of performance standards

Agreement as to performance standards

- (a) *NEMMCO* and a person who is registered as a *Generator* in relation to eligible plant may, at any time before 1 March 2007, agree to a performance standard in respect of a particular performance requirement that is to apply to that eligible plant without following the procedures set out in this clause 4.16.3, but that performance standard must be a standard which, based on the information available to *NEMMCO* at that time, is consistent with the performance standard requirements.
- (b) A performance standard that is agreed under paragraph (a) is to be taken as the *performance standard* in respect of the relevant performance requirement for that eligible plant and *NEMMCO* must forthwith include that standard in the register as the *performance standard* in respect of that performance requirement for that eligible plant.
- (c) If, as at 1 March 2007:
 - (1) *NEMMCO* is not required to include the performance standard in the register under paragraph (b); and
 - (2) *NEMMCO* and the *Generator* have not agreed that no performance standard in respect of the relevant performance requirement is to apply to that eligible plant,

NEMMCO must give a written notice to the *Generator* of its intention to refer the determination of the performance standard to a performance standards expert.

NEMMCO notice

- (d) As soon as reasonably practicable but by no later than 29 December 2006, *NEMMCO* must give to each person who is registered as a *Generator* in relation to any eligible plant a written notice that specifies:
 - (1) the registered performance standards that apply to all eligible plants in relation to which that *Generator* is so registered;
 - (2) which of those registered performance standards *NEMMCO* requires the *Generator* to renegotiate under clause 4.16.5(i) and in which case *NEMMCO* must also specify:
 - (i) the *power system security* issue that *NEMMCO* is seeking to address; and
 - (ii) the actual capability of the eligible plant in respect of the performance requirement the subject of the registered performance standard that *NEMMCO* considers is required to address that *power system security* issue; and
 - (3) where:

- (i) a *performance standard* in respect of a particular performance requirement is not included in the register as being applicable to an eligible plant in relation to which that *Generator* is registered; and
- (ii) *NEMMCO* considers that a performance standard in respect of that performance requirement should apply to that eligible plant, that performance requirement.

Generator notice

- (e) As soon as reasonably practicable but by no later than 5 January 2007, each person who is registered as a *Generator* in relation to any eligible plant must give to *NEMMCO* a written notice that specifies:
 - (1) each deemed performance standard in respect of a performance requirement which the *Generator* proposes as being applicable to any of its eligible plants, where that performance requirement is not the subject of a registered performance standard that applies to that eligible plant;
 - (2) those registered performance standards that apply to any of its eligible plant which the *Generator* requires *NEMMCO* to renegotiate under clause 4.16.5(k) – in which case the *Generator* must also specify:
 - (i) its best assessment of the actual capability of the eligible plant in respect of the performance requirement the subject of the registered performance standard; and
 - (ii) the lower performance standard that it is proposing in respect of that performance requirement,and must include with its notice information that supports its assessment of the actual capability of that eligible plant;
 - (3) where *NEMMCO* has given the *Generator* a *NEMMCO* notice that specifies the actual capability of an eligible plant in respect of a performance requirement that *NEMMCO* considers is required to address a power system security issue, the *Generator's* best assessment of the actual capability of that eligible plant in respect of that performance requirement - in which case the *Generator* must also include with its notice information that supports its assessment of that actual capability; and
 - (4) where:
 - (i) *NEMMCO* has given the *Generator* a *NEMMCO* notice that specifies a performance requirement under subparagraph (d)(3); and

- (ii) the *Generator* has not included in its notice a deemed performance standard in respect of that performance requirement that it considers applies to the eligible plant,

the performance standard (if any) that the *Generator* proposes in respect of that performance requirement.

(f) If:

- (1) the *Generator* does not state in a *Generator* notice that it requires a registered performance standard that applies to an eligible plant to be renegotiated under clause 4.16.5(k), and *NEMMCO* has not specified that standard in a *NEMMCO* notice as a registered performance standard that is to be renegotiated under clause 4.16.5(i), that registered performance standard is to be taken as the *performance standard* in respect of the relevant performance requirement for that eligible plant; or
- (2) the required actual capability of an eligible plant in respect of a performance requirement, as notified to the *Generator* under subparagraph (d)(2), is lower than or equal to the *Generator's* best assessment of the actual capability of that eligible plant in respect of that performance requirement,

then:

- (3) the required actual capability of the eligible plant in respect of that performance requirement, as notified to the *Generator* under subparagraph (d)(2), is to be taken as the *performance standard* in respect of that performance requirement for that eligible plant; and
- (4) *NEMMCO* must forthwith include that standard in the register as the *performance standard* in respect of that performance requirement for that eligible plant.

Provision of connection agreements

(g) Where:

- (1) *NEMMCO* has given the *Generator* a *NEMMCO* notice that specifies the actual capability of an eligible plant in respect of a performance requirement that *NEMMCO* considers is required to address a *power system security* issue and the *performance standard* in respect of that performance requirement is not determined under subparagraphs (f)(2)-(4);
- (2) *NEMMCO* has given the *Generator* a *NEMMCO* notice that specifies a performance requirement under subparagraph (d)(3); or
- (3) a *Generator* gives *NEMMCO* a *Generator* notice that specifies a deemed performance standard under subparagraph (e)(1) or a registered performance standard under subparagraph (e)(2),

and

- (4) the *Generator* has not already provided to *NEMMCO* a copy of the current *connection agreement* that applies to the relevant eligible plant,

then the *Generator* must include with its *Generator* notice or if it does not give *NEMMCO* a *Generator* notice, provide to *NEMMCO* by no later than 5 January 2007, a copy of the current *connection agreement* that applies to the eligible plant.

- (h) The copy of the *connection agreement* referred to in paragraph (g) may be altered in such a way as to mask any commercial arrangements and is *confidential information*.

NEMMCO reply notice

- (i) As soon as reasonably practicable but by no later than the performance standards agreement date, *NEMMCO* must give to each person who is registered as a *Generator* in relation to any eligible plant a written notice that states:
 - (1) where the *Generator* has given *NEMMCO* a *Generator* notice that specifies a deemed performance standard under subparagraph (e)(1), whether *NEMMCO* accepts the deemed performance standard as proposed by the *Generator*;
 - (2) where the *Generator* has given *NEMMCO* a *Generator* notice that specifies a proposed lower performance standard under subparagraph (e)(2), whether *NEMMCO* accepts:
 - (i) the *Generator's* assessment of the actual capability of the eligible plant in respect of the performance requirement the subject of the registered performance standard; and/or
 - (ii) the lower performance standard that has been proposed by the *Generator*;
 - (3) where:
 - (i) the *Generator* has given *NEMMCO* a *Generator* notice that, under subparagraph (e)(3), specifies the *Generator's* best assessment of the actual capability of the eligible plant in respect of a performance requirement; and
 - (ii) the required actual capability of the eligible plant in respect of that performance requirement, as notified to the *Generator* under subparagraph (d)(2), is higher than the *Generator's* assessment of the actual capability referred to in paragraph (l),

whether *NEMMCO* accepts the *Generator's* assessment;

- (4) where the *Generator* has given *NEMMCO* a *Generator* notice that specifies a proposed performance standard under subparagraph (e)(4), whether *NEMMCO* accepts that performance standard; and
- (5) where *NEMMCO* has given to the *Generator* a *NEMMCO* notice that specifies a performance requirement under subparagraph (d)(3) and the *Generator* has either:
 - (i) not proposed a performance standard under subparagraph (e)(4); or
 - (ii) not given a *Generator* notice to *NEMMCO*,
the performance standard (if any) that *NEMMCO* proposes for that purpose.
- (j) If *NEMMCO* states in a *NEMMCO* reply notice that:
 - (1) it accepts a standard referred to in subparagraph (i)(1), (2) or (4), that standard is to be taken as the *performance standard* in respect of the relevant performance requirement for the eligible plant and *NEMMCO* must forthwith include that standard in the register as the *performance standard* in respect of that performance requirement for that eligible plant; or
 - (2) it accepts the *Generator's* assessment of the actual capability of an eligible plant in respect of a performance requirement as included in a *Generator* notice under subparagraph (e)(3),
and the *Generator's* assessment of that actual capability is lower than the required actual capability of the eligible plant in respect of that performance requirement as notified to the *Generator* under subparagraph (d)(2), then:
 - (3) the *Generator's* assessment of the actual capability of that eligible plant as referred to above is to be taken as the *performance standard* in respect of that performance requirement for that eligible plant; and
 - (4) *NEMMCO* must forthwith include that standard in the register as the *performance standard* in respect of that performance requirement for that eligible plant.

Generator reply notice

- (k) Where *NEMMCO* has given a *Generator* a *NEMMCO* reply notice that specifies a proposed performance standard under subparagraph (i)(5), that *Generator* must, as soon as reasonably practicable but by no later than 15 January 2007, give written notice to *NEMMCO* which states whether it accepts that performance standard.
- (l) If the *Generator* states in a *Generator* reply notice that it accepts a standard referred to in paragraph (k), that standard is to be taken as the *performance standard* in respect of the relevant performance requirement for the eligible

plant and *NEMMCO* must forthwith include that standard in the register as the performance standard in respect of that performance requirement for that eligible plant.

4.16.4 Actual capability

- (a) If *NEMMCO* notifies a *Generator* in a *NEMMCO* reply notice that it does not accept that the *Generator*'s assessment of the actual capability of an eligible plant in respect of a particular performance requirement, then:
 - (1) the *Generator* and *NEMMCO* must seek to agree the actual capability of that eligible plant in respect of that performance requirement, taking into account (among other things) the results of relevant tests, the records of the operation of the plant, engineering reports, information provided by *Network Service Providers*, manufacturers' reports and the specifications of the plant or of similar plant; and
 - (2) if, within 20 *business days* of the giving of the *NEMMCO* reply notice, the *Generator* and *NEMMCO* have not agreed the actual capability of that eligible plant in respect of that performance requirement:
 - (i) they must seek to agree to the tests or engineering assessments that are to be undertaken for the purpose of establishing that actual capability and the time by which such tests or engineering assessments are to be completed; and
 - (ii) if, within 30 *business days* of the giving of the *NEMMCO* reply notice, they have not agreed to the tests or engineering assessments that are to be undertaken, or the time by which they are to be undertaken, the tests or engineering assessments, and the time by which they are to be undertaken, must be as specified by the *AER* in writing to the *Generator* and *NEMMCO*, such specification to be made at the written request of either the *Generator* or *NEMMCO* within 40 *business days* of the giving of the *NEMMCO* reply notice.
- (b) The *Generator* must use all reasonable endeavours, subject to complying with any other applicable provisions of the *Rules*, to have the tests or engineering assessments agreed or specified under subparagraph (a)(2) undertaken as agreed or specified and must promptly provide the results of such tests or engineering assessments to *NEMMCO*.
- (c) The costs of undertaking the tests or engineering assessments and providing the results to *NEMMCO* as referred to in paragraph (b) must be borne by the *Generator*.
- (d) This clause 4.16.4 does not apply where both the *Generator* and *NEMMCO* agree that there is no need to determine the actual capability of the eligible plant in respect of a particular performance requirement.

4.16.5 Criteria for, and negotiation of, performance standards

Restrictions on NEMMCO regarding performance standards

(a) *NEMMCO*:

- (1) must, and must only, accept a deemed performance standard or a proposed performance standard under clause 4.16.3(i)(1), (2) or (4) if it is satisfied that, based on the information available to *NEMMCO* at that time, the standard is consistent with the performance standard requirements;
- (2) must not propose a performance standard under clause 4.16.3(i)(5) unless it is satisfied that, based on the information available to *NEMMCO* at that time, the standard is consistent with the performance standard requirements,

and may only agree to a performance standard under clause 4.16.3(a)-(c) or as described in clause 4.17.3(f) if it is satisfied that, based on the information available to *NEMMCO* at that time, the standard is consistent with the performance standard requirements.

Preconditions to obligation to negotiate

(b) If:

- (1) *NEMMCO* does not state in a *NEMMCO* reply notice that it accepts a *Generator's* assessment of the actual capability of an eligible plant in respect of a performance requirement, as referred to in clause 4.16.3(i)(3), and the *Generator* is required to renegotiate the relevant registered performance standard pursuant to paragraph (i);
- (2) *NEMMCO* does not state in a *NEMMCO* reply notice that it accepts a performance standard proposed by a *Generator*, as referred to in clause 4.16.3(i)(2), and *NEMMCO* is required to renegotiate the relevant registered performance standard pursuant to paragraph (k);
- (3) *NEMMCO* does not state in a *NEMMCO* reply notice that it accepts a deemed performance standard or a proposed performance standard, as referred to in clause 4.16.3(i)(1) or (4); or
- (4) a *Generator* does not state in a *Generator* reply notice that it accepts a proposed performance standard, as referred to in clause 4.16.3(k),

NEMMCO and the *Generator* must negotiate in good faith to agree the relevant performance standard in accordance with the performance standard requirements.

Criteria for performance standards

- (c) Subject to paragraphs (e) and (f), a performance standard referred to in paragraph (a) or negotiated in accordance with paragraph (b) must be the least onerous of:

- (1) in the case of a performance standard other than a performance standard referred to in subparagraph (b)(1), the technical characteristics set out in the relevant connection agreement, subject to the technical characteristics set out in any applicable derogation;
 - (2) the relevant *automatic access standard*;
 - (3) the relevant mandatory standard; and
 - (4) the actual capability of the eligible plant in respect of the performance requirement the subject of the performance standard as accepted by NEMMCO in a NEMMCO reply notice, agreed by NEMMCO and the *Generator*, established in accordance with tests or engineering assessments agreed or specified under clause 4.16.4(a)(2), or determined by a performance standards expert.
- (d) As a result of the application of paragraph (c), and notwithstanding anything else to the contrary in the *Rules*, the relevant performance standard may be less than the relevant *minimum access standard* or mandatory standard.
- (e) The performance standard may be such other standard of performance as is agreed by NEMMCO and the *Generator* and as is higher than that which complies with the requirements set out in paragraphs (c) and (d).
- (f) NEMMCO and the *Generator* may agree that a performance requirement is not applicable to an eligible plant, with the result that no *performance standard* in respect of that performance requirement is required for that eligible plant.

Provision of information

- (g) For the purpose of facilitating the negotiations referred to in paragraph (b), the *Generator* must provide to NEMMCO as soon as reasonably practicable but by no later than 22 January 2007, a copy of the current *connection agreement* that applies to the relevant eligible plant and details of the design performance of the eligible plant.
- (h) The obligation in paragraph (g) does not apply to the extent the *Generator* has already provided such documents and information to NEMMCO and the copy of the *connection agreement* may be altered in such a way as to mask any commercial arrangements and is *confidential information*.

When NEMMCO may require renegotiation of registered performance standard

- (i) NEMMCO may only require a *Generator* to renegotiate a registered performance standard pursuant to a NEMMCO notice if:
 - (1) the registered performance standard is lower than what NEMMCO considers, based on the information available to it, to be the actual capability of the eligible plant in respect of the performance requirement the subject of the registered performance standard; and

- (2) *NEMMCO* is satisfied that a higher performance standard in respect of that performance requirement is required to address a *power system security* issue.
- (j) Notwithstanding paragraph (i), a *Generator* is not required to (but may nevertheless agree to) renegotiate a registered performance standard pursuant to that clause if the actual capability of that eligible plant in respect of the performance requirement as agreed by *NEMMCO* and the *Generator*, or as established in accordance with tests or engineering assessments agreed or specified under clause 4.16.4(a)(2), is lower than the registered performance standard.

When Generator may require renegotiation of performance standard

- (k) A *Generator* may only require *NEMMCO* to renegotiate a registered performance standard pursuant to a *Generator* notice if the registered performance standard is higher than the *Generator*'s best assessment of the actual capability of the eligible plant in respect of the performance requirement the subject of the registered performance standard.
- (l) Notwithstanding paragraph (k), *NEMMCO* is not required to (but may nevertheless agree to) renegotiate a registered performance standard pursuant to that clause if the actual capability of that eligible plant in respect of the performance requirement as agreed by *NEMMCO* and the *Generator*, or as established in accordance with tests or engineering assessments agreed or specified under clause 4.16.4(a)(2), is higher than the registered performance standard.

Consequences of agreeing performance standard

- (m) If *NEMMCO* and a *Generator* agree a performance standard in respect of a performance requirement for any eligible plant under this clause 4.16.5, that performance standard is to be taken as the *performance standard* in respect of that performance requirement for the eligible plant and *NEMMCO* must forthwith include that standard in the register as the performance standard in respect of that performance requirement for that eligible plant.

4.16.6 Consultation with and assistance by Network Service Providers

- (a) Before *NEMMCO*:
 - (1) accepts or agrees to a performance standard under this rule 4.16 or as described in clause 4.17.3(d); or
 - (2) agrees that a performance requirement is not applicable to an eligible plant under clause 4.16.5(f),

NEMMCO must notify the *Network Service Provider* to whose network the relevant eligible plant is directly *connected* and give that *Network Service Provider* a reasonable opportunity to provide its views on that matter to *NEMMCO*.

- (b) As soon as reasonably practicable after including a performance standard for an eligible plant in the register under this rule 4.16 or rule 4.17, *NEMMCO* must give written notice of that performance standard to the *Network Service Provider* to whose *network* that eligible plant is directly connected.
- (c) If requested to do so by *NEMMCO* or a *Generator*, a *Network Service Provider* must use its reasonable endeavours to provide such assistance as is requested in connection with the proposal, negotiation, acceptance or agreement of a performance standard under this rule 4.16 or as described in clause 4.17.3(d).

4.16.7 Referral to expert determination

- (a) If:
 - (1) in accordance with clause 4.16.5(b), *NEMMCO* and a *Generator* are required to negotiate to agree a performance standard in respect of a particular performance requirement for an eligible plant;
 - (2) *NEMMCO* and the *Generator* have not agreed under clause 4.16.5(f) that such a performance requirement is not applicable to that eligible plant; and
 - (3) as at 29 January 2007, *NEMMCO* is not required under clause 4.16.5(m) to include in the register a performance standard for that eligible plant that is in respect of that performance requirement,

the *Generator* may give a written notice to *NEMMCO* (or *NEMMCO* may give a written notice to the *Generator*) of its intention to refer the determination of the performance standard in respect of the performance requirement to a performance standards expert.

- (b) If:
 - (1) in accordance with clause 4.16.5(b), *NEMMCO* and a *Generator* are required to negotiate to agree a performance standard in respect of a particular performance requirement for an eligible plant;
 - (2) *NEMMCO* and the *Generator* have not agreed under clause 4.16.5(f) that such a performance requirement is not applicable to that eligible plant; and
 - (3) as at 1 March 2007, *NEMMCO* is not required under clause 4.16.5(m) to include in the register a performance standard for that eligible plant that is in respect of that performance requirement,

NEMMCO must give a written notice to the *Generator* of its intention to refer the determination of the performance standard in respect of the performance requirement to a performance standards expert.

4.16.8 Prior actions

If the *AEMC*, the *AER*, *NEMMCO* or a *Registered Participant* takes any action to enable any entity to perform functions under, or obligations imposed by, this rule 4.16 or rule 4.17 before 7 December 2006 in anticipation of the relevant provision applying on the performance standards transition commencement date, and the action was taken so far as reasonably practicable in accordance with the provision (as though the provision applied at the time the relevant action was taken), then the action is deemed to have been validly taken in accordance with that provision with effect on and from 7 December 2006.

4.16.9 Deemed performance standards

A deemed performance standard for any eligible plant:

- (a) that is in respect of a particular performance requirement; and
- (b) that is included in the register as at the performance standards transition commencement date,

is to be taken to be the performance standard in respect of that performance requirement for that eligible plant for the purposes of the *Rules* unless it is subsequently amended or replaced in accordance with the *Rules*.

4.16.10 Modification of connection agreements

- (a) Notwithstanding clause 5.2.2(c) and subject to paragraph (b), a *connection agreement* that applies to any eligible plant is to be taken to include:
 - (1) such *performance standards* for that eligible plant as are included in the register under this rule 4.16 or rule 4.17; and
 - (2) except to the extent they have been superseded by a *performance standard* referred to in subparagraph (1), such *performance standards* for that eligible plant as are included in the register as at the performance standards transition commencement date,

and those *performance standards* prevail over any other standards of performance that are included in that *connection agreement* to the extent of any inconsistency between them.

- (b) Clause 4.16.10(a) does not apply to the extent a *performance standard* that is taken to be included in a *connection agreement* under that clause is subsequently amended or replaced in accordance with the *Rules*.

4.17 Expert determination

4.17.1 Performance standards committee and appointment of performance standards experts

- (a) As soon as reasonably practicable but by no later than 10 January 2007, *NEMMCO* must establish a committee comprising six members (the **performance standards committee**).
- (b) The six members must consist of:
 - (1) two persons appointed to represent *NEMMCO*, one of whom is appointed as the chairperson of the committee;
 - (2) two persons appointed to represent *Generators*; and
 - (3) two persons appointed to represent *Network Service Providers*.
- (c) A decision of the performance standards committee to nominate a person as a performance standards expert must be made:
 - (1) at a meeting of the performance standards committee; and
 - (2) by at least two thirds of the number of members who attend the meeting.
- (d) A quorum for a meeting of the performance standards committee consists of one member from each of the categories referred to in subparagraph (b)(1) to (3).
- (e) The chairperson of the performance standards committee:
 - (1) is responsible for all procedural matters; and
 - (2) without limiting subparagraph (1), may determine that a member or members may participate in, and form any part of the quorum for, a meeting of the performance standards committee by telephone, closed circuit television or other means, but only if the member who speaks on any matter at that meeting can be heard by the other members at that meeting.
- (f) If a member of the performance standards committee resigns or otherwise ceases to be able or available to perform the functions of a member for more than 2 consecutive meetings of the committee, *NEMMCO* must, as soon as reasonably practicable, appoint another person to replace that member.
- (g) As soon as reasonably practicable after it is established, the performance standards committee must nominate at least two persons as performance standards experts.
- (h) The performance standards committee must:

- (1) from time to time nominate such number of persons as performance standards experts as is necessary to ensure that the number of performance standards experts at any time is no less than two; and
 - (2) at the request of *NEMMCO*, nominate such additional number of persons as performance standards experts as *NEMMCO* requires.
- (i) If the performance standards committee:
 - (1) fails to nominate at least two persons as performance standards experts within 30 *business days* of the committee being established; or
 - (2) where the number of performance standards experts is reduced to less than two – fails, within 30 *business days* of such reduction occurring, to nominate such number of persons as performance standards experts as is necessary to restore the number of performance standards experts to two,

NEMMCO must request the *AER* in writing to nominate the requisite number of persons as performance standards experts and the *AER* must nominate that number of performance standards experts as soon as reasonably practicable.
- (j) *NEMMCO* must engage a performance standards expert nominated under this clause 4.17.1 for the purpose of performing the functions of a performance standards expert under this rule 4.17.
- (k) *NEMMCO* must notify the *AER* in writing of each performance standards expert that it engages under paragraph (j).
- (l) The performance standards committee will cease to exist one month after 1 June 2007.

4.17.2 Referral to performance standards expert

- (a) Where *NEMMCO* or a *Generator* gives a notice under clause 4.16.3(c) or clause 4.16.7 of its intention to refer the determination of a performance standard to a performance standards expert, the party giving the notice (the '**initiating party**') and the party to whom the notice is given (the '**receiving party**') must seek to agree on a performance standards expert to determine the performance standard.
- (b) If:
 - (1) 5 *business days* from the giving of the notice under clause 4.16.3(c) or clause 4.16.7 (as the case may be) have elapsed; and
 - (2) the initiating party and the receiving party have not agreed on a performance standards expert to determine the performance standard,

then the initiating party or the receiving party may request the *AER* in writing to nominate a performance standards expert to determine the performance standard, in which case:

- (3) the *AER* must make such nomination by notice in writing given to both the initiating party and the receiving party within 5 *business days* of the *AER* receiving the request to do so; and
 - (4) the nominated performance standards expert will determine the performance standard.
- (c) Within 5 *business days* of the selection of the performance standards expert who will determine the performance standard, or within such longer time as the performance standards expert may agree, the initiating party and the receiving party must each give to the performance standards expert a written submission as to the performance standard they contend should be adopted and the reasons (together with supporting evidence) for that contention.

4.17.3 Determinations of performance standards experts

- (a) The initiating party, the receiving party and any *Network Service Provider* required to do so by the performance standards expert must promptly supply the performance standards expert with any information, assistance and cooperation requested in writing by the performance standards expert in connection with its determination of a performance standard.
- (b) The performance standards expert must determine the performance standard in accordance with the performance standard requirements. For these purposes the performance standards expert may, without limitation:
 - (1) determine the actual capability of the eligible plant in respect of the performance requirement the subject of the performance standard; or
 - (2) determine that a performance requirement is not applicable to the relevant eligible plant, with the result that no performance standard in respect of that performance requirement is required for that eligible plant.
- (c) The performance standards expert must, as soon as reasonably practicable but no later than 1 June 2007, determine the performance standard and provide *NEMMCO* and the *Generator* with its written determination (including reasons).
- (d) The performance standards expert must not determine a performance standard in respect of a performance requirement for an eligible plant if, prior to making that determination, *NEMMCO* and the *Generator* notify the expert in writing that they have agreed to the relevant performance standard.
- (e) A performance standard in respect of a particular performance requirement that is:
 - (1) agreed as described in paragraph (d); or

- (2) determined by a performance standards expert,

is to be taken as the performance standard in respect of that performance requirement for the relevant eligible plant and *NEMMCO* must forthwith include that standard in the register as the *performance standard* in respect of that performance requirement for that eligible plant.
- (f) Not later than 1 July 2007, a performance standards expert must provide a summary of each determination it makes under this rule 4.17 to *NEMMCO* and *NEMMCO* must *publish* that summary as soon as is reasonably practicable.
- (g) A summary under paragraph (f) must only include the following information:
 - (1) the name of the relevant *Generator*;
 - (2) the name or a description of the eligible plant; and
 - (3) the performance requirement that is the subject of the performance standard that has been determined by the performance standards expert for that eligible plant.

4.17.4 Other matters

- (a) To the extent permitted by law, a performance standards expert is not liable for any loss, damage or liability suffered or incurred by a *Registered Participant* or any other person as a consequence of any act or omission of the performance standards expert that was done in good faith in connection with the determination of a performance standard.
- (b) Before proceeding to determine a performance standard, a performance standards expert may require the initiating party and the receiving party to execute a release and indemnity in relation to any loss, damage or liability that the performance standards expert might, but for the release and indemnity, suffer or incur as a consequence of any act or omission of the performance standards expert that was done in good faith in connection with the determination of the performance standard.
- (c) As part of its engagement by *NEMMCO*, a performance standards expert must enter into a confidentiality deed with *NEMMCO*, for the benefit of *NEMMCO* and each *Generator* in respect of which the performance standards expert determines a performance standard, under which it undertakes to keep confidential all information provided to it for the purposes of determining any performance standard except to the extent that the disclosure of such information is necessary for the purposes of the summary referred to in clause 4.17.3(f).
- (d) The costs of the performance standards expert must be borne equally as between *NEMMCO* and National Generators Forum Limited (ACN 113 331 623).

CHAPTER 5

5. Network Connection Access, Planning and Expansion

Part A Introduction

5.1 Introduction to Chapter 5

5.1.1 Structure of this Chapter

- (a) This Chapter deals with matters relating to *networks*.
- (b) It is divided into the following Parts:
 - (1) this Part is introductory;
 - (2) Part B provides a framework for *connection* and access to a *transmission network* or a *distribution network* and to the *national grid*;
 - (3) Part C addresses the *network* related issues following the negotiation of a *connection agreement* under Part B, namely the design of *connected* equipment, inspection and testing, commissioning and *disconnection* and reconnection; and
 - (4) Part D deals with the planning and expansion of *networks* and the *national grid*.

5.1.2 Overview of Part B and connection and access under the Rules

- (a) Rule 5.1A sets out the purpose, application and principles for Part B.
- (b) Rule 5.2 sets out the obligations of *Registered Participants* under Part B and other relevant Parts of this Chapter 5.
- (c) Rule 5.2A sets out obligations and principles relevant to *connection* and access to *transmission networks* and *large dedicated connection assets*. This includes the classification of certain services relating to assets relevant to *connection* as *prescribed transmission services*, *negotiated transmission services* and *non-regulated transmission services*. Rule 5.2A does not apply to the *declared transmission system* of an *adoptive jurisdiction*.
- (d) Rules 5.3, 5.3A and 5.3AA and Chapter 5A set out processes by which *Connection Applicants* can negotiate for connection and access to the *national grid* from a *Network Service Provider*. The process applicable will depend on the nature of the application. The table below sets out an overview of the relevant processes:

Connection Applicant	Process
A <i>Registered Participant</i> or a person intending to become a <i>Registered Participant</i> for a <i>generating plant</i> connecting to a <i>transmission network</i>	Rule 5.3 applies
A <i>Registered Participant</i> or a person intending to become a <i>Registered Participant</i> (or a person pursuant to clause 5.1A.1(c)) for a <i>load</i> connecting to a <i>transmission network</i>	Rule 5.3 applies
A <i>load</i> connecting to a <i>distribution network</i> where the <i>Connection Applicant</i> is a <i>Registered Participant</i> or a person intending to become a <i>Registered Participant</i> (and is not acting as the agent of a <i>retail customer</i>)	Rule 5.3 applies
A <i>distribution network</i> (including an <i>embedded network</i>) connecting to another <i>distribution network</i> or to a <i>transmission network</i> where the <i>Connection Applicant</i> is a <i>Registered Participant</i> , intending to become a <i>Registered Participant</i> or will obtain an exemption from registration	Rule 5.3 applies
A <i>Market Network Service Provider</i> or person intending to register as one seeking connection to a <i>distribution network</i> or a <i>transmission network</i>	Rule 5.3 applies
An <i>embedded generating unit</i> connecting to a <i>distribution network</i> where the <i>Connection Applicant</i> is a <i>Registered Participant</i> or a person intending to become a <i>Registered Participant</i>	Rules 5.3 and 5.3A apply (see clause 5.3.1A for the interaction between the two rules)
A non-registered embedded generator who makes an election for rule 5.3A to apply instead of Chapter 5A	Rules 5.3 and 5.3A apply (see clause 5.3.1A for the interaction between the two rules)
A <i>Generator</i> wishing to alter a <i>connected generating plant</i> in the circumstances set out in clause 5.3.9	Clause 5.3.9 applies

Connection Applicant	Process
A <i>Connection Applicant</i> for <i>prescribed transmission services</i> or <i>negotiated transmission services</i> that do not require the establishment or modification of a <i>connection</i> or alteration of a <i>connected generating plant</i> in the circumstances set out in clause 5.3.9	Rule 5.3 applies as modified by clause 5.2A.3(c)
An <i>Embedded Generator</i> or <i>Market Network Service Provider</i> applying for <i>distribution user network access</i>	Rule 5.3 or 5.3A (as applicable) and rule 5.3AA apply
A <i>load</i> or <i>generating plant</i> connecting to a <i>declared shared network</i>	Rule 5.3 as modified by clause 5.1A.1(d) to (g) and rule 5.3B apply
A <i>load</i> connecting to a <i>distribution network</i> where the <i>Connection Applicant</i> is not a <i>Registered Participant</i> and is not intending to become a <i>Registered Participant</i> (unless it is acting as the agent of a <i>retail customer</i>) A non-registered embedded generator who does not make an election for Rule 5.3A to apply instead of Chapter 5A	Chapter 5A applies
A <i>retail customer</i> (or a <i>retailer</i> on behalf of that customer) connecting a micro embedded generator to a <i>distribution network</i>	Chapter 5A applies

- (e) In addition to the rules referred to in paragraph (d), in relation to *connection* and access to a *distribution network*:
- (1) a *Distribution Network Service Provider* must comply with its *negotiating framework* and *Negotiated Distribution Service Criteria* when *negotiating the terms and conditions of access to negotiated distribution services*;
 - (2) disputes relating to the *terms and conditions of access* to a *direct control service* or to a *negotiated distribution service*, *access charges* or matters referred to in clause 5.3AA(f) (*negotiated use of system charges*) or 5.3AA(h) (*avoided charges for the locational component of prescribed TUOS services*) may be referred to the AER in accordance with Part L of Chapter 6;

- (3) Part G of Chapter 5A provides for dispute resolution by the *AER* for certain disputes under Chapter 5A; and
 - (4) other disputes relating to *connection* and access may be subject to dispute resolution under rule 8.2.
- (f) In addition to the rules referred to in paragraph (d), in relation to *connection* and access to a *transmission network*:
- (1) schedule 5.11 sets out the negotiating principles which apply to negotiations between a *Transmission Network Service Provider* and a *Connection Applicant* for *negotiated transmission services*;
 - (2) rule 5.4 provides a framework for *Connection Applicants* and *Transmission Network Service Providers* to appoint an *Independent Engineer* to provide advice on certain technical matters; and
 - (3) rule 5.5 provides for commercial arbitration of disputes between a *Transmission Network Service Provider* and a *Connection Applicant* as to *terms and conditions of access* for the provision of *prescribed transmission services* or for the provision of *negotiated transmission services*.
- (g) Part B also provides for a *Dedicated Connection Asset Service Provider* to have an *access policy* for a *large dedicated connection asset* and for *commercial arbitration* under rule 5.5 to apply to a *large DCA services access dispute*.

Part B Network Connection and Access

5.1A Introduction to Part B

5.1A.1 Purpose and Application

- (a) This Part B:
- (1) **[Deleted]**
 - (2) has the following aims:
 - (i) to detail the principles and guidelines governing *connection* and access to a *network*;
 - (ii) to establish the process to be followed by a *Registered Participant* or a person intending to become a *Registered Participant* for establishing or modifying a *connection* to a *network* or for altering *generating plant connected to a network*;
 - (iii) to address a *Connection Applicant's* reasonable expectations of the level and standard of *power transfer capability* that the relevant *network* should provide; and

- (iv) to establish processes to ensure ongoing compliance with the technical requirements of this Part B to facilitate management of the *national grid*.
- (b) **[Deleted]**.
- (c) If a person who is not a *Registered Participant* or a person intending to become a *Registered Participant* requests *connection* of a *load* to a *transmission network* and agrees to comply with this Part B as if that person was a *Registered Participant*, the relevant *Transmission Network Service Provider* must comply with this Part B as if that person was a *Registered Participant*.
- (d) Subject to paragraphs (e) and (g), the following *Rules* apply in the application of this Part B to *transmission services* provided by means of, or in connection with, the *declared transmission system* of an *adoptive jurisdiction*:
 - (1) a reference to a *Network Service Provider* is, in relation to the provision of *connection services*, to be read as a reference to a *declared transmission system operator*; and
 - (2) a reference to a *Network Service Provider* is, in relation to the provision of *shared transmission services*, to be read as a reference to *AEMO*.
- (e) A reference in any of the following provisions to a *Network Service Provider* will, in relation to the *declared transmission system* of an *adoptive jurisdiction*, be construed as a reference to *AEMO*:
 - (1) clause 5.2.3(b);
 - (2) clause 5.2.6;
 - (3) clause 5.3A.12;
 - (4) clause 5.7.6;
 - (5) clause 5.7.7 (except clause 5.7.7(c));
 - (6) rule 5.11;
 - (7) clause 5.12.1;
 - (8) clause 5.12.2 (except clause 5.12.2(c)(2));
 - (9) clause 5.14.1;
 - (10) schedule 5.1, clause S5.1.2.3;
 - (11) schedule 5.3, clause S5.3.5.
- (f) Subject to clause (f1) a reference in:

- (1) the definition of RIT-T proponent in clause 5.10.2;
- (2) clause 5.14.3;
- (3) clause 5.16.4;
- (4) clause 5.16.5;
- (5) rule 5.18;
- (6) rule 5.19;
- (7) rule 5.20B; and
- (8) rule 5.20C,

to a *Transmission Network Service Provider* will, in relation to the *declared transmission system* of an *adoptive jurisdiction*, be construed as a reference to AEMO.

(f1) A reference in:

- (1) the definition of RIT-T proponent in clause 5.10.2;
- (2) clause 5.16.4; and
- (3) clause 5.16.5,

to a *Transmission Network Service Provider* will, in relation to the *declared transmission system* of an *adoptive jurisdiction*, be construed as a reference to the relevant *declared transmission system operator* where:

- (4) the relevant RIT-T project (as defined in clause 5.10.2) is to address an *identified need* that arises from the retirement or de-rating of *network* assets; and
- (5) a credible option (as defined in clause 5.10.2) for that RIT-T project (as defined in clause 5.10.2) is replacement of *network* assets.

(g) A reference in any of the following provisions to a *Network Service Provider* will, in relation to the *declared transmission system* of an *adoptive jurisdiction*, be construed as a reference to the relevant *declared transmission system operator*:

- (1) clause 5.2.3(d)(12), (e) and (e1)(except 5.2.3(e1)(2));
- (2) clause 5.3.4A(c) and (d);
- (3) clause 5.9.3;
- (4) clause 5.9.4;
- (5) clause 5.9.6;

- (6) Schedule 5.1, clause S5.1.10.3(a);
- (7) Schedule 5.2 clause S5.2.3(a)(8).

5.1A.2 Principles

This Part B is based on the following principles relating to *connection* to the *national grid*:

- (a) all *Registered Participants* should have the opportunity to form a *connection* to a *network* and have access to the *network services* provided by the *networks* forming part of the *national grid*;
- (b) the terms and conditions on which *connection* to a *network* and provision of *network service* is to be granted are to be set out in commercial agreements on reasonable terms entered into between a *Network Service Provider* and other *Registered Participants*;
- (c) the technical terms and conditions of *connection agreements* regarding standards of performance must be established at levels at or above the *minimum access standards* set out in schedules 5.1, 5.2, 5.3 and 5.3a, with the objective of ensuring that the *power system* operates securely and reliably and in accordance with the *system standards* set out in schedule 5.1a;
- (d) a *Registered Participant* or person intending to become a *Registered Participant* may request *connection* of a *facility*, modification of a *connection*, or alteration of *connected plant* at a standard below an *automatic access standard* if the *connection*, modification to the *connection*, or alteration of *connected plant* does not adversely affect:
 - (1) *power system security*; and
 - (2) the quality of *supply* to other *Network Users*; and
- (e) the operation of the *Rules* should result in the achievement of:
 - (1) long term benefits to *Registered Participants* in terms of cost and *reliability* of the *national grid*; and
 - (2) open communication and information flows relating to *connections* between *Registered Participants* themselves, and between *Registered Participants* and AEMO, while ensuring the security of *confidential information* belonging to competitors in the *market*.

5.2 Obligations

5.2.1 Obligations of Registered Participants

- (a) All *Registered Participants* must maintain and operate (or ensure their authorised *representatives* maintain and operate) all equipment that is part of their *facilities* in accordance with:
 - (1) relevant laws;
 - (2) the requirements of the *Rules*; and
 - (3) *good electricity industry practice* and relevant *Australian Standards*.
- (b) All *Registered Participants* must ensure that the *connection agreements* to which they are a party require the provision and maintenance of all required *facilities* consistent with *good electricity industry practice* and must operate their equipment in a manner:
 - (1) to assist in preventing or controlling instability within the *power system*;
 - (2) to comply with their *performance standards*;
 - (3) to assist in the maintenance of, or restoration to, a *satisfactory operating state* of the *power system*; and
 - (4) to prevent uncontrolled separation of the *power system* into isolated *regions* or partly combined *regions*, *intra-regional transmission* break-up, or *cascading outages*, following any *power system* incident.

5.2.2 Connection agreements

- (a) If requested to do so by a *Transmission Network User*, *Distribution Network User*, *AEMO* or the *AER*, a *Network Service Provider* and a *Transmission Network User* or *Distribution Network User* (as the case may be) must document the terms of any *network connection* arrangements made prior to 13 December 1998 and the resulting document will then be deemed to be a *connection agreement* for the purposes of the *Rules*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) The *Rules* apply to:
 - (1) *connection agreements* made after 13 December 1998;
 - (2) deemed *connection agreements* under paragraph (a); and
 - (3) requests to establish *connection* after 13 December 1998.

- (c) This Chapter is neither intended to have, nor is it to be read or construed as having, the effect of:
 - (1) altering any of the terms of a *connection agreement*; or
 - (2) altering the contractual rights or obligations of any of the parties under the *connection agreement* as between those parties; or
 - (3) relieving the parties under any such *connection agreement* of their contractual obligations under such an agreement.
- (d) Notwithstanding the provisions of clause 5.2.2(c), if any obligation imposed or right conferred on a *Registered Participant* by this Chapter is inconsistent with the terms of a *connection agreement* to which the *Rules* apply and the application of the inconsistent terms of the *connection agreement* would adversely affect the quality or security of *network service* to other *Network Users*, the parties to the *connection agreement* must observe the provisions of this Chapter as if they prevail over the *connection agreement* to the extent of the inconsistency.

5.2.3 Obligations of network service providers

- (a) To be registered by *AEMO* as a *Network Service Provider*, a person must satisfy the relevant requirements specified in Chapter 2 and submit an application to *AEMO* in such form as *AEMO* may require.
- (b) A *Network Service Provider* must comply with the *power system* performance and quality of *supply* standards:
 - (1) described in schedule 5.1;
 - (2) in accordance with any *connection agreement* with a *Registered Participant*,and if there is an inconsistency between schedule 5.1 and such a *connection agreement*:
 - (3) if compliance with the relevant provision of the *connection agreement* would adversely affect the quality or security of *network service* to other *Network Users*, schedule 5.1 is to prevail;
 - (4) otherwise the *connection agreement* is to prevail.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) Where the provisions of the *connection agreement* vary the technical requirements set out in the schedules to this Chapter, the relevant *Network Service Provider* must report on such variations to *AEMO* on an annual basis. *AEMO* must allow access to such information to all other *Network*

Service Providers and the *Network Service Providers* must keep such information confidential.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(d) A *Network Service Provider* must:

- (1) review and process *applications to connect* or modify a *connection* which are submitted to it and must enter into a *connection agreement* with each *Registered Participant* and any other person to which it has provided a *connection* in accordance with rules 5.3 or 5.3A (as is relevant) to the extent that the *connection point* relates to its part of the *national grid*;
- (1A) co-operate with any other *Network Service Provider* who is processing a *connection* enquiry or *application to connect* to allow that *connection* enquiry or *application to connect* to be processed expeditiously and in accordance with rules 5.3 or 5.3A (as is relevant);
- (2) ensure that, to the extent that a *connection point* relates to its part of the *national grid*, every arrangement for *connection* with a *Registered Participant* or any other arrangement involving a *connection agreement* with that *Network Service Provider* complies with all relevant provisions of the *Rules*;
- (3) co-ordinate the design aspects of equipment proposed to be *connected* to its *networks* with those of other *Network Service Providers* in accordance with rule 5.6 in order to seek to achieve *power system* performance requirements in accordance with schedule 5.1;
- (4) together with other *Network Service Providers*, arrange for and participate in planning and development of their *networks* and *connection points* on or with those *networks* in accordance with Part D of Chapter 5;
- (5) permit and participate in inspection and testing of *facilities* and equipment in accordance with rule 5.7;
- (6) permit and participate in commissioning of *facilities* and equipment which are to be *connected* to its *network* in accordance with rule 5.8;
- (7) advise a *Registered Participant* or other person with whom there is a *connection agreement* upon request of any expected interruption characteristics at a *connection point* on or with its *network* so that the *Registered Participant* or other person may make alternative arrangements for *supply* during such interruptions, including negotiating for an alternative or backup *connection*;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (8) use its reasonable endeavours to ensure that modelling data used for planning, design and operational purposes is complete and accurate and order tests in accordance with rule 5.7 where there are reasonable grounds to question the validity of data;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (9) provide to *AEMO* and other *Network Service Providers* all data available to it and reasonably required for modelling the static and *dynamic performance* of the *power system*;
- (10) forward to *AEMO* and other *Network Service Providers* subsequent updates of the data referred to in subparagraph (9) and, to the best of its ability and knowledge, ensure that all data used for the purposes referred to in rules 5.3 or 5.3A (as is relevant) is consistent with data used for such purposes by other *Network Service Providers*;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (11) provide to *AEMO* the information required from *Generators* under schedule 5.2 and from *Customers* under schedule 5.3 and from *Market Network Service Providers* under schedule 5.3a in relation to a *connection agreement* and details of any *connection points* with other *Network Service Providers*; and

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (12) where *network augmentations*, setting changes or other technical issues arise which could impact across *regional* boundaries, provide *AEMO* with a written report on the impact and its effects.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (e) A *Network Service Provider* (including a *Dedicated Connection Asset Service Provider*) must arrange for operation of that part of the *national grid* over which it has control in accordance with instructions given by *AEMO*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (e1) A *Network Service Provider* must, except in so far as its *market network services* and parts of its *network* which are used solely for the provision of *market network services* are concerned, arrange for:
- (1) management, maintenance and operation of its part of the *national grid* such that, in the *satisfactory operating state*, electricity may be transferred continuously at a *connection point* on or with its *network* up to the *agreed capability*;
 - (2) operation of its *network* such that the fault level at any *connection point* on or with that *network* does not breach the limits that have been specified in a *connection agreement*;
 - (3) management, maintenance and operation of its *network* to minimise the number of interruptions to *agreed capability* at a *connection point* on or with that *network* by using *good electricity industry practice*; and
 - (4) restoration of the *agreed capability* at a *connection point* on or with that *network* as soon as reasonably practicable following any interruption at that *connection point*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (f) A *Network Service Provider* must comply with *applicable regulatory instruments*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (g) Each *Network Service Provider* must in respect of new or altered equipment owned, operated or controlled by it for the purpose of providing a *market network service*:
- (1) submit an *application to connect* and enter into a *connection agreement* with a *Network Service Provider* in accordance with rule 5.3 prior to that equipment being connected to the *network* of that *Network Service Provider* or altered (as the case may be);

- (2) comply with the reasonable requirements of *AEMO* and the relevant *Network Service Provider* in respect of design requirements of equipment proposed to be *connected* to the *network* of that *Network Service Provider* in accordance with rule 5.6 and schedule 5.3a;
- (3) provide forecast information to the relevant *Network Service Provider* in accordance with Part D of Chapter 5;
- (4) permit and participate in inspection and testing of *facilities* and equipment in accordance with rule 5.7;
- (5) permit and participate in commissioning of *facilities* and equipment which are to be *connected* to a *network* for the first time in accordance with rule 5.8; and
- (6) **[Deleted]**
- (7) give notice of intended voluntary permanent *disconnection* in accordance with rule 5.9.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (g1) A *Network Service Provider* must comply with any terms and conditions of a *connection agreement* for its *market network service facilities* that provide for the implementation, operation, maintenance or performance of a *system strength remediation scheme*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (h) **[Deleted]**
- (h1) **[Deleted]**
- (h2) **[Deleted]**
- (h3) **[Deleted]**
- (i) This Chapter is neither intended to require, nor is it to be read or construed as having the effect of requiring, a *Network Service Provider* to permit *connection* to or to *augment* any part of its *network* which is solely used for the provision of *market network services*.
- (j) If in *AEMO*'s reasonable opinion, there is a risk a *Network Service Provider's plant* or equipment will:

- (1) adversely affect *network capability, power system security, quality or reliability of supply, inter-regional power transfer capability*;
- (2) adversely affect the use of a *network* by a *Network User*; or
- (3) have an *adverse system strength impact*,

AEMO may request the *Network Service Provider* to provide information of the type described in clause 4.3.4(o), and following such a request, the *Network Service Provider* must provide the information to *AEMO* and any other relevant *Network Service Provider(s)* in accordance with the requirements and circumstances specified in the *Power System Model Guidelines*, the *Power System Design Data Sheet* and the *Power System Setting Data Sheet*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (k) If in *AEMO's* reasonable opinion, information of the type described in clause 4.3.4(o) is required to enable a *Network Service Provider* to conduct the assessment required by clause 5.3.4B, *AEMO* may request any other relevant *Network Service Provider* to provide the information, and following such a request, that *Network Service Provider* must provide the information to *AEMO* and the other relevant *Network Service Provider*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (l) All information provided to *AEMO* and the relevant *Network Service Provider(s)* under paragraphs (j) and (k) must be treated as *confidential information* by those recipients.

5.2.3A Obligations of Market Network Service Providers

- (a) If in *AEMO's* reasonable opinion, there is a risk a *Market Network Service Provider's plant* or equipment will:
 - (1) adversely affect *network capability, power system security, quality or reliability of supply, inter-regional power transfer capability*;
 - (2) adversely affect the use of a *network* by a *Network User*; or
 - (3) have an *adverse system strength impact*,

AEMO may request the *Market Network Service Provider* to provide information of the type described in clause S5.3a.1(a1), and following such a request, the *Market Network Service Provider* must provide the information to *AEMO* and the relevant *Network Service Provider(s)* in

accordance with the requirements and circumstances specified in the *Power System Model Guidelines*, the *Power System Design Data Sheet* and the *Power System Setting Data Sheet*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) If in *AEMO's* reasonable opinion, information of the type described in clause S5.3a.1(a1) is required to enable a *Network Service Provider* to conduct the assessment required by clause 5.3.4B, *AEMO* may request a *Market Network Service Provider* to provide the information, and following such a request, the *Market Network Service Provider* must provide the information to *AEMO* and the relevant *Network Service Provider*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) All information provided to *AEMO* and the relevant *Network Service Provider(s)* under paragraphs (a) and (b) must be treated as *confidential information* by those recipients.

5.2.4 Obligations of customers

- (a) Each *Customer* must plan and design its *facilities* and ensure that its *facilities* are operated to comply with:
 - (1) its *connection agreement* with a *Network Service Provider*;
 - (2) subject to clause 5.2.4(a)(1), all applicable *performance standards*; and
 - (3) subject to clause 5.2.4(a)(2), the *system standards*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) A *Customer* must:
 - (1) submit an *application to connect* in respect of new or altered equipment owned, operated or controlled by the *Customer* and enter into a *connection agreement* with a *Network Service Provider* in accordance with rule 5.3 prior to that equipment being *connected* to the *network* of that *Network Service Provider* or altered (as the case may be);

- (2) comply with the reasonable requirements of the relevant *Network Service Provider* in respect of design requirements of equipment proposed to be *connected* to the *network* of that *Network Service Provider* in accordance with rule 5.6 and schedule 5.3;
 - (3) provide *load* forecast information to the relevant *Network Service Provider* in accordance with Part D of Chapter 5;
 - (4) permit and participate in inspection and testing of *facilities* and equipment in accordance with rule 5.7;
 - (5) permit and participate in commissioning of *facilities* and equipment which are to be *connected* to a *network* for the first time in accordance with rule 5.8; and
 - (6) **[Deleted]**
 - (7) give notice of any intended voluntary permanent *disconnection* in accordance with rule 5.9.
- (c) If in *AEMO*'s reasonable opinion, there is a risk that a *Customer's plant* will:
- (1) adversely affect *network capability*, *power system security*, quality or reliability of *supply*, *inter-regional power transfer capability*;
 - (2) adversely affect the use of a *network* by a *Network User*; or
 - (3) have an *adverse system strength impact*,

AEMO may request a *Customer* to which Schedule 5.3 applies to provide information of the type described in clause S5.3.1(a1), and following such a request, the *Customer* must provide the information to *AEMO* and the relevant *Network Service Provider(s)* in accordance with the requirements and circumstances specified in the *Power System Model Guidelines*, the *Power System Design Data Sheet* and the *Power System Setting Data Sheet*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) If in *AEMO*'s reasonable opinion, information of the type described in clause S5.3.1(a1) is required to enable a *Network Service Provider* to conduct the assessment required by clause 5.3.4B, *AEMO* may request a *Customer* to which Schedule 5.3 applies, to provide the information, and following such a request, the *Customer* must provide the information to *AEMO* and the relevant *Network Service Provider*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (e) All information provided to *AEMO* and the relevant *Network Service Provider(s)* under paragraphs (c) and (d) must be treated as *confidential information* by those recipients.

5.2.5 Obligations of Generators

- (a) A *Generator* must plan and design its *facilities* and ensure that they are operated to comply with:
 - (1) the *performance standards* applicable to those *facilities*;
 - (2) subject to subparagraph (1), its *connection agreement* applicable to those *facilities*; and
 - (3) subject to subparagraph (2), the *system standards*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) A *Generator* must:
 - (1) submit an *application to connect* in respect of new *generating plant* owned, operated or controlled by the *Generator*, or to be owned, operated or controlled by the *Generator*, and enter into a *connection agreement* with a *Network Service Provider* in accordance with rule 5.3 prior to that *generating plant* being *connected* to the *network* of that provider;
 - (2) comply with the reasonable requirements of the relevant *Network Service Provider* in respect of design requirements of *generating plant* proposed to be *connected* to the *network* of that provider in accordance with rule 5.6 and schedule 5.2;
 - (3) provide *generation* forecast information to the relevant *Network Service Provider* in accordance with Part D of Chapter 5;
 - (4) permit and participate in inspection and testing of *facilities* and equipment in accordance with rule 5.7;
 - (5) permit and participate in commissioning of *facilities* and equipment which are to be *connected* to a *network* for the first time in accordance with rule 5.8; and
 - (6) give notice of intended voluntary permanent *disconnection* in accordance with rule 5.9.

- (c) A *Generator* must comply with any terms and conditions of a *connection agreement* for its *generating system* that provide for the implementation, operation, maintenance or performance of a *system strength remediation scheme*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) If in *AEMO*'s reasonable opinion, there is a risk that a *Generator's plant* will:
 - (1) adversely affect *network capability, power system security, quality or reliability of supply, inter-regional power transfer capability*;
 - (2) adversely affect the use of a *network* by a *Network User*; or
 - (3) have an *adverse system strength impact*,

AEMO may request a *Generator* to provide information of the type described in clause S5.2.4, and following such a request, the *Generator* must provide the information to *AEMO* and the relevant *Network Service Provider(s)* in accordance with the requirements and circumstances specified in the *Power System Model Guidelines*, the *Power System Design Data Sheet* and the *Power System Setting Data Sheet*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (e) If in *AEMO*'s reasonable opinion, information of the type described in clause S5.2.4 is required to enable a *Network Service Provider* to conduct the assessment required by clause 5.3.4B, *AEMO* may request a *Generator* to provide the information, and following such a request, the *Generator* must provide the information to *AEMO* and the relevant *Network Service Provider*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (f) All information provided to *AEMO* and the relevant *Network Service Provider(s)* under paragraphs (c) and (d) must be treated as *confidential information* by those recipients.

5.2.6 Obligations of AEMO

- (a) *AEMO* must provide to *Network Service Providers* on request, a copy of any report provided to *AEMO* by a *Network Service Provider* under clause

5.2.3(d)(12). If a *Registered Participant* reasonably considers that it is or may be adversely affected by a development or change in another *region*, the *Registered Participant* may request the preparation of a report by the relevant *Network Service Provider* as to the technical impacts of the development or change. If so requested, the *Network Service Provider* must prepare such a report and provide a copy of it to AEMO, the *Registered Participant* requesting the report and, on request, any other *Registered Participant*.

5.2.7 Obligations of Dedicated Connection Asset Service Providers

- (a) A *Dedicated Connection Asset Service Provider* must classify its *dedicated connection asset* as a *small dedicated connection asset* or a *large dedicated connection asset* in accordance with Chapter 2.
- (b) A *Dedicated Connection Asset Service Provider* must plan and design its *dedicated connection assets* and ensure that they are operated to comply with:
 - (1) the *performance standards* applicable to those *facilities connected* to those *dedicated connection assets*;
 - (2) subject to subparagraph (1), its *connection agreement* applicable to those *dedicated connection assets*; and
 - (3) subject to subparagraph (2), the *system standards*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) A *Dedicated Connection Asset Service Provider* for a *large dedicated connection asset* must prepare, maintain and publish an *access policy* in accordance with clause 5.2A.8.
- (d) A *Dedicated Connection Asset Service Provider* must:
 - (1) permit and participate in inspection and testing of *facilities* and equipment in accordance with rule 5.7;
 - (2) permit and participate in commissioning of *facilities* and equipment which are to be *connected* to a *network* for the first time in accordance with rule 5.8;
 - (3) give notice of intended voluntary permanent *disconnection* in accordance with rule 5.9; and
 - (4) in relation to a *connection* to an *identified user shared asset*, ensure that there is a *connection agreement* between itself and the *Primary Transmission Network Service Provider*.

5.2A Transmission network connection and access

5.2A.1 Application

- (a) This rule 5.2A does not apply in relation to *connection* and access to the *declared transmission system* of an *adoptive jurisdiction*.
- (b) In this rule 5.2A, a reference to ownership in relation to an asset includes a leasehold interest.

5.2A.2 Relevant assets

- (a) The assets relevant to *connection* and access to the *transmission network* and the person who is registered for those assets are set out in the following table:

Asset	Registered Person
primary <i>transmission network</i> in the <i>participating jurisdictions</i> .	Primary Transmission Network Service Provider
identified user shared asset owned by the Primary Transmission Network Service Provider	Primary Transmission Network Service Provider (forms part of that provider's broader <i>transmission network</i>)
third party IUSA	Primary Transmission Network Service Provider (as controller and operator of the <i>third party IUSA</i> under a <i>network operating agreement</i>) (forms part of that provider's broader <i>transmission network</i>)
dedicated connection asset	Dedicated Connection Asset Service Provider
network connection asset	Transmission Network Service Provider
facility of a Transmission Network User	Transmission Network User (if registration required or obtained)

- (b) The intention of this rule 5.2A and Chapter 2 is that there is a *Registered Participant* for each asset connecting the *transmission network* to the *facilities* of the *Transmission Network User*, subject to exemptions obtained under Chapter 2.

5.2A.3 Connection and access to transmission services

- (a) The following *transmission services* are relevant to *connection* and access to the *transmission network*:

Service classification	TNSP obligations	Assets involved
<i>prescribed transmission services</i>	Subject to access under Chapter 5 and economic regulation under Chapter 6A	<i>transmission network and network connection assets</i>
<i>negotiated transmission services</i>	Subject to access under Chapter 5	<i>transmission network</i>
<i>large DCA services</i>	Subject to access under the <i>access policy</i> established under clause 5.2A.8	<i>large dedicated connection assets</i>
<i>non-regulated transmission services</i>	Not subject to access under Chapter 5 or economic regulation under Chapter 6A	<i>transmission system</i>

- (b) A *Connection Applicant* may apply to a *Transmission Network Service Provider* for provision of a *prescribed transmission service* or a *negotiated transmission service* in accordance with rule 5.3 and the relevant *Transmission Network Service Provider* must comply with this Chapter 5 in negotiating a *connection agreement* for the requested service.
- (c) If the *prescribed transmission service* or *negotiated transmission service* sought under paragraph (b) does not require the *Connection Applicant* to establish or modify a *connection* or alter a *generating plant* in the circumstances set out in clause 5.3.9, the processes in rules 5.3, 5.4 and 5.5 will apply with such modifications as is appropriate to the nature of the service requested.
- (d) A *Transmission Network Service Provider* must provide *prescribed transmission services* or *negotiated transmission services* on *terms and conditions of access* that are consistent with the requirements of Chapters 4, 5 and 6A of the *Rules* (as applicable).
- (e) A *Transmission Network Service Provider* or a person who is provided *prescribed transmission services* or *negotiated transmission services* must not engage in conduct for the purpose of preventing or hindering access to those services.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (f) The *Connection Applicant* may terminate negotiations with the *Transmission Network Service Provider* at any time during the *connection* process provided under rules 5.3 and 5.3A with at least three *business days*’ prior written notice.
- (g) A *Transmission Network Service Provider* may terminate negotiations with the *Connection Applicant* with at least three *business days*’ prior written notice if:
- (1) the *Connection Applicant* becomes insolvent or an equivalent event occurs;
 - (2) the *Connection Applicant* has, in the *Transmission Network Service Provider*’s reasonable opinion, provided false or misleading information;
 - (3) the *Transmission Network Service Provider* has reasonable grounds to believe that the *Connection Applicant* is not negotiating in good faith; or
 - (4) the *Transmission Network Service Provider* has formed the reasonable opinion that the *Connection Applicant* does not intend to obtain the service.

5.2A.4 Transmission services related to connection

- (a) If a service related to assets relevant for *connection* in the following table is classified as:
- (1) *contestable* – then the *Primary Transmission Network Service Provider* may (but is not obliged to) provide that service as a *non-regulated transmission service* on request from a *Connection Applicant*.
 - (2) *non-contestable* – then the *Primary Transmission Network Service Provider* has the exclusive right to provide that service and must negotiate under rule 5.3 to do so as a *negotiated transmission service* on request from a *Connection Applicant*.

Asset	Service	Example of service	Classification
<i>transmission network including identified user shared asset</i>	Functional specification for IUSA	Specification of: • preferred equipment suppliers; • preferred equipment; • land/access requirements;	non-contestable

Asset	Service	Example of service	Classification
		• design specifications; • single line diagrams; • remote monitoring and communication requirements; • protection, control and metering requirements; • minimum operating conditions; • supervisory control and data acquisition system interface requirements; • equipment ratings; • equipment protection ratings; and • spare parts itineraries	
<i>identified user shared asset</i>	Detailed design for IUSA	Provision of: • site plan; • asset layout and configuration; • the specification for vendor equipment; • civil, structural, mechanical and electrical detailed design; • issued for construction drawings; • as built drawings; • tender specifications; • cable schedules; • protection settings;	<i>contestable</i>

Asset	Service	Example of service	Classification
		- applicable technical studies; - earthing design; - the design of lightning protection; and - the design of insulation co-ordination, consistent with the functional specification.	
<i>transmission network</i>	Cut-in works	Interface works which cut into the existing shared <i>transmission network</i> , these may include tower realignment, protection control and communications requirements	non-contestable
<i>contestable IUSA components</i>	Construction / ownership	Construction and/or ownership of a substation	<i>contestable</i>
<i>non-contestable IUSA components</i>	Construction / ownership	Installation and ownership of supervisory control and data acquisition systems and cabling forming part of the <i>Primary Transmission Network Service Provider's control system</i>	non-contestable
<i>identified user shared asset owned by the Primary Transmission Network Service Provider</i>	Control, operation and maintenance	<i>Primary Transmission Network Service Provider</i> provides operation and maintenance services	non-contestable
<i>third party IUSA</i>	Control, operation and maintenance under a <i>network operating</i>	See clause 5.2A.7	non-contestable

Asset	Service	Example of service	Classification
	<i>agreement</i>		
<i>dedicated connection assets</i>	All development aspects	Design, construction, maintenance and ownership of a power line connecting a <i>facility</i>	<i>contestable</i>

- (b) If the capital cost of all the components that make up an *identified user shared asset* is reasonably expected by the *Primary Transmission Network Service Provider* to be \$10 million or less, the *Primary Transmission Network Service Provider* must undertake the detailed design, construction and ownership of the *identified user shared asset* as a *negotiated transmission service*.
- (c) If the capital cost of all the components that make up an *identified user shared asset* is reasonably expected by the *Primary Transmission Network Service Provider* to exceed \$10 million, the detailed design, construction and ownership of each component of the *identified user shared asset* is a *non-regulated transmission service* to the extent that it satisfies the following criteria:
- (1) the component being constructed is new or a complete replacement of existing assets (and does not involve the reconfiguration of existing assets); and
 - (2) the detailed design and construction of the relevant component of the *identified user shared asset* is separable in that the new component will be distinct and definable from the existing *transmission network*,
- (“**contestable IUSA components**”).
- (d) To the extent that any components of an *identified user shared asset* do not satisfy the criteria set out in paragraph (c) (“**non-contestable IUSA components**”), the *Primary Transmission Network Service Provider* must negotiate under rule 5.3 to undertake the detailed design, construction and ownership of the *non-contestable IUSA components* as a *negotiated transmission service*.

Note

Parties may seek the advice of an *Independent Engineer* under rule 5.4 if the parties cannot agree on whether a component of an *identified user shared asset* based on the criteria under subparagraph (c)(1) and (2) is a *contestable IUSA component* or a *non-contestable IUSA component*.

5.2A.5 Publication and provision of information

- (a) A *Primary Transmission Network Service Provider* must publish the information on its website, or provide the information to a *Connection Applicant* on request, as required by schedule 5.10.

- (b) A *Primary Transmission Network Service Provider* may charge a *Connection Applicant* a fee for providing information where specified under schedule 5.10, the amount of which must not be more than necessary to cover the reasonable costs of work required to prepare that information.
- (c) A *Transmission Network Service Provider* and a *Connection Applicant* must provide information (including commercial information) reasonably required by the other party that would facilitate effective negotiation for the provision of a *negotiated transmission service* in a timely manner.
- (d) The *Connection Applicant* must procure that any persons it engages to undertake services which are specified to be *contestable* in the table in clause 5.2A.4(a) provide information reasonably requested by the *Primary Transmission Network Service Provider*.
- (e) Information required to be provided under paragraphs (c) and (d) that is confidential may be provided subject to a condition that the receiving party must not provide any part of that information to any other person without the consent of the party who provided the information.

5.2A.6 Negotiating principles

- (a) If a *Connection Applicant* seeks access to *negotiated transmission services*, including in relation to an *identified user shared asset*, the *Transmission Network Service Provider* and the *Connection Applicant* must, in negotiating pursuant to rule 5.3 and other relevant *Rules*, negotiate in accordance with the *negotiating principles*.
- (b) A *Transmission Network Service Provider* must, in accordance with the *negotiating principles*:
 - (1) on request, identify and inform a *Connection Applicant* of the reasonable costs and/or the increase or decrease in costs (as appropriate) of providing a *negotiated transmission service*;
 - (2) on request, demonstrate to a *Connection Applicant* that the charges for providing a *negotiated transmission service* reflect those costs and/or the cost increment or decrement (as appropriate);
 - (3) determine the potential impact on other *Transmission Network Users* of the provision of a *negotiated transmission service*; and
 - (4) notify and consult with any affected *Transmission Network Users* and ensure that the provision of a *negotiated transmission service* does not result in non-compliance with obligations in relation to other *Transmission Network Users* under the *Rules*.
- (c) If an applicant seeks *large DCA services*, the *Dedicated Connection Asset Service Provider* must comply with its *access policy* and the negotiating principles in schedule 5.12.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

5.2A.7 Third party IUSAs

- (a) A person must not commission, or permit the commissioning of, a *third party IUSA* unless there is a *network operating agreement* between the owner of that *third party IUSA* and the *Primary Transmission Network Service Provider*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) The person who owns or is intending to own a *third party IUSA* and the *Primary Transmission Network Service Provider* must:
- (1) include terms and conditions in the *network operating agreement* which give effect to the requirements of paragraphs (c) and (d);
 - (2) include terms and conditions in the *network operating agreement* of the kind set out in Part B of schedule 5.6; and
 - (3) negotiate the *network operating agreement* in accordance with the *negotiating principles* (where applicable).
- (c) The term of the *network operating agreement* must be for a period which is at least equal to the term of the longest *connection agreement* of a member of the initial *identified user group* for the *third party IUSA*.
- (d) The *network operating agreement* must provide for the *Primary Transmission Network Service Provider* to:
- (1) have operation and control of the *third party IUSA* (including the rights and obligations to maintain that asset) for an agreed charge or based on an agreed charging methodology;
 - (2) have an option to purchase the *third party IUSA* at fair market value at the expiry or early termination of the *network operating agreement*;
 - (3) alter, replace or augment the *third party IUSA*;
 - (4) have the right to connect other persons to the *third party IUSA* in accordance with the *Rules*;
 - (5) have unrestricted use of, and access to, the *third party IUSA*; and
 - (6) treat the *third party IUSA* as forming part of the *Primary Transmission Network Service Provider's transmission network* in all

material respects and provide *transmission services* to any *Transmission Network User* in accordance with the *Rules*.

- (e) A person who owns a *third party IUSA* must not:
- (1) own, operate or control a *generating system*;
 - (2) own, operate or control a *facility* utilising electrical *energy*; or
 - (3) be a related entity of a person owning, operating or controlling a *generating system* or *facility* utilising electrical *energy*,

that is *connected* to that *third party IUSA*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (f) In paragraph (e):

related entity means, in relation to an entity, an entity that controls, or is controlled by, that first mentioned entity;

entity has the meaning given in the *Corporations Act 2001* (Cth) subject to section 64A of the *Corporations Act 2001* (Cth) not applying to such meaning; and

control has the meaning given in the *Corporations Act 2001* (Cth).

5.2A.8 Access framework for large dedicated connection assets

- (a) This clause 5.2A.8 applies only to *large dedicated connection assets*.
- (b) A *Dedicated Connection Asset Service Provider* must prepare, maintain and publish an *access policy* on its website to provide a framework for applicants to obtain access to *large DCA services*. An *access policy* must include, as a minimum, the following information:
- (1) a description of the routes, tenure arrangements and main components of the *large dedicated connection asset* and the *facilities connected* to it;
 - (2) any material regulatory limitations relating to the development and operation of the *large dedicated connection asset*;
 - (3) the pricing principles and the key terms which are proposed to apply to the provision of *large DCA services* where such principles and terms must be consistent with schedule 5.12;
 - (4) the process by which an applicant may seek access to *large DCA services*, which must include a right for an applicant to obtain

sufficient information to enable it to prepare a request for the *large DCA services* it requires and contact details for access enquiries; and

- (5) advice on the availability of commercial arbitration under rule 5.5 in the case of a dispute.
- (c) The *AER* has the function of:
 - (1) approving an *access policy* and variations to it; and
 - (2) enforcing compliance with an *access policy*.
- (d) Within 30 days of an asset being classified as a *large dedicated connection asset* under Chapter 2, a *Dedicated Connection Asset Service Provider* must submit an *access policy* for approval by the *AER*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (e) A *Dedicated Connection Asset Service Provider* may seek approval of a variation to an *access policy* from the *AER* at any time and must do so where required to keep the *access policy* up to date.
- (f) The *AER* must approve an *access policy*, or a variation to an *access policy*, if it is reasonably satisfied that it complies with paragraph (b). If the *AER* does not approve an *access policy* submitted under paragraph (d), the *AER* must notify of the changes required for it to be approved. If an *access policy* is not approved within 6 months of the *AER*'s notification of required changes, the *AER* may itself propose an *access policy*.
- (g) The *AER*'s proposal for an *access policy* is to be formulated with regard to:
 - (1) the minimum requirements set out in paragraph (b);
 - (2) the *Dedicated Connection Asset Service Provider*'s proposed *access policy*; and
 - (3) the *AER*'s reasons for refusing to approve the proposed *access policy*.
- (h) The *AER* may (but is not obliged to) consult on its proposal.
- (i) If the *AER* decides to approve an *access policy* proposed by the *AER*, it must:
 - (1) give a copy of the decision to the *Dedicated Connection Asset Service Provider*; and
 - (2) *publish* the decision on the *AER*'s website and make it available for inspection, during business hours, at the *AER*'s public offices.

- (j) An *access policy*, or a variation to it, takes effect on a date fixed in the *AER's* decision to approve it.
- (k) A *Dedicated Connection Asset Service Provider* must report on requests for *connection* and access to a *large dedicated connection asset* to the *AER* when such requests are made and when an agreement for access is entered into, in the manner and form notified by the *AER*.
- (l) A *Dedicated Connection Asset Service Provider* or a person who is provided *large DCA services* must not engage in conduct for the purpose of preventing or hindering access to *large DCA services*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (m) A *Dedicated Connection Asset Service Provider* may, but is not required to, give access to an applicant for *large DCA services* if doing so would mean the *large dedicated connection asset* would no longer constitute a *dedicated connection asset*.

Note

An example of where clause 5.2A.8(m) may apply is where the applicant for access to *large DCA services* is a *Distribution Network Service Provider* or a person not seeking access to those services as part of the *identified user group*. The creation of a new *connection point* could change the nature of the services being provided by the *large dedicated connection asset* and therefore change its regulatory treatment.

5.3 Establishing or Modifying Connection

5.3.1 Process and procedures

- (a) For the purposes of this rule 5.3:

establish a connection includes modify an existing *connection* or alter *plant* but does not include alterations to *generating plant* in the circumstances set out in clause 5.3.9.
- (b) A *Registered Participant* or person intending to become a *Registered Participant* who wishes to establish a *connection* to a *network* must follow the procedures in this rule 5.3.
- (c) A *Generator* wishing to alter *connected generating plant* must comply with clause 5.3.9.
- (d) *AEMO* must comply with clause 5.3.11 in relation to requests to change *normal voltage*.
- (e) For *connection* to a *transmission network*, there may be more than one *Connection Applicant* in relation to a *connection* where there are different persons developing and owning *contestable IUSA components*, *dedicated*

connection assets and *Transmission Network User facilities* in relation to that *connection*.

5.3.1A Application of rule to connection of embedded generating units

- (a) For the purposes of this clause 5.3.1A;

non-registered embedded generator has the same meaning as in clause 5A.A.1.

- (b) If a *Connection Applicant* wishes to *connect* an *embedded generating unit*, then:

- (1) unless otherwise provided, rule 5.3A applies to the proposed connection and clauses 5.3.2, 5.3.3, 5.3.4 and 5.3.5 do not apply to the proposed *connection*; and
- (2) for the avoidance of doubt, the application of the balance of Chapter 5, Part B to the *Connection Applicant* is otherwise unaffected by this clause 5.3.1A.

- (c) A reference to a *Connection Applicant* in paragraph (b) is to a:

- (1) person who intends to be an *Embedded Generator*;
- (2) person who is required to apply to AEMO for an exemption from the requirement to register as a *Generator* in respect of an *embedded generating unit*; or
- (3) non-registered embedded generator who has made an election under clause 5A.A.2(c),

and who makes a *connection* enquiry under clause 5.3A.5 or an *application to connect* under clause 5.3A.9 in relation to any *generating systems*, or any *network elements* used in the provision of a *network service*, as the case may be.

5.3.2 Connection enquiry

- (a) A person referred to in clause 5.3.1(b) who wishes to make an *application to connect* must first make a *connection* enquiry by advising the *Local Network Service Provider* of the type, magnitude and timing of the proposed *connection* to that provider's *network*.
- (b) If the information submitted with a *connection* enquiry is inadequate to enable the *Local Network Service Provider* to process the enquiry the provider must within 5 *business days*, advise the *Connection Applicant* what other relevant preliminary information of the kind listed in schedule 5.4 is required before the *connection* enquiry can be further processed.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) The *Local Network Service Provider* must advise the *Connection Applicant* within 10 *business days* of receipt of the *connection* enquiry and the further information required in accordance with paragraph (b) if the enquiry would be more appropriately directed to another *Network Service Provider*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) The *Connection Applicant*, notwithstanding the advice received under paragraph (c), may if it is reasonable in all the circumstances, request the *Local Network Service Provider* to process the *connection* enquiry and the provider must meet this request.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (e) Where the *Local Network Service Provider* considers that the *connection* enquiry should be jointly examined by more than one *Network Service Provider*, with the agreement of the *Connection Applicant*, one of those *Network Service Providers* may be allocated the task of liaising with the *Connection Applicant* and the other *Network Service Providers* to process and respond to the enquiry.
- (f) A *Network Service Provider* must to the extent that it holds technical information necessary to facilitate the processing of a *connection* enquiry made in accordance with paragraph (a) or an *application to connect* in accordance with clause 5.3.4(a), provide that information to the *Connection Applicant* in accordance with the relevant requirements of schedule 5.1, 5.2, 5.3 or 5.3a.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (g) If applicable, a *Primary Network Service Provider* may charge a *Connection Applicant* an enquiry fee, the amount of which must not be more than necessary to cover the reasonable costs of work required to provide the information in clauses 5.3.3(b)(5A) and (7) to (10).

5.3.3 Response to connection enquiry

- (a) In preparing a response to a *connection* enquiry, the *Network Service Provider* must liaise with other *Network Service Providers* with whom it has *connection agreements*, if the *Network Service Provider* believes, in its reasonable opinion, that compliance with the terms and conditions of those *connection agreements* will be affected. The *Network Service Provider* responding to the *connection* enquiry may include in that response the reasonable requirements of any such other *Network Service Providers* for information to be provided by the *Connection Applicant*.
- (b) The *Network Service Provider* must:
 - (1) within 30 *business days* after receipt of the *connection* enquiry and all such additional information (if any) advised under clause 5.3.2(b); or
 - (2) within 30 *business days* after receipt of a request from the *Connection Applicant* to the *Local Network Service Provider* to process the *connection* enquiry under clause 5.3.2(d),

provide the following information in writing to the *Connection Applicant*:

- (3) the identity of other parties that the *Network Service Provider* considers:
 - (i) will need to be involved in planning to make the *connection*; and
 - (ii) must be paid for *transmission services* or *distribution services* in the appropriate jurisdiction;
- (4) whether it will be necessary for any of the parties identified in subparagraph (3) to enter into an agreement with the *Connection Applicant* in respect of the provision of *connection* or other *transmission services* or *distribution services* or both, to the *Connection Applicant*;
- (5) in relation to *Distribution Network Service Providers* and *Network Service Providers* for *declared transmission systems*, whether any service the *Network Service Provider* proposes to provide is *contestable* in the relevant *participating jurisdiction*;
- (5A) whether any service a *Transmission Network Service Provider* proposes to provide in relation to the *connection* enquiry is a *prescribed transmission service*, a *negotiated transmission service* or a *non-regulated transmission service* including, if applicable:
 - (i) whether the capital cost of any *identified user shared asset* is reasonably expected to exceed \$10 million; and
 - (ii) if so, the *contestable IUSA components* and *non-contestable IUSA components*;

- (6) a *preliminary program* showing proposed milestones for *connection* and access activities which may be modified from time to time by agreement of the parties, where such agreement must not be unreasonably withheld;
- (7) the specification of the interface required to provide the *connection*, including plant and equipment requirements for the *connection* of a *dedicated connection asset* to the *transmission network* and of the interface between the *transmission network* and any *contestable IUSA components*;
- (8) if applicable, the scope of work for any *non-contestable IUSA components*;
- (9) if the response to the *connection enquiry* specifies the need for an *identified user shared asset* the capital cost of which is reasonably expected to exceed \$10 million, a functional specification:
 - (i) setting out the technical parameters for that asset as described in the table in clause 5.2A.4 with sufficient detail to enable the *Connection Applicant* to obtain binding tenders for the provision of detailed design, construction and ownership services for the *contestable IUSA components*;
 - (ii) at the *Primary Transmission Network Service Provider*'s option, that is above those minimum requirements in subparagraph (i) subject to the *Primary Transmission Network Service Provider* separately identifying the additional requirements and agreeing to fund the additional works related to those requirements;
- (10) an indicative costing for operation and maintenance services for any *identified user shared asset*, based on the functional specification provided pursuant to subparagraph (9); and
- (11) the amount of any enquiry fee under clause 5.3.2(g).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(b1) The *Network Service Provider* must:

- (1) within 30 *business days* after receipt of the *connection enquiry* and all such additional information (if any) advised under clause 5.3.2(b); or
- (2) within 30 *business days* after receipt of a request from the *Connection Applicant* to the *Local Network Service Provider* to process the *connection enquiry* under clause 5.3.2(d),

provide the *Connection Applicant* with the following written details of each technical requirement relevant to the proposed *plant*:

- (3) the *automatic access standards*;
- (4) the *minimum access standards*;
- (5) the applicable *plant standards*;
- (6) the *negotiated access standards* that will require AEMO's involvement in accordance with clause 5.3.4A(c); and
- (7) the *normal voltage* level, if that is to change from the *nominal voltage* level.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b2) A *Registered Participant*, AEMO or *interested party* may request the *Reliability Panel* to determine whether, in respect of one or more technical requirements for access, an existing Australian or international standard, or a part thereof, may be adopted as a *plant standard* for a particular class of *plant*.
- (b3) Where, in respect of a technical requirement for access, the *Reliability Panel* determines a *plant standard* for a particular class of *plant* in accordance with clause 8.8.1(a)(8) as an acceptable alternative to a particular *minimum access standard* or *automatic access standard*, a *plant* which meets that *plant standard* is deemed to meet the applicable *automatic access standard* or *minimum access standard* for that technical requirement.
- (b4) In making a determination in accordance with clause 5.3.3(b2) the *Reliability Panel* must consult *Registered Participants* and AEMO using the *Rules consultation procedures*.
- (b5) For a *connection point* for a proposed new *connection* of a *generating system* or *market network service facility*, within the time applicable under paragraph (b1), the *Network Service Provider* must provide the *Connection Applicant* with the following written details:
 - (1) the minimum *three phase fault level* at the *connection point*; and
 - (2) the results of the *Network Service Provider's* preliminary assessment of the impact of the new *connection* undertaken in accordance with the *system strength impact assessment guidelines* and clause 5.3.4B.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) Within 30 *business days* after receipt of the *connection* enquiry and all such additional information (if any) advised under clause 5.3.2(b) or, if the

Connection Applicant has requested the *Local Network Service Provider* to process the *connection* enquiry under clause 5.3.2(d), within 20 *business days* after receipt of that request, the *Network Service Provider* must provide to the *Connection Applicant* written advice of all further information which the *Connection Applicant* must prepare and obtain in conjunction with the *Network Service Provider* to enable the *Network Service Provider* to assess an *application to connect* including:

- (1) details of the *Connection Applicant's connection* requirements, and the *Connection Applicant's* specifications of the *facility* to be connected, consistent with the requirements advised in accordance with clause 5.3.3(b1);
- (2) details of the *Connection Applicant's* reasonable expectations of the level and standard of service of *power transfer capability* that the *network* should provide;
- (3) a list of the technical data to be included with the *application to connect*, which may vary depending on the *connection* requirements and the type, rating and location of the *facility* to be *connected* and will generally be in the nature of the information set out in schedule 5.5 but may be varied by the *Network Service Provider* as appropriate to suit the size and complexity of the proposed *facility* to be *connected*;
- (4) commercial information to be supplied by the *Connection Applicant* to allow the *Network Service Provider* to make an assessment of the ability of the *Connection Applicant* to satisfy the prudential requirements set out in rules 6.21 and 6A.28;
- (5) the amount of the application fee which is payable on lodgement of an *application to connect*, such amount:
 - (i) not being more than necessary to cover the reasonable costs of all work anticipated to arise from investigating the *application to connect* and preparing the associated offer to *connect* and to meet the reasonable costs anticipated to be incurred by *AEMO* and other *Network Service Providers* whose participation in the assessment of the *application to connect* will be required; and
 - (ii) must not include any amount for, or in anticipation of, the costs of the person using an *Independent Engineer*; and
- (6) any other information relevant to the submission of an *application to connect*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

5.3.4 Application for connection

- (a) A person who has made a *connection* enquiry under clause 5.3.2 may, following receipt of the responses under clause 5.3.3, make an *application to connect* in accordance with this clause 5.3.4 , clause 5.3.4A and clause 5.3.4B.
- (b) To be eligible for *connection* the *Connection Applicant* must submit an *application to connect* containing:
 - (1) the information specified in clause 5.3.3(c);
 - (2) the relevant application fee to the relevant *Network Service Provider*;
 - (3) for services related to *contestable IUSA components* that the *Connection Applicant* has not obtained from the *Primary Transmission Network Service Provider* (as applicable):
 - (i) the *Connection Applicant's* process for how the *Primary Transmission Network Service Provider* will undertake a review of the detailed design and inspect the construction of those components and how risks of defects will be addressed;
 - (ii) the detailed design of those components; and
 - (iii) if the *Primary Transmission Network Service Provider* will not own the *contestable IUSA components*, the *Connection Applicant's* proposed changes (if any) to the form of *network operating agreement* published pursuant to schedule 5.10; and
 - (4) if the *Connection Applicant* has obtained services related to *contestable IUSA components* other than from the *Primary Transmission Network Service Provider*, all information reasonably required for the *Primary Transmission Network Service Provider* to properly provide operation and maintenance services for the life of those components, including details of the *contestable IUSA components'* construction, instructions for operation and maintenance and health safety and asset management manuals.
- (b1) The *Connection Applicant's* detailed design under paragraph (b)(3)(ii):
 - (1) must be consistent with the minimum functional specification provided by the *Primary Transmission Network Service Provider* under clause 5.3.3(b)(9)(i);
 - (2) must not unreasonably inhibit the capacity for future expansion of the *identified user shared asset* or preclude the possibility of future *connections* to that asset; and
 - (3) subject to the *Connection Applicant* considering the *Primary Transmission Network Service Provider's* additional requirements

under clause 5.3.3(b)(9)(ii) in good faith, may be (but is not required to be) consistent with those additional requirements.

- (c) In relation to *Distribution Network Service Providers* and *Network Service Providers* for declared transmission systems, the *Connection Applicant* may submit applications to connect to more than one *Network Service Provider* in order to receive additional offers to connect in respect of facilities to be provided that are *contestable*.
- (d) To the extent that an application fee includes amounts to meet the reasonable costs anticipated to be incurred by any other *Network Service Providers* or *AEMO* in the assessment of the application to connect, a *Network Service Provider* who receives the application to connect and associated fee must pay such amounts to the other *Network Service Providers* or *AEMO*, as appropriate.
- (e) For each technical requirement where the proposed arrangement will not meet the *automatic access standards* nominated by the *Network Service Provider* pursuant to clause 5.3.3(b1), the *Connection Applicant* must submit with the application to connect a proposal for a *negotiated access standard* for each such requirement to be determined in accordance with clause 5.3.4A.
- (f) The *Connection Applicant* may:
 - (1) lodge separate applications to connect and separately liaise with the other *Network Service Providers* identified in clause 5.3.3(b) who may require a form of agreement;
 - (2) lodge one application to connect with the *Network Service Provider* who processed the connection enquiry and require it to liaise with those other *Network Service Providers* and obtain and present all necessary draft agreements to the *Connection Applicant*; or
 - (3) lodge a combined application to connect with the *Primary Network Service Provider* where the connection involves more than one *Connection Applicant* due to different persons developing and owning contestable IUSA components, dedicated connection assets and Transmission Network User facilities in relation to that connection.
- (g) A *Connection Applicant* who proposes a *system strength remediation scheme* under clause 5.3.4B must submit its proposal with the application to connect.

5.3.4A Negotiated access standards

- (a) [Deleted]
- (b) A negotiated access standard must:

- (1) be no less onerous than the corresponding *minimum access standard* provided by the *Network Service Provider* under clauses 5.3.3(b1)(4) or S5.4B(e);
 - (2) be set at a level that will not adversely affect *power system security*;
 - (3) be set at a level that will not adversely affect the quality of *supply* for other *Network Users*; and
 - (4) in respect of *generating plant*, meet the requirements applicable to a *negotiated access standard* in clauses S5.2.5, S5.2.6, S5.2.7 and S5.2.8.
- (c) A *Network Service Provider* must following the receipt of a proposed *negotiated access standard* under clause 5.3.4(e), clause 5.3A.9(f) or paragraph (h)(3), consult with *AEMO* as soon as practicable in relation to *AEMO advisory matters* for that proposed standard.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) *AEMO* must within 20 *business days* following the later of:
- (1) receipt of a proposed *negotiated access standard* under clause 5.3.4(e), clause 5.3A.9(f) or paragraph h(3); and
 - (2) receipt of all information required to be provided by the *Connection Applicant* under clause S5.2.4, clause S5.5.6, clause S5.3.1(a1) or S5.3a.1(a1) (as applicable),
- respond to the *Network Service Provider* in writing in respect of any *AEMO advisory matters*.
- (e) A *Network Service Provider* must within 30 *business days* following the later of:
- (1) receipt of a proposed *negotiated access standard* in accordance with clause 5.3.4(e), clause 5.3A.9(f) or paragraph (h)(3); and
 - (2) receipt of all information required to be provided by the *Connection Applicant* under clause S5.2.4, clause S5.5.6, clause S5.3.1(a1) or S5.3a.1(a1) (as applicable),
- accept or reject a proposed *negotiated access standard*.
- (f) The *Network Service Provider* must reject the proposed *negotiated access standard* if that *connection*, or alteration of the *generating plant* (as the case may be), at the *negotiated access standard* proposed by the *Connection Applicant* would:

- (1) on *AEMO's* reasonable advice, adversely affect *power system security*;
- (2) in the *Network Service Provider's* reasonable opinion, adversely affect quality of *supply* for other *Network Users*;
- (3) in the reasonable opinion of *AEMO* or the *Network Service Provider*, in respect of a *AEMO advisory matter* or a matter allocated to the *Network Service Provider*, respectively, be lower than the corresponding *minimum access standard*; or
- (4) in respect of *generating plant*, in *AEMO's* reasonable opinion, not satisfy paragraph (b)(4).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (g) If a *Network Service Provider* rejects a proposed *negotiated access standard*, the *Network Service Provider* must when rejecting the proposed *negotiated access standard*, advise the *Connection Applicant* of a *negotiated access standard* that the *Network Service Provider* will accept.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (h) The *Connection Applicant* may in relation to a proposed *negotiated access standard* advised by a *Network Service Provider* in accordance with paragraph (g):
 - (1) accept the proposed *negotiated access standard*;
 - (2) reject the proposed *negotiated access standard*;
 - (3) propose an alternative *negotiated access standard* to be further evaluated in accordance with the criteria in paragraph (b); or
 - (4) elect to adopt the relevant *automatic access standard* or a corresponding *plant standard*.
- (i) An *automatic access standard* or if the procedures in this clause 5.3.4A have been followed a *negotiated access standard*, that forms part of the terms and conditions of a *connection agreement*, is taken to be the *performance standard* applicable to the *connected plant* for the relevant technical requirement.

5.3.4B System strength remediation for new connections

- (a) A *Network Service Provider* must, in accordance with the *system strength impact assessment guidelines*, undertake a *system strength impact assessment* for each proposed new *connection* of a *generating system* or *market network service facility* and any proposed alteration to a *generating system* to which clause 5.3.9 applies. A *Network Service Provider* must make:
 - (1) a preliminary assessment if it is in receipt of a *connection* enquiry or a request by a *Generator* under clause 5.3.9(c1); and
 - (2) a full assessment if it is in receipt of an *application to connect* or submission from a *Generator* under clause 5.3.9, unless the preliminary assessment indicates that the full assessment is not needed.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) The *Network Service Provider* must give the results of the preliminary assessment and the full assessment to the *Connection Applicant* or *Generator* concerned following consultation with AEMO.
- (c) A dispute referred to in paragraph (d) between any of:
 - (1) AEMO;
 - (2) A *Network Service Provider* required to conduct an assessment under paragraph (a);
 - (3) a *Connection Applicant* who has submitted an *application to connect* for which a full assessment is required under paragraph (a); and
 - (4) a *Generator* who proposes an alteration to a *generating system* to which clause 5.3.9 applies and for which a full assessment is required under paragraph (a),may be determined under rule 8.2.
- (d) Paragraph (c) applies to any dispute relating to the assessment of an *adverse system strength impact* as a result of conducting a *system strength impact assessment* including a dispute in relation to:
 - (1) whether the model specified by AEMO for the purposes of clause 4.6.6(b)(2) was reasonably appropriate for conducting the *system strength impact assessment*; and
 - (2) the application of the *system strength impact assessment guidelines* when undertaking a *system strength impact assessment*.

- (e) Subject to paragraph (f), a *Network Service Provider* must undertake *system strength connection works* at the cost of the *Connection Applicant* or *Generator* (as applicable) if the full assessment undertaken in accordance with the *system strength impact assessment guidelines* indicates that the *Connection Applicant's* proposed new *connection* of a *generating facility* or *market network service facility* or the *Generator's* proposed alteration to a *generating system* to which clause 5.3.9 applies will have an *adverse system strength impact*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (f) Paragraph (e) does not require a *Network Service Provider* to undertake, nor permit a *Network Service Provider* to require, *system strength connection works* in the following circumstances:
- (1) the proposed new *connection* or alteration does not proceed;
 - (2) to the extent that the *adverse system strength impact* referred to in paragraph (e) is or will be avoided or remedied by a *system strength remediation scheme* agreed or determined under this clause and implemented by the *Registered Participant* in accordance with its *connection agreement*; or
 - (3) to the extent that the impact is below any threshold specified in the *system strength impact assessment guidelines* for this purpose.
- (g) A *Connection Applicant* must include any proposal for a *system strength remediation scheme* in its *application to connect* or its proposal under clause 5.3.9(b)(4).
- (h) A *Connection Applicant* proposing to install *plant* as part of a *system strength remediation scheme* must include a description of the *plant*, the ratings of the proposed *plant* (in MVA) and other information (including models) reasonably required by the *Network Service Provider* and AEMO to assess the *system strength remediation scheme*.
- (i) A *Network Service Provider* must, following the receipt of a proposal for a *system strength remediation scheme*, consult with AEMO as soon as practical in relation to the proposal.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (j) following the submission of a proposal for a *system strength remediation scheme*, AEMO must use reasonable endeavours to respond to the *Network Service Provider* in writing in respect of the proposal within 20 *business days*.

- (k) A *Network Service Provider* must within 10 *business days* following the receipt of a response from AEMO under paragraph (h) to a proposal for a *system strength remediation scheme*, accept or reject the proposal.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (l) The *Network Service Provider* must reject a proposal for a *system strength remediation scheme* if the scheme is not reasonably likely to achieve its required outcome or would:
- (1) in the reasonable opinion of the *Network Service Provider* adversely affect quality of *supply* for other *Network Users*; or
 - (2) on AEMO's reasonable advice, adversely affect *power system security*.
- (m) If a *Network Service Provider* rejects a proposal for a *system strength remediation scheme*, the *Network Service Provider* must give its reasons but has no obligation to propose a *system strength remediation scheme* that it will accept.
- (n) The *Connection Applicant* submitting a proposal for a *system strength remediation scheme* rejected by a *Network Service Provider* may:
- (1) propose an alternative *system strength remediation scheme* to be further evaluated following the process initiated under paragraph (i); or
 - (2) request negotiations under paragraph (o).
- (o) If a *Connection Applicant* requests negotiations under this paragraph, the *Connection Applicant*, the *Network Service Provider* and AEMO must negotiate in good faith to reach agreement in respect of the proposal for a *system strength remediation scheme*.
- (p) If the matter is not resolved by negotiation under paragraph (o):
- (1) in the case of a *connection* to a *transmission system* other than the *declared transmission system* of an *adoptive jurisdiction*, the matter may be dealt with as a dispute under rule 5.5 (but not rule 8.2); or
 - (2) otherwise, may be dealt with under rule 8.2 or as a *distribution service access dispute* as applicable.
- (q) The parties to a *connection agreement* containing a *system strength remediation scheme* must not modify the scheme unless the modified scheme has been agreed or determined under this clause. A *Registered Participant* proposing to modify a *system strength remediation scheme* must submit its proposal for modification to the *Network Service Provider* for evaluation by the *Network Service Provider* and AEMO under this clause.

Once agreed or determined, the modified scheme must be incorporated as an amendment to the *connection agreement* and notified to AEMO under clause 5.3.7(g).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

5.3.5 Preparation of offer to connect

- (a) The *Network Service Provider* to whom the *application to connect* is submitted:
 - (1) at the *automatic access standard* under clause 5.3.4; or
 - (2) at a *negotiated access standard* that the provider has accepted under clause 5.3.4A(e),must proceed to prepare an offer to *connect* in response.
- (b) The *Network Service Provider* must use its reasonable endeavours to advise the *Connection Applicant* of all risks and obligations in respect of the proposed *connection* associated with planning and environmental laws not contained in the *Rules*.
- (c) The *Connection Applicant* must provide such other additional information in relation to the *application to connect* as the *Network Service Provider* reasonably requires to assess the technical performance and costs of the required *connection* (including the details of any person undertaking the construction, detailed design and/or ownership of *contestable IUSA components*) to enable the *Network Service Provider* to prepare an offer to *connect*.
- (d) So as to maintain levels of service and quality of *supply* to existing *Registered Participants* in accordance with the *Rules*, the *Network Service Provider* in preparing the offer to *connect* must consult with AEMO and other *Registered Participants* with whom it has *connection agreements*, if the *Network Service Provider* believes in its reasonable opinion, that compliance with the terms and conditions of those *connection agreements* will be affected, in order to assess the *application to connect* and determine:
 - (1) the technical requirements for the equipment to be *connected*;
 - (2) the extent and cost of *augmentations* and changes to all affected *networks*;
 - (3) any consequent change in *network service* charges; and
 - (4) any possible material effect of this new *connection* on the *network power transfer capability* including that of other *networks*.

- (e) The *Network Service Provider* preparing the offer to *connect* must specify in reasonable detail any *system strength connection works* to be undertaken by the *Network Service Provider*.
- (f) **[Deleted]**
- (g) The *Network Service Provider* preparing the offer to *connect* must include provision for payment of the reasonable costs associated with *remote control equipment* and *remote monitoring equipment* as required by *AEMO* and it may be a condition of the offer to *connect* that the *Connection Applicant* pay such costs.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

5.3.6 Offer to connect

- (a) A *Network Service Provider* processing an *application to connect* must make an offer to *connect* the *Connection Applicant's facilities* to the *network* within the following timeframes:
 - (1) where the *application to connect* was made under clause 5.3.4(a), the timeframe specified in the *preliminary program*, subject to clause 5.3.3(b)(6); and
 - (2) where the *application to connect* was made under clause 5.3A.9(b), a period of time no longer than 4 months from the date of receipt of the *application to connect* and any additional information requested under clause 5.3A.9(d), unless agreed otherwise.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (a1) The *Network Service Provider* may amend the time period referred to in paragraph (a)(1) to allow for any additional time taken in excess of the period allowed in the *preliminary program* for the negotiation of *negotiated access standards* in accordance with clause 5.3.4A or a *system strength remediation scheme* in accordance with clause 5.3.4B or any time taken by *AEMO* to respond under clause 5.3.4B(j) in excess of 20 *business days*.
- (a2) In relation to the timeframes fixed in paragraph (a)(2), for the purposes of calculating elapsed time, the following periods shall be disregarded:
 - (1) the period that commences on the day when a dispute is initiated under clause 8.2.4(a) and ends of the day on which the dispute is withdrawn or is resolved in accordance with clauses 8.2.6D or 8.2.9(a);

- (2) any time taken to resolve a *distribution services access dispute*; and
 - (3) any time taken by AEMO to respond under clause 5.3.4B(j) in excess of 20 *business days*.
- (b) In relation to an *application to connect* made under clause 5.3.4(a), the offer to *connect* must contain the proposed terms and conditions for *connection* to the *network* including:
- (1) for each technical requirement identified by the *Network Service Provider* under clause 5.3.3(b1), the *automatic access standard* or the *negotiated access standard* as determined in accordance with clauses 5.3.4 and 5.3.4A; and
 - (2) the terms and conditions of the kind set out in Part A and (where applicable) Part B of schedule 5.6,

and must be capable of acceptance by the *Connection Applicant* so as to constitute a *connection agreement* and (where applicable) a *network operating agreement*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b1) The proposed terms and conditions detailed in the offer to *connect* must be no lower than the applicable *minimum access standards*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b2) An offer to *connect* made under paragraph (a)(2), must be accompanied by:
- (1) so far as is relevant, and in relation to services the *Distribution Network Service Provider* intends to provide, an itemised statement of *connection* costs including:
 - (i) *connection service* charges;
 - (ii) costs associated with *metering* requirements contained in the offer to *connect*;
 - (iii) costs of *network extension*;
 - (iv) details of *augmentation* required to provide the *connection* and associated costs;
 - (v) details of the interface equipment required to provide the *connection* and associated costs;

- (vi) details of any ongoing operation and maintenance costs and charges by the *Distribution Network Service Provider*; and
 - (vii) other incidental costs and their basis of calculation;
- (2) if any item in the statement of costs in subparagraph (1) differs substantially from the estimate provided under clause S5.4B(h), an explanation of the differences;
- (3) a *connection agreement* capable of execution by the *Connection Applicant*, which must contain the proposed terms and conditions for *connection* to the *distribution network* (of the kind set out in Part A of schedule 5.6) including, for each technical requirement identified by the *Distribution Network Service Provider* in the detailed response provided under clause 5.3A.8(c), the *automatic access standard* or the negotiated access standard as determined in accordance with clause 5.3.4A; and
- (4) an explanation:
 - (i) of how the offer to *connect* can be accepted; and
 - (ii) that the offer to *connect* remains open for 20 *business days*, unless otherwise agreed.
- (b3) An offer to *connect* made under paragraph (a)(2) must remain open for acceptance for 20 *business days* from the date it is made and, if not accepted within that period, lapses unless the *Connection Applicant* has sought an extension of the period of time from the *Distribution Network Service Provider*. The *Distribution Network Service Provider* may not unreasonably withhold consent to the extension.
- (b4) An offer to *connect* by a *Primary Transmission Network Service Provider* made under paragraph (a)(1) must include:
 - (1) the *Primary Transmission Network Service Provider*'s requirements in relation to the matters proposed in clause 5.3.4(b)(3) and (b)(4); and
 - (2) the costs of the services proposed to be provided by the *Primary Transmission Network Service Provider* separated between *negotiated transmission services* and *non-regulated transmission services* (if applicable).
- (b5) A *Connection Applicant* may seek amendments to the offer to *connect* provided that the *Connection Applicant* agrees to changes to the *preliminary program* to reflect the additional time required to agree the amendments.
- (c) The offer to *connect* must be fair and reasonable and must be consistent with the safe and *reliable* operation of the *power system* in accordance with the *Rules*. Without limitation, unless the parties otherwise agree, to be fair and reasonable an offer to *connect* must offer *connection* and *network services* consistent with schedule 5.1 and (as applicable) schedules 5.2, 5.3

and 5.3a and must not impose conditions on the *Connection Applicant* which are more onerous than those contemplated in schedules 5.1, 5.2, 5.3 or 5.3a.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(c1) **[Deleted]**

- (d) The *Network Service Provider* must use its reasonable endeavours to provide the *Connection Applicant* with an offer to *connect* in accordance with the reasonable requirements of the *Connection Applicant*, including without limitation, the location of the proposed *connection point* and the level and standard of *power transfer capability* that the *network* will provide.
- (e) An offer to *connect* may contain options for *connection* to a *network* at more than one point in a *network* and/or at different levels of service and with different terms and conditions applicable to each *connection point* according to the different characteristics of *supply* at each *connection point*.
- (f) Both the *Network Service Provider* and the *Connection Applicant* are entitled to negotiate with each other in respect of the provision of *connection* and any other matters relevant to the provision of *connection* and, if negotiations occur, the *Network Service Provider* and the *Connection Applicant* must conduct such negotiations in good faith.
- (g) An offer to *connect* must define the basis for determining *transmission service* charges in accordance with Chapter 6A, including the prudential requirements set out in that Chapter.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (h) An offer to *connect* must define the basis for determining *distribution service* charges in accordance with Chapter 6, including the prudential requirements set out in Part K of Chapter 6.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(i) **[Deleted]**

- (j) An offer to *connect* in respect of a *distribution network* made to an *Embedded Generator* or a *Market Network Service Provider*, must conform with the relevant access arrangements set out in rule 5.3AA.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(k) **[Deleted]**

5.3.7 Finalisation of connection agreements and network operating agreements

- (a) If a *Connection Applicant* wishes to accept an offer to *connect*, the *Connection Applicant* must negotiate and enter into:
- (1) a *connection agreement* with each relevant *Network Service Provider* identified in accordance with clauses 5.3.3(b)(3) and (4) or clauses S5.4.A(d) and (e); and
 - (2) if applicable, a *network operating agreement* with the *Primary Transmission Network Service Provider*,
- and in doing so must use its reasonable endeavours to negotiate in good faith with all parties with which the *Connection Applicant* must negotiate such a *connection agreement* and (if applicable) *network operating agreement*.
- (b) The *connection agreement* must include proposed *performance standards* with respect to each of the technical requirements identified in schedules 5.2, 5.3 and 5.3a and each proposed *performance standard* must have been established in accordance with the relevant technical requirement.
- (c) The proposed *performance standards* must be based on the *automatic access standard* or, if the procedures in clause 5.3.4A have been followed, the *negotiated access standard*.
- (d) The provision of *connection* by any *Network Service Provider* may be made subject to gaining environmental and planning approvals for any necessary *augmentation* or *extension* works to a *network* or any *system strength connection works*.
- (e) Where permitted by the applicable law in the relevant *participating jurisdiction*, the *connection agreement* may assign responsibility to the *Connection Applicant* for obtaining the approvals referred to in paragraph (d) as part of the project proposal and the *Network Service Provider* must provide all reasonable information and may provide reasonable assistance for a reasonable fee to enable preparation of applications for such approvals.
- (f) Subject to paragraph (e), each *connection agreement* must be based on the offer to *connect* as varied by agreement between the parties.
- (f1) The parties may agree to have one *connection agreement* between a *Primary Transmission Network Service Provider*, *Dedicated Connection Asset Service Provider* and a *Transmission Network User* for a *connection*.

- (f2) A *network operating agreement* must be based on the offer to *connect* as varied by agreement between the parties.
- (g) Within 20 *business days* of execution of the *connection agreement*, the *Network Service Provider* responsible for the *connection point* and the *Registered Participant* must jointly notify *AEMO* that a *connection agreement* has been entered into between them and forward to *AEMO* relevant technical details of the proposed *plant* and *connection*, including as applicable:
 - (1) details of all *performance standards* that form part of the terms and conditions of the *connection agreement*;
 - (2) if a *Generator*, the arrangements for:
 - (i) updating the *releasable user guide* and other information required under clause S5.2.4(b); and
 - (ii) informing *AEMO* when the *connection agreement* expires or is terminated;
 - (3) the proposed *metering installation*;
 - (4) arrangements to obtain physical access to the *metering installation* for the *Metering Provider* and the *Metering Data Provider* for *metering installations* type 4A, 5 and 6;
 - (5) the terms upon which a *Registered Participant* is to supply any *ancillary services* under the *connection agreement*; and
 - (6) the details of any *system strength remediation scheme* agreed, determined or modified under clause 5.3.4B.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (h) *AEMO* must, within 20 *business days* of receipt of the notice under paragraph (g), advise the relevant *Network Service Provider* and the *Registered Participant* of whether the proposed *metering installation* is acceptable for those *metering installations* associated with those *connection points* which are classified as *metering installation* types 1, 2, 3 and 4 as specified in schedule 7.4.

5.3.8 Provision and use of information

- (a) The data and information provided under rules 5.2A, 5.3 and 5.3A is *confidential information* and must:
 - (1) be prepared, given and used in good faith; and

- (2) not be disclosed or made available by the recipient to a third party except as set out in clause 3.13.3 or this clause 5.3.8 or in accordance with rule 8.6.
- (a1) The data and information provided to a *Primary Transmission Network Service Provider* in relation to its provision of non-contestable services as specified under clause 5.2A.4(a) must not be used by the *Primary Transmission Network Service Provider* for the purpose of tendering for, or negotiating, *contestable* services specified under clause 5.2A.4(a) in the *connection* process in which the data or information was given, or in future *connection* processes, without the consent of the *Connection Applicant*.
- (b) The data and information to be provided under this rule 5.3 may be shared between a *Network Service Provider* and AEMO for the purpose of enabling:
 - (1) the *Network Service Provider* to advise AEMO of *ancillary services* ;
and
 - (2) either party to:
 - (i) assess the effect of a proposed *facility* or proposed alteration to *generating plant* (as the case may be) on:
 - (A) the performance of the *power system*; or
 - (B) another proposed *facility* or another proposed alteration;
 - (ii) assess proposed *negotiated access standards*;
 - (iii) determine the extent of any required *augmentation* or *extension* or *system strength connection works*; or
 - (iv) assess *system strength remediation scheme* proposals.
- (c) A *Network Service Provider* may disclose the data and information to be provided under rules 5.2A, 5.3 and 5.3A to another *Network Service Provider* if the *Network Service Provider* considers the information or data is materially relevant to that provider for *connection*.
- (d) A person intending to disclose information under paragraphs (b) or (c) must first advise the relevant *Connection Applicant* of the extent of the disclosure, unless the information may be disclosed in accordance with rule 8.6.
- (e) If a *Connection Applicant* or *Network Service Provider* becomes aware of any material change to any information contained in or relevant to an *application to connect*, it must promptly notify the other party in writing of that change.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (f) A *Registered Participant* must, within 5 *business days* of becoming aware that any information provided to *AEMO* in relation to a *performance standard* or other information of a kind required to be provided to *AEMO* under clause 5.3.7 is incorrect, advise *AEMO* of the correct information.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

5.3.9 Procedure to be followed by a Generator proposing to alter a generating system

- (a) This clause 5.3.9 applies where a *Generator* proposes to alter a *connected generating system* or a *generating system* for which *performance standards* have been previously accepted by *AEMO* and that alteration:
 - (1) will affect the performance of the *generating system* relative to any of the technical requirements set out in clauses S5.2.5, S5.2.6, S5.2.7 and S5.2.8; or
 - (2) will, in *AEMO's* reasonable opinion, have an *adverse system strength impact*; or
 - (3) will, in *AEMO's* reasonable opinion, adversely affect *network capability, power system security, quality or reliability of supply, inter-regional power transfer capability* or the use of a *network* by another *Network User*.
- (b) A *Generator* to which this clause applies, must submit to the *Network Service Provider* with a copy to *AEMO*:
 - (1) a description of the nature of the alteration and the timetable for implementation;
 - (2) in respect of the proposed alteration to the *generating system*, details of the *generating unit* design data and *generating unit* setting data in accordance with the *Power System Model Guidelines, Power System Design Data Sheet* and *Power System Setting Data Sheet*;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (3) in relation to each relevant technical requirement for which the proposed alteration to the equipment will affect the performance of the *generating system*, the proposed amendments to:
 - (i) the applicable *automatic access standard*; or
 - (ii) a proposed *negotiated access standard*; and
 - (4) where relevant, the *Generator's* proposed *system strength remediation scheme*.
- (c) Clause 5.3.4A applies to a submission by a *Generator* under paragraph (b)(3)(ii).
- (c1) Clause 5.3.4B applies to a submission by a *Generator* under subparagraph (b)(4). A *Generator* may request the *Network Service Provider* to undertake a preliminary assessment in accordance with the *system strength impact assessment guidelines* before making a submission under paragraph (b).
- (d) Without limiting subparagraph (b)(3), for the purposes of that subparagraph (unless *AEMO* and the *Network Service Provider* otherwise agree), a proposed alteration to the equipment specified in column 1 of the table set out below is taken to affect the performance of the *generating system* relative to technical requirements specified in column 2, thereby necessitating a submission under subparagraph (b)(3).

Column 1 (altered equipment)	Column 2 (clause)
machine windings	S5.2.5.1, S5.2.5.2, S5.2.8
power converter	S5.2.5.1, S5.2.5.2, S5.2.5.5, S5.2.5.12, S5.2.5.13, S5.2.8
reactive compensation plant	S5.2.5.1, S5.2.5.2, S5.2.5.5, S5.2.5.12, S5.2.5.13
<i>excitation control system</i>	S5.2.5.5, S5.2.5.7, S5.2.5.12, S5.2.5.13
<i>voltage control system</i>	S5.2.5.5, S5.2.5.12, S5.2.5.13
<i>governor control system</i>	S5.2.5.7, S5.2.5.11, S5.2.5.14
<i>power control system</i>	S5.2.5.11, S5.2.5.14
<i>protection system</i>	S5.2.5.3, S5.2.5.4, S5.2.5.5, S5.2.5.7, S5.2.5.8, S5.2.5.9
auxiliary supplies	S5.2.5.1, S5.2.5.2, S5.2.8

Column 1 (altered equipment)	Column 2 (clause)
remote control and monitoring system	S5.2.5.14, S5.2.6.1, S5.2.6.2

- (e) The *Network Service Provider* may as a condition of considering a submission made under paragraph (b), require payment of a fee to meet the reasonable costs anticipated to be incurred by the provider, other *Network Service Providers* and *AEMO*, in the assessment of the submission.
- (f) The *Network Service Provider* must require payment of a fee under paragraph (e) if so requested by *AEMO*.
- (g) On payment of the required fee referred to in paragraph (e), the *Network Service Provider* must pay such amounts as are on account of the costs anticipated to be incurred by the other *Network Service Providers* and *AEMO*, as appropriate.
- (h) If the application of this clause 5.3.9 leads to a variation to an existing *connection agreement* the *Network Service Provider* and the *Generator* must immediately jointly advise *AEMO*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

5.3.10 Acceptance of performance standards for generating plant that is altered

- (a) A *Generator* must not commission altered *generating plant* until the *Network Service Provider* has advised the *Generator* that the provider and *AEMO* are satisfied in accordance with paragraph (b).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) In relation to altered *generating plant*, the *Network Service Provider* and *AEMO*, to the extent of *AEMO*'s advisory role under clause 5.3.4A and clause 5.3.4B, must be satisfied that:
 - (1) the *Generator* has complied with clause 5.3.9; and
 - (2) each amended *performance standard* submitted by the *Generator* either meets:
 - (i) the *automatic access standard* applicable to the relevant technical requirement; or

- (ii) the *negotiated access standard* under clause 5.3.4A as applied in accordance with clause 5.3.9(c); and
 - (3) any *system strength remediation scheme* satisfies clause 5.3.4B.
- (c) For the purposes of paragraph (a), *AEMO* must advise the *Network Service Provider* as to whether it is satisfied with the matters referred to paragraph (b).

5.3.11 Notification of request to change normal voltage

- (a) On receipt of a request from a *Network Service Provider* to change *normal voltage*, *AEMO* must *publish* a notice to *Registered Participants* advising:
 - (1) the change in *normal voltage* requested; and
 - (2) the *connection point* to which the request relates.
- (b) Within a reasonable period after publication of the notice in paragraph (a), *AEMO* must *publish* a further notice to *Registered Participants* advising:
 - (1) whether the *normal voltage* at the relevant *connection point* will change; and
 - (2) the nature of, and reasons for, any such change.

5.3A Establishing or modifying connection - embedded generation

5.3A.1 Application of rule 5.3A

- (a) For the purposes of this rule 5.3A:

non-registered embedded generator has the same meaning as in clause 5A.A.1
- (b) Where a *Connection Applicant* wishes to connect an *embedded generating unit*, this rule 5.3A applies.
- (c) For the purposes of this rule 5.3A and Schedules 5.4A and 5.4B:
 - (1) a reference to a *Connection Applicant* is to a:
 - (i) person who intends to be an *Embedded Generator*;
 - (ii) person who is required to apply to *AEMO* for an exemption from the requirement to register as a *Generator* in respect of an *embedded generating unit*; or
 - (iii) non-registered embedded generator who has made an election under clause 5A.A.2(c),

and who makes a *connection* enquiry under clause 5.3A.5 or an *application to connect* under clause 5.3A.9 in relation to any *generating systems*, or any *network elements* used in the provision of a *network service*, as the case may be.

- (2) the *Distribution Network Service Provider* is the *Distribution Network Service Provider* required under clause 5.3A.5 to process and respond to a *connection* enquiry or required under clause 5.3A.10 to prepare an offer to *connect* for the establishment or modification of a *connection* to the *distribution network* owned, controlled or operated by that *Distribution Network Service Provider* or for the provision of a *network service*.

5.3A.2 Definitions and miscellaneous

- (a) In this rule 5.3A and Schedules 5.4A and 5.4B:

detailed response means the response to a *connection* enquiry prepared under clause 5.3A.8.

establish a connection has the same meaning as in clause 5.3.1.

information pack means information relevant to the making of an *application to connect* specified in clause 5.3A.3(b).

preliminary response means the response to a *connection* enquiry prepared under clause 5.3A.7.

sub-transmission line has the same meaning as in clause 5.10.2.

zone substation has the same meaning as in clause 5.10.2.

- (b) To the extent a *Distribution Network Service Provider* has provided information required to be provided under this clause 5.3A by the inclusion of that information in:

- (1) its demand side engagement document under clause 5.13.1(g); or

- (2) a *Distribution Annual Planning Report*,

it will comply with the relevant information provision requirements of rule 5.3A by including hyperlinks to the relevant information in information provided to a *Connection Applicant*.

- (c) Where this rule 5.3A fixes a time limit for the provision of information or a response then, for the purposes of calculating elapsed time, the period that:

- (1) commences on the day when a dispute is initiated under clause 8.2.4(a); and

- (2) ends on the day on which the dispute is withdrawn or is resolved in accordance with clauses 8.2.6D or 8.2.9(a),

is to be disregarded.

5.3A.3 Publication of Information

- (a) A *Distribution Network Service Provider* must *publish* the following in the same location on its website:
 - (1) an enquiry form for *connection* of an *embedded generating unit*;
 - (2) a register of completed embedded generation projects under clause 5.18B; and
 - (3) an information pack.
- (b) An information pack must include:
 - (1) a description of the process for lodging an *application to connect* for an *embedded generating unit*, including:
 - (i) the purpose of each stage of the *connection* enquiry and application processes;
 - (ii) the steps a *Connection Applicant* will need to follow at each stage of the *connection* enquiry and application processes;
 - (iii) the information that is to be included by the *Connection Applicant* with a *connection* enquiry and the information that will be made available to the *Connection Applicant* by the *Distribution Network Service Provider* at each stage of the *connection* enquiry;
 - (iv) the information that is to be included with an *application to connect* and the type of information that will be made available to the *Connection Applicant* by the *Distribution Network Service Provider* after lodgement of the application;
 - (v) the factors taken into account by the *Distribution Network Service Provider*, at each stage of the *connection* enquiry and application, when assessing an *application to connect* for an *embedded generating unit*;
 - (vi) the process for negotiating *negotiated access standards* under clause 5.3.4A and any *system strength remediation scheme* under clause 5.3.4B and a summary of the factors the *Distribution Network Service Provider* takes into account when considering proposed *negotiated access standards* and *system strength remediation schemes*; and
 - (vii) a list of services, if any, relevant to the *connection* that are *contestable* in the relevant *participating jurisdiction*;

- (2) single line diagrams of the *Distribution Network Service Provider's* preferred *connection* arrangements, and a range of other possible *connection* arrangements for integration of an *embedded generating unit*, showing the *connection point*, the point of common coupling, the *embedded generating unit(s)*, *load(s)*, *meter(s)*, circuit breaker(s) and isolator(s);
- (3) a sample schematic diagram of the *protection system* and *control system* relevant to the *connection* of an *embedded generating unit* to the *distribution network*, showing the *protection system* and *control system*, including all relevant current circuits, relay potential circuits, alarm and monitoring circuits, back-up systems and parameters of protection and *control system* elements;
- (4) worked examples of *connection service* charges, enquiry and application fees for the *connection* of *embedded generating units*, based on the preferred and possible *connection* arrangements set out in paragraph (b)(2);
- (5) details of any *minimum access standards* or *plant standards* the *Distribution Network Service Provider* considers are applicable to *embedded generating units* and *generating plant*;
- (6) technical requirements relevant to the processing of a *connection* enquiry or an *application to connect*, including information of the type, but not limited to:
 - (i) *protection systems* and protection schemes;
 - (ii) fault level management principles;
 - (iii) *reactive power capability* and *power factor* correction;
 - (iv) power quality and how limits are allocated;
 - (v) responses to *frequency* and *voltage* disturbances;
 - (vi) *voltage* control and regulation;
 - (vii) *remote monitoring equipment*, control and communication requirements;
 - (viii) earthing requirements and other relevant safety requirements;
 - (ix) circumstances in which *augmentation* may be required to facilitate integration of an *embedded generating unit* into the *network*;
 - (x) commissioning and testing requirements; and

- (xi) circumstances in which a *system strength remediation scheme* or *system strength connection works* will be required as a condition of connection; and
- (7) model *connection agreements* used by that *Distribution Network Service Provider*.

5.3A.4 Fees

- (a) A *Distribution Network Service Provider* may charge a *Connection Applicant* an enquiry fee, the amount of which must not be more than necessary to cover the reasonable costs of work required to prepare a detailed response to the enquiry.
- (b) The *Distribution Network Service Provider* may specify that an enquiry fee is payable in components.
- (c) The enquiry fee, or such component of it identified by the *Distribution Network Service Provider*, is payable either:
 - (1) on lodgement of the further information identified in S5.4A(o); or
 - (2) on receipt of advice from the *Distribution Network Service Provider* provided pursuant to clause 5.3A.7(b).
- (d) A *Distribution Network Service Provider* must not charge a fee for the provision of a preliminary response.
- (e) A *Distribution Network Service Provider* may charge an application fee, payable on lodgement of an *application to connect*, provided that the fee must not:
 - (1) include an amount for work that was completed in preparing the detailed response to the enquiry; and
 - (2) be more than necessary to:
 - (i) cover the costs of work and expenses reasonably incurred by the *Distribution Network Service Provider* in assessing the *application to connect* and making an offer to *connect*; and
 - (ii) meet the reasonable costs anticipated to be incurred by AEMO and other *Network Service Providers* whose participation in the assessment of the *application to connect* will be required.

5.3A.5 Enquiry

- (a) A *Connection Applicant* who wishes to make an *application to connect* must first make a *connection enquiry* with the *Local Network Service Provider*.
- (b) Subject to paragraph (c), an enquiry must be in the form determined by the *Local Network Service Provider*.

- (c) An enquiry form under paragraph (b) must require the *Connection Applicant* to provide:
 - (1) a qualitative description of the objectives of the project proposal the subject of the *application to connect*;
 - (2) the information specified in Schedule 5.4; and
 - (3) a list of the information required from the *Local Network Service Provider* in relation to its *application to connect* and supporting reasons for its requests.
- (d) A *Local Network Service Provider* must, within 5 *business days* after receiving an enquiry, provide written acknowledgment of receipt of the *connection enquiry*.
- (e) If the *Local Network Service Provider* considers that the *connection enquiry* should be jointly examined by more than one *Distribution Network Service Provider*, then, with the agreement of the *Connection Applicant*, one of those *Distribution Network Service Providers* may be allocated the task of liaising with the *Connection Applicant* and the other *Distribution Network Service Providers* to process and respond to the enquiry.
- (f) If the enquiry is incomplete in a material respect, or the *Connection Applicant* has lodged an enquiry other than in accordance with the form determined by a *Local Network Service Provider*, that *Local Network Service Provider* must, within 5 *business days* after receipt of the enquiry, advise the *Connection Applicant* of the deficiency, and may require the *Connection Applicant* to provide the necessary information.
- (g) A *Connection Applicant* may request in a *connection enquiry* made under paragraph (a), that the *Local Network Service Provider* provide only a detailed response under clause 5.3A.8(c) to its enquiry. The *Local Network Service Provider* must, within 5 *business days* after receipt of the enquiry and all such additional information (if any) requested under paragraph (f), advise the *Connection Applicant* if it agrees to the request.

5.3A.6 Response to Enquiry

- (a) In response to a *connection enquiry*, the *Distribution Network Service Provider* must provide:
 - (1) subject to clause 5.3A.5(g) or receiving any further information requested under clause 5.3A.5(f), a preliminary response; and
 - (2) subject to receiving the enquiry fee and the further information requested under clause 5.3A.8(b), if relevant, a detailed response.
- (b) In preparing either the detailed response or preliminary response, the *Distribution Network Service Provider* must liaise with other *Network Service Providers* with whom it has *connection agreements*, if the *Distribution Network Service Provider* believes, in its reasonable opinion,

that compliance with the terms and conditions of those *connection agreements* will be affected. The *Distribution Network Service Provider* responding to the *connection* enquiry may include in its preliminary response or detailed response, the reasonable requirements of any such other *Network Service Providers* for information to be provided by the *Connection Applicant*.

5.3A.7 Preliminary Response to Enquiry

- (a) Unless agreed otherwise, a preliminary response must:
 - (1) be provided within 15 *business days* of receipt of a *connection* enquiry and all such additional information (if any) requested under clause 5.3A.5(f); and
 - (2) include the information specified in Schedule 5.4A.
- (b) If the *Distribution Network Service Provider* has agreed under clause 5.3A.5(g) to not provide a preliminary response, it must advise the *Connection Applicant* of the:
 - (1) estimate of the enquiry fee payable by the *Connection Applicant* for the detailed response, including details of how components of the fee were calculated; and
 - (2) the component of the estimate of the enquiry fee payable by the *Connection Applicant* to request the detailed response,within 15 *business days* of receipt of a *connection* enquiry and all such additional information (if any) requested under clause 5.3A.5(f), unless agreed otherwise.
- (c) A *Distribution Network Service Provider* may seek an extension of a time period specified in paragraphs (a) or (b) by giving notice, in writing to the *Connection Applicant*, specifying the reasons required for the extension. The *Connection Applicant* may not unreasonably withhold consent to that extension.
- (d) Nothing in paragraph (a) or Schedule 5.4A is to be read or construed as requiring the *Distribution Network Service Provider* to undertake detailed design or to perform detailed technical studies or analysis to prepare a preliminary response.

5.3A.8 Detailed Response to Enquiry

- (a) Subject to clause 5.3A.5(g), a *Distribution Network Service Provider* must within 5 *business days* after receiving the further information identified in clause 5.3A.5(o) provide written acknowledgment of receipt of it.
- (b) If the further information provided under paragraph (a) is incomplete in a material respect the *Distribution Network Service Provider* must within 10

business days after receipt of it, advise the *Connection Applicant* of the deficiency and what is required to address it.

(c) Unless:

- (1) agreed otherwise; or
- (2) the proposed *connection* requires the application of the *regulatory investment test for distribution*,

the *Distribution Network Service Provider* must provide a detailed response within 30 *business days* of the date specified under paragraph (d).

(d) For the purposes of paragraph (c), the relevant date is the date on which the *Distribution Network Service Provider* has received all of the following:

- (1) the enquiry fee, or any component of the enquiry fee requested by the *Distribution Network Service Provider*;
- (2) if the *Connection Applicant* was required to remedy a deficiency in further information provided under paragraph (b), that further information; and
- (3) if the *Connection Applicant* was required under clause S5.4A(o) to provide further information, that information.

(e) A *Distribution Network Service Provider* may seek an extension of the time period specified in paragraph (c) by giving notice, in writing to the *Connection Applicant*, specifying the reasons required for the extension. The *Connection Applicant* may not unreasonably withhold consent to that extension.

(f) Where the proposed *connection* requires the application of the *regulatory investment test for distribution*, the *Distribution Network Service Provider* and the *Connection Applicant* are to agree a timeframe for the provision of a detailed response, taking into account the status of the relevant RIT-D project (as defined in clause 5.10.2).

(g) A detailed response must include the information specified in:

- (1) paragraphs (f), (g) and (m) of Schedule 5.4B;
- (2) paragraphs (a) - (e1), (h) - (l) and (n)-(o) of Schedule 5.4B.

Note

Clause 5.3A.8(g) requires that a detailed response include all information specified in Schedule 5.4B. The above division may be of relevance for enforcement purposes only.

(h) A *Connection Applicant* that is a *Registered Participant*, AEMO or an *interested party* may make a request in relation to technical requirements for access to the *Reliability Panel* in accordance with clause 5.3.3(b2)-(b4).

5.3A.9 Application for connection

- (a) Following receipt of a detailed response under clause 5.3A.8, a *Connection Applicant* may make an *application to connect* in accordance with this clause 5.3A.9, clause 5.3.4A and clause 5.3.4B.
- (b) To be eligible for *connection*, the *Connection Applicant* must submit an *application to connect* containing the information specified in the detailed response provided under clause 5.3A.8(c) and the application fee specified under clause S5.4B(m) to the *Distribution Network Service Provider*.
- (c) The *Connection Applicant* may submit an *application to connect* to more than one *Distribution Network Service Provider* in order to receive additional offers to *connect* in respect of *facilities* to be provided that are *contestable*.
- (d) If the *application to connect* is incomplete in a material respect the *Distribution Network Service Provider* must, within 10 *business days* after receipt of it, advise the *Connection Applicant* of the deficiency, and the steps required to address it.
- (e) To the extent that an application fee includes amounts to meet the reasonable costs anticipated to be incurred by any other *Network Service Providers* or AEMO in the assessment of the *application to connect*, a *Distribution Network Service Provider* who receives the *application to connect* and associated fee must pay such amounts to the other *Network Service Providers* or AEMO, as appropriate.
- (f) For each technical requirement where the proposed arrangement will not meet the *automatic access standards* nominated by the *Distribution Network Service Provider* pursuant to clause S5.4B(b), the *Connection Applicant* must submit with the *application to connect* a proposal for a *negotiated access standard* for each such requirement to be determined in accordance with clause 5.3.4A.
- (g) The *Connection Applicant* may:
 - (1) lodge separate *applications to connect* and separately liaise with the other *Network Service Providers* identified in clause 5.3A.5(e) who may require a form of agreement; or
 - (2) lodge one *application to connect* with the *Distribution Network Service Provider* who processed the *connection* enquiry and require it to liaise with those other *Network Service Providers* and obtain and present all necessary draft agreements to the *Connection Applicant*.
- (h) A *Connection Applicant* who proposes a *system strength remediation scheme* under clause 5.3.4B must submit its proposal with the *application to connect*.

5.3A.10 Preparation of offer to connect

- (a) The *Distribution Network Service Provider* to whom the *application to connect* is submitted under clause 5.3A.9(a):
 - (1) at the *automatic access standard*; or
 - (2) at a *negotiated access standard* that the provider has accepted under clause 5.3.4A(e),must proceed to prepare an offer to *connect* in response.
- (b) So as to maintain levels of service and quality of *supply* to existing *Registered Participants* in accordance with the *Rules*, the *Distribution Network Service Provider* in preparing the offer to *connect* must consult with AEMO and other *Registered Participants* with whom it has *connection agreements*, if the *Distribution Network Service Provider* believes in its reasonable opinion, that compliance with the terms and conditions of those *connection agreements* will be affected, in order to assess the *application to connect* and determine:
 - (1) the technical requirements for the equipment to be *connected*;
 - (2) the extent and cost of *augmentations* and changes to all affected *networks*;
 - (3) any consequent change in *network service* charges; and
 - (4) any possible material effect of this new *connection* on the *network power transfer capability* including that of other *networks*.
- (c) If the *application to connect* involves the *connection* of *embedded generating units* having a nameplate rating of 10 MW or greater, the *Distribution Network Service Provider* must consult the relevant *Transmission Network Service Provider* regarding the impact of the *connection* contemplated by the *application to connect* on fault levels, line reclosure protocols, and stability aspects.
- (d) The *Transmission Network Service Provider* consulted under paragraph (c) must determine the reasonable costs of addressing those matters for inclusion in the offer to *connect* and the *Distribution Network Service Provider* must make it a condition of the offer to *connect* that the *Connection Applicant* pay these costs.
- (e) The *Distribution Network Service Provider* preparing the offer to *connect* must include provision for payment of the reasonable costs associated with *remote control equipment* and *remote monitoring equipment* as required by AEMO and it may be a condition of the offer to *connect* that the *Connection Applicant* pay these costs.

- (f) The *Distribution Network Service Provider* preparing the offer to *connect* must specify in reasonable detail any *system strength connection works* to be undertaken by the *Distribution Network Service Provider*.

5.3A.11 Technical Dispute

- (a) Rule 8.2 applies to any dispute between a *Distribution Network Service Provider* and a *Connection Applicant* as to the technical requirements to establish or modify a *connection* sought by a *Connection Applicant* in a *connection* enquiry made under clause 5.3A.5 or an *application to connect* under clause 5.3A.9.

5.3A.12 Network support payments and functions

- (a) When negotiating the amount of a *network support payment* with an *Embedded Generator*, the *Transmission Network Service Provider* must take into account the:
 - (1) nature of the *network* support services being provided by the *Embedded Generator*; and
 - (2) extent to which the *Embedded Generator* is being, or will be, compensated for providing those *network* support services by receiving *avoided Customer TUOS charges*.
- (b) Where the relevant *Transmission Network Service Provider* or *Distribution Network Service Provider* decides to implement a *generation* option as an alternative to *network augmentation*, the *Network Service Provider* must:
 - (1) register the *generating unit* with AEMO and specify that the *generating unit* may be periodically used to provide a *network* support function and will not be eligible to set *spot prices* when *constrained* on in accordance with clause 3.9.7; and
 - (2) include the cost of this *network* support service in the calculation of *transmission service* and *distribution service* prices determined in accordance with Chapter 6 or Chapter 6A, as the case may be.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

5.3AA Access arrangements relating to Distribution Networks

- (a) In this rule 5.3AA:
 - (1) the *Distribution Network Service Provider* is the *Distribution Network Service Provider* required under clauses 5.3.3 or 5.3A.5 to process and respond to a *connection* enquiry or required under clauses 5.3.5 or 5.3A.10 to prepare an offer to *connect* for the establishment or

- modification of a *connection* to the *distribution network* owned, controlled or operated by that *Distribution Network Service Provider* or for the provision of *network service*; and
- (2) the references to a *Connection Applicant* are to an *Embedded Generator* or *Market Network Service Provider* who makes a *connection* enquiry under clauses 5.3.2 or 5.3A.5 or an application to *connect* under clauses 5.3.4 or 5.3A.10 in relation to any *generating units* or group of *generating units*, or any *network elements* used in the provision of *network service*, as the case may be.
- (b) If requested by a *Connection Applicant*, whether as part of a *connection* enquiry, application to *connect* or the subsequent negotiation of a *connection agreement*, the *Distribution Network Service Provider* must negotiate in good faith with the *Connection Applicant* to reach agreement in respect of the *distribution network user access* arrangements sought by the *Connection Applicant*.
- (c) As a basis for negotiations under paragraph (b):
- (1) the *Connection Applicant* must provide to the *Distribution Network Service Provider* such information as is reasonably requested relating to the expected operation of:
- (i) its *generating units* (in the case of an *Embedded Generator*); or
- (ii) its *network elements* used in the provision of *network service* (in the case of a *Market Network Service Provider*); and
- (2) the *Distribution Network Service Provider* must provide to the *Connection Applicant* such information as is reasonably requested to allow the *Connection Applicant* to fully assess the commercial significance of the *distribution network user access* arrangements sought by the *Connection Applicant* and offered by the *Distribution Network Service Provider*.
- (d) A *Connection Applicant* may seek *distribution network user access* arrangements at any level of *power transfer capability* between zero and:
- (1) in the case of an *Embedded Generator*, the *maximum power input* of the relevant *generating units* or group of *generating units*; and
- (2) in the case of a *Market Network Service Provider*, the *power transfer capability* of the relevant *network elements*.
- (e) The *Distribution Network Service Provider* must use reasonable endeavours to provide the *distribution network user access* arrangements being sought by the *Connection Applicant* subject to those arrangements being consistent with *good electricity industry practice* considering:
- (1) the *distribution connection assets* to be provided by the *Distribution Network Service Provider* or otherwise at the *connection point*; and

- (2) the potential *augmentations* or *extensions* required to be undertaken on all affected *transmission networks* or *distribution networks* to provide that level of *power transfer capability* over the period of the *connection agreement* taking into account the amount of *power transfer capability* provided to other *Registered Participants* under *distribution network user access* arrangements in respect of all affected *distribution networks*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (f) The *Distribution Network Service Provider* and the *Connection Applicant* must negotiate in good faith to reach agreement as appropriate on:
 - (1) the *connection service* charge to be paid by the *Connection Applicant* in relation to *distribution connection assets* to be provided by the *Distribution Network Service Provider*;
 - (2) in the case of a *Market Network Service Provider*, the service level standards to which the *Market Network Service Provider* requires the *Distribution Network Service Provider* to adhere in providing it services;
 - (3) the *use of system services* charge to be paid:
 - (i) by the *Connection Applicant* in relation to any *augmentations* or *extensions* required to be undertaken on all affected *transmission networks* and *distribution networks*; and
 - (ii) where the *Connection Applicant* is a *Market Network Service Provider*, to the *Market Network Service Provider* in respect of any reduction in the long run marginal cost of *augmenting* the *distribution network* as a result of it being *connected* to the *distribution network*,

(*negotiated use of system charges*); and
 - (4) the following amounts:
 - (i) the amount to be paid by the *Connection Applicant* to the *Distribution Network Service Provider* in relation to the costs reasonably incurred by the *Distribution Network Service Provider* in providing *distribution network user access*;
 - (ii) where the *Connection Applicant* is an *Embedded Generator*:
 - (A) the compensation to be provided by the *Distribution Network Service Provider* to the *Embedded Generator* in the event that the *generating units* or group of *generating*

units of the Embedded Generator are constrained off or constrained on during a trading interval; and

- (B) *the compensation to be provided by the Embedded Generator to the Distribution Network Service Provider in the event that dispatch of the Embedded Generator's generating units or group of generating units causes another Generator's generating units or group of generating units to be constrained off or constrained on during a trading interval; and*

(iii) *where the Connection Applicant is a Market Network Service Provider:*

- (A) *the compensation to be provided by the Distribution Network Service Provider to the Market Network Service Provider in the event that the distribution network user access is not provided; and*

- (B) *the compensation to be provided by the Market Network Service Provider to the Distribution Network Service Provider in the event that dispatch of the relevant market network service causes a Generator's generating units or group of generating units to be constrained off or constrained on during a trading interval or causes the dispatch of another market network service to be constrained.*

- (g) *The maximum negotiated use of system charges applied by a Distribution Network Service Provider must be in accordance with the applicable requirements of Chapter 6 and the Negotiated Distribution Service Criteria applicable to the Distribution Network Service Provider.*
- (h) *A Distribution Network Service Provider must pass through to a Connection Applicant the amount calculated in accordance with paragraph (i) for the locational component of prescribed TUOS services that would have been payable by the Distribution Network Service Provider to a Transmission Network Service Provider had the Connection Applicant not been connected to its distribution network.*

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (i) *To calculate the amount to be passed through to a Connection Applicant in accordance with paragraph (h), a Distribution Network Service Provider must, if prices for the locational component of prescribed TUOS services were in force at the relevant transmission network connection point throughout the relevant financial year:*

- (1) determine the charges for the locational component of *prescribed TUOS services* that would have been payable by the *Distribution Network Service Provider* for the relevant *financial year*:
 - (i) where the *Connection Applicant* is an *Embedded Generator*, if that *Embedded Generator* had not injected any *energy* at its *connection point* during that *financial year*;
 - (ii) where the *Connection Applicant* is a *Market Network Service Provider*, if the *Market Network Service Provider* had not been *connected* to the *Distribution Network Service Provider's* *distribution network* during that *financial year*; and
 - (2) determine the amount by which the charges calculated in subparagraph (1) exceed the amount for the locational component of *prescribed TUOS services* actually payable by the *Distribution Network Service Provider*, which amount will be the relevant amount for the purposes of paragraph (h).
- (j) Where prices for the locational component of *prescribed TUOS services* were not in force at the relevant *distribution network connection point* throughout the relevant *financial year*, as referred to in paragraph (i), the *Distribution Network Service Provider* must apply an equivalent procedure to that referred to in paragraph (i) in relation to that component of its *transmission use of system service* charges which is deemed by the relevant *Transmission Network Service Provider* to represent the marginal cost of *transmission*, less an allowance for locational signals present in the *spot market*, to determine the relevant amount for the purposes of paragraph (h).

5.3B Application for connection to declared shared network

- (a) In relation to a *declared transmission system*, the powers, functions and responsibilities of the *Network Service Provider* are divided between AEMO and the *declared transmission system operator* as follows:
 - (1) AEMO is the *Network Service Provider* in respect of the provision of *shared transmission services*; and
 - (2) the relevant *declared transmission system operator* is the *Network Service Provider* in respect of the provision of *connection services*.
- (b) If:
 - (1) a *declared transmission system operator* receives a *connection inquiry* or an *application to connect* to a *declared shared network*; and
 - (2) the inquiry or application relates in whole or part to the provision of *shared transmission services*;

the *declared transmission system operator* must pass on to AEMO the information provided by the applicant in connection with the inquiry or application.

- (c) Clauses 5.3.1(e), 5.3.2(g), 5.3.3(b)(5A), (7) to (11), 5.3.3(c)(5)(ii), 5.3.4(b)(3) and (4), 5.3.4(b1), 5.3.4(f)(3), 5.3.6(b4) and (b5), 5.3.7(a2), 5.3.7(f1) and (f2) and 5.3.8(a2) do not apply in respect of a *declared transmission system*.

5.4 Independent Engineer

5.4.1 Application

- (a) This rule 5.4 does not apply to the *declared transmission system* of an *adoptive jurisdiction*.
- (b) This rule 5.4 applies only if a relevant *Transmission Network Service Provider* or a *Connection Applicant* requires independent advice in order to reach agreement on or resolve:
 - (1) a technical issue in relation to *negotiated transmission services* related to a *connection* sought by the *Connection Applicant*;
 - (2) whether assets or components form part of a *dedicated connection asset* or form part of an *identified user shared asset*;
 - (3) whether or not a component of an *identified user shared asset* is a *contestable IUSA component* pursuant to clause 5.2A.4(c)(1) and (2); or
 - (4) whether the detailed design of a *contestable IUSA component* is consistent with the functional specification for the relevant *identified user shared asset*,

(“**technical matter**”).
- (c) A technical matter does not include issues relating to:
 - (1) the cost or commercial terms of;
 - (2) the process relating to; or
 - (3) the timing of,

the *connection*.

5.4.2 Establishment of a pool

- (a) The *Adviser* must establish and maintain a pool of persons (who may be individuals or firms) from whom the *Independent Engineer* may be selected in accordance with clauses 5.4.3(d)(2) or 5.4.4(a)(4).
- (b) In selecting persons for the pool, the *Adviser* must have regard to the need for the person to have sufficient experience and expertise in technical matters involved in *connections* to the *transmission network*.

- (c) The *Adviser* must review the composition of the pool at least every two years.

5.4.3 Initiating the Independent Engineer process

- (a) If a technical matter arises that requires independent advice in order to reach an agreement or resolution, a *Transmission Network Service Provider* or a *Connection Applicant* may serve a notice on the other party that:
 - (1) requires the parties to engage an *Independent Engineer*;
 - (2) includes a statement setting out the technical matter; and
 - (3) may request the receiving party to provide information about the technical matter.
- (b) If another *Transmission Network Service Provider*:
 - (1) has the task of liaising with the *Connection Applicant* under clause 5.3.2(e); or
 - (2) has been identified as a party with whom the *Connection Applicant* must enter into an agreement with under clause 5.3.3(b)(4),

and has an interest in the technical issue under clause 5.4.1(b)(1), that *Transmission Network Service Provider* must also be served with a copy of the notice under paragraph (a) and must participate in the *Independent Engineer* process.
- (c) If the technical matter involves a matter that relates to an *AEMO advisory matter*, then *AEMO* must also be served with a copy of the notice under paragraph (a) and may participate in the *Independent Engineer* process.
- (d) Within 10 *business days* of service of a notice under paragraph (a), a party may:
 - (1) agree that the technical matter be resolved through an alternative means as agreed by the parties on the terms agreed between the parties; or
 - (2) agree to appoint an *Independent Engineer* from the pool and the scope of work the *Independent Engineer* is to undertake.
- (e) If the parties appoint an *Independent Engineer* in accordance with subparagraph (d)(2), the parties are not required to notify the *Adviser* of the agreed selection in which case clauses 5.4.5 and 5.4.6 apply.

5.4.4 Referral to the Adviser

- (a) If the parties do not reach an agreement under clause 5.4.3(d) within 10 *business days* of service of a notice under clause 5.4.3(a), any party may

refer the technical matter to the *Adviser* by serving on the *Adviser* a notice, which must:

- (1) be in a form approved and published by the *Adviser*;
 - (2) contain the names of the parties who seek advice on the technical matter;
 - (3) contain a statement setting out the technical matter;
 - (4) if the parties have agreed on an *Independent Engineer*, the name of that *Independent Engineer* or in the absence of such agreement, contain a request for the *Adviser* to select an *Independent Engineer*;
 - (5) contain the scope of advice required in respect of the technical matter, as agreed by the parties and in the absence of such agreement, request the *Adviser* to assist in determining the scope (which the *Adviser* may do in consultation with the parties and the *Independent Engineer* once appointed); and
 - (6) specify a time frame by which the advice from the *Independent Engineer* is required so as to allow the *Adviser* to consider the availability of potential *Independent Engineers*.
- (b) If the *Adviser* is requested to select an *Independent Engineer* from the pool under clause 5.4.2, it must:
- (1) use reasonable endeavours to ensure the cost, availability, independence and expertise and experience of the selected *Independent Engineer* is appropriate to the technical matter;
 - (2) consult with the parties prior to appointment, and
 - (3) unless the parties otherwise agree, make the appointment within 15 *business days* of the notice under paragraph (a).
- (c) Despite the requirement to consult set out in subparagraph (b)(3), a selection of the *Adviser* is final and binding upon all parties.

5.4.5 Proceedings and decisions of the Independent Engineer

- (a) The *Independent Engineer* may request documents and information from the parties that it reasonably considers is required to provide advice on the technical matter and a party must comply with such a request.
- (b) As a condition of providing documents and information, a party may require the *Independent Engineer* to agree to be bound to the confidentiality obligations under rule 8.6 as if the *Independent Engineer* was a *Registered Participant*.

- (c) The *Independent Engineer* must provide its written advice on a technical matter promptly, and in any case must do so within 30 *business days* after the *Independent Engineer* is appointed unless the parties otherwise agree.
- (d) The *Transmission Network Service Provider* may amend the time period referred to in any stage of the *connection* process under the *preliminary program* to allow for the additional time reasonably required for the *Independent Engineer* process under this rule 5.4.
- (e) The *Independent Engineer* must have regard to the following matters in forming their advice:
 - (1) the technical requirements of the *connection* proposed by either of the parties;
 - (2) the requirement under clause 5.3.4(b1)(2) that the technical requirements of the *connection* must not unreasonably inhibit the capacity for future expansion of an *identified user shared asset* or preclude the possibility of future *connections*;
 - (3) the technical requirements of the *connection* should be consistent with *good electricity industry practice* and contribute to a safe, reliable and secure *transmission system*;
 - (4) any submissions made by AEMO on an *AEMO advisory matter*; and
 - (5) any relevant requirements and obligations under the applicable *jurisdictional electricity legislation*.
- (f) The *Independent Engineer* is not bound by the rules of evidence and may inform itself in any manner it thinks fit.
- (g) The *Independent Engineer* is a person who facilitates the resolution of disputes on technical matters, and is a protected person for the purposes of section 120B of the *National Electricity Law* in relation to the exercise of its powers and functions carried out under this clause 5.4.5.
- (h) The *Independent Engineer*'s advice is not binding on the parties.

5.4.6 Costs of the Independent Engineer

The costs of any *Independent Engineer*, including any costs incurred by the *Adviser* in performing the functions of the *Adviser* in clause 5.4.4 are to be borne equally by the parties, unless otherwise agreed by the parties.

5.4A [Deleted]

Note

In the transitional rules, rule 5.4A and its associated definitions will be preserved in relation to the *declared transmission system* of an *adoptive jurisdiction*.

5.4AA [Deleted]

5.5 Commercial arbitration for prescribed and negotiated transmission services and large DCA services

5.5.1 Application

- (a) This rule 5.5 does not apply to the *declared transmission system* of an *adoptive jurisdiction*.
- (b) This rule 5.5 applies to any dispute which may arise between a *Transmission Network Service Provider* (including a *Dedicated Connection Asset Service Provider* for a *large dedicated connection asset*) (a **provider**) and a *Connection Applicant* or a person seeking *large DCA services* (an **applicant**) as to *terms and conditions of access*, for the provision of *prescribed transmission services*, the provision of *negotiated transmission services* (each a *transmission services access dispute*); or the provision of *large DCA services* (a *large DCA services access dispute*) (as applicable).
- (c) For the purposes of *prescribed transmission services*, *negotiated transmission services* and *large DCA services*, the *terms and conditions of access*:
 - (1) in relation to *negotiated transmission services*, are:
 - (i) the price of those services; and
 - (ii) other terms and conditions for the provision of those *negotiated transmission services*,

under Chapters 4 and 5 of the *Rules*;
 - (2) in relation to *prescribed transmission services*, are:
 - (i) the price of those services as determined under the *pricing methodology* of the relevant *Transmission Network Service Provider*; and
 - (ii) other terms and conditions for the provision of those *prescribed transmission services*,

under Chapters 4, 5 and 6A of the *Rules*; and
 - (3) in relation to *large DCA services*, are the price of, and the other terms and conditions for, the provision of those *large DCA services*, as determined under the *access policy*.

5.5.2 Notification of dispute

- (a) A provider or an applicant may notify the AER in writing that a *transmission services access dispute* or *large DCA services access dispute* exists.

- (b) On receiving a notification under paragraph (a), the *AER* must give notice in writing of the dispute to the other party to the dispute.
- (c) A provider or an applicant who has given notice of a dispute under paragraph (a) may withdraw notification of the dispute at any time by written notice to the *AER* and the other party to the dispute.
- (d) If the notification of a dispute is withdrawn under paragraph (c), it is taken for the purposes of this clause 5.5.2 to never have been given.

5.5.3 Appointment of commercial arbitrator

- (a) On receiving a notification under clause 5.5.2(a), the *AER* must request the provider and the applicant, by a time specified by the *AER*, to nominate to the *AER* two persons each for appointment as the *commercial arbitrator* to determine the *transmission services access dispute* or *large DCA services access dispute*. The provider and applicant may make the nominations.
- (b) As soon as practicable after the expiry of the time specified by the *AER* under paragraph (a), the *AER* must appoint:
 - (1) one of the persons (if any) nominated to the *AER* by the provider or the applicant under paragraph (a); or
 - (2) if neither the provider or the applicant nominate any such person within the time specified by the *AER* under paragraph (a) or all of the persons so nominated do not qualify for appointment under paragraph (d) or (e), a person determined by the *AER*,as the *commercial arbitrator* to determine the dispute, and must refer the dispute to that *commercial arbitrator*.
- (c) A decision of the *AER* as to the appointment of the *commercial arbitrator* is final and binding on the provider and the applicant.
- (d) The *AER* may only appoint a person as the *commercial arbitrator* if that person is experienced or trained in dispute resolution techniques.
- (e) A person is not eligible for appointment as the *commercial arbitrator* if that person has any interest that may conflict with, or which may be seen to conflict with, the impartial resolution of the dispute. Where the person who is appointed as the *commercial arbitrator* becomes aware of such conflict after that person commences the hearing of the dispute, the person must advise the parties to that effect.
- (f) Where:
 - (1) the provider or the applicant believes that the person appointed as the *commercial arbitrator* has an interest which may conflict with the impartial resolution of the dispute; or

- (2) the person appointed as the *commercial arbitrator* discloses the existence of such an interest,

the person must not continue to hear and determine the dispute, except with the written consent of the provider and the applicant.

5.5.4 Procedures of commercial arbitrator

- (a) The *commercial arbitrator* may give to the parties such directions as it considers necessary:
 - (1) for the proper conduct of the proceedings, including in relation to the provision of documents and information to the other party and the making of oral and written submissions;
 - (2) relating to the use and disclosure of information obtained from the other party to the dispute (including a direction to keep information confidential); and
 - (3) in relation to the participation (if any) of legal representatives of the parties in the proceedings.
- (b) The *commercial arbitrator* must observe the rules of procedural fairness, but is not bound by the rules of evidence and may inform itself in any manner it thinks fit.

5.5.5 Powers of commercial arbitrator in determining disputes

- (a) In determining a *transmission services access dispute* in relation to the *terms and conditions of access* for the provision of *prescribed transmission services* the *commercial arbitrator* must apply:
 - (1) in relation to price, the *pricing methodology* of the relevant *Transmission Network Service Provider* approved by the AER under Part E and Part J of Chapter 6A of the *Rules*;
 - (2) in relation to other terms and conditions, Chapters 4, 5 and 6A of the *Rules*; and
 - (3) in relation to all *terms and conditions of access* (including price) the decision of AEMO or the AER where those decisions relate to those terms and conditions and are made under Chapters 4, 5 and 6A of the *Rules*.
- (b) In determining a *transmission services access dispute* in relation to the *terms and conditions of access* for the provision of a *negotiated transmission service* the *commercial arbitrator* must apply:
 - (1) in relation to price for the provision of that service by the provider, the *negotiating principles* that are applicable to that dispute;

- (2) in relation to other terms and conditions, the *negotiating principles* that are applicable to that dispute and Chapters 4 and 5 of the *Rules*;
 - (3) in relation to all *terms and conditions of access* (including price) the decision of *AEMO* or the *AER* where those decisions relate to those terms and conditions and are made under Chapters 4 and 5 of the *Rules*.
- (c) In determining a *large DCA services access dispute* in relation to the *terms and conditions of access* for the provision of *large DCA services*, the *commercial arbitrator* must:
 - (1) apply the *access policy* of the *Dedicated Connection Asset Service Provider*;
 - (2) apply the relevant negotiating principles in schedule 5.12;
 - (3) have regard to the legitimate business interests of the *Dedicated Connection Asset Service Provider*;
 - (4) have regard to the interests of all persons who have rights to use the *large DCA services*; and
 - (5) have regard to the operational and technical requirements necessary for the safe and reliable operation of the *large dedicated connection asset* and any *facility connected* to it.
- (d) In determining a *transmission services access dispute* in relation to the *terms and conditions of access* for the provision of *negotiated transmission services* a *commercial arbitrator* may:
 - (1) have regard to other matters which the *commercial arbitrator* considers relevant.
 - (2) hear evidence or receive submissions from *AEMO* and *Transmission Network Users* who may be adversely affected.
- (e) In determining a *transmission services access dispute* in relation to the *terms and conditions of access* for the provision of *prescribed transmission services* a *commercial arbitrator* may:
 - (1) have regard to other matters which the *commercial arbitrator* considers relevant.
 - (2) hear evidence or receive submissions from *AEMO* in relation to *power system security* matters and from *Transmission Network Users* who may be adversely affected.

5.5.6 Determination of disputes

- (a) Subject to paragraph (c), the *commercial arbitrator* must determine the dispute as quickly as possible, and in any case it must do so within 30 *business days* after the dispute is referred to the *commercial arbitrator*.
- (b) The determination of the *commercial arbitrator*:
 - (1) may direct the provision of *prescribed transmissions services* and *negotiated transmission services* in accordance with Chapters 4, 5 and 6A of the Rules;
 - (2) may specify, for a *negotiated transmission service* or a *large DCA service*, a price or charge in such a way that it is or is to be adjusted over time;
 - (3) may direct the provision of *large DCA services* in accordance with the access policy of the *Dedicated Connection Asset Service Provider*; and
 - (4) only where the dispute is a *large DCA services access dispute*, may require the enlargement or increase in capacity of, or alterations to, a *large dedicated connection asset*.

Note

An adjustment as referred to in subparagraph (2) may, for example, be appropriate where the cost of providing the *negotiated transmission service* to a *Connection Applicant* or person seeking *large DCA services* changes because the assets used to provide that service are subsequently used to provide a service to another person and the payment for the service by that other person enables the *Transmission Network Service Provider* or *Dedicated Connection Asset Service Provider* to recoup some of those costs from that other person.

- (c) The *commercial arbitrator* may extend the period referred to in paragraph (a) if the provider and the applicant so agree in writing.
- (d) The *commercial arbitrator* may at any time terminate the proceedings without making a decision if it considers that:
 - (1) the dispute is misconceived or lacking in substance;
 - (2) the notification of the dispute to the *AER* under clause 5.5.2(a) was vexatious; or
 - (3) the party who notified the dispute to the *AER* under clause 5.5.2(a) has not negotiated in good faith or has notified the dispute prematurely or unreasonably.
- (e) The *commercial arbitrator* must terminate the proceedings without making a decision if at any time, whether on application by the provider or the applicant or otherwise, the arbitrator determines that the *transmission service* or *large DCA service* is capable of being provided on a genuinely

competitive basis by a person other than the provider or an entity which is associated with the provider.

5.5.7 Costs of dispute

- (a) The fees and costs of the *commercial arbitrator* must be borne equally by the provider and the applicant unless:
 - (1) paragraph (b) applies; or
 - (2) otherwise agreed between the provider and the applicant.
- (b) The costs of determining the dispute (including the legal costs of either of the parties) may be allocated by the *commercial arbitrator* for payment as between the parties as part of any determination.
- (c) In deciding to allocate costs against one of the parties to the dispute, the *commercial arbitrator* may have regard to any relevant matters including (but not limited to) whether the conduct of that party unreasonably prolonged or escalated the dispute or otherwise increased the costs of resolving the dispute.

5.5.8 Enforcement of agreement or determination and requirement for reasons

- (a) Where the provider and the applicant reach agreement (whether or not the matter is before a *commercial arbitrator*), the parties may execute a written agreement recording their resolution of that dispute.
- (b) The *commercial arbitrator* must give its decision determining the dispute, together with its reasons for that decision, in writing and must provide a copy of its determination:
 - (1) to the provider and to the applicant; and
 - (2) (except to the extent that it contains confidential information) to the *AER* for publication.
- (c) An agreement that is executed under paragraph (a) and a determination of the *commercial arbitrator* under paragraph (b) are binding on the provider and the applicant, and any failure to comply with such an agreement or determination is a breach of the *Rules* in respect of which the *AER* may take action in accordance with the *National Electricity Law*.

5.5.9 Miscellaneous

- (a) To the extent permitted by law, a person who is appointed as a *commercial arbitrator* is not liable for any loss, damage or liability suffered or incurred by any person as a consequence of any act or omission of that person which was done in good faith in connection with the dispute

- (b) A person who is appointed as a *commercial arbitrator* may, before acting in relation to the dispute, require the parties to the dispute (and any one of them) to execute a release and indemnity in relation to any loss, damage or liability that that person would, but for the release or indemnity, suffer or incur as a consequence of any act or omission done in good faith in connection with the dispute.

5.5A [Deleted]

Part C Post-Connection Agreement matters

5.6 Design of Connected Equipment

5.6.1 Application

This rule 5.6 applies to new installations and modifications to existing installations that include alterations to existing *generating plant*, after:

- (a) 13 December 1998, in the case of installations located in *participating jurisdictions* other than Tasmania; and
- (b) 29 May 2005, in the case of installations located in Tasmania.

5.6.2 Advice of inconsistencies

- (a) At any stage prior to commissioning the *facility* in respect of a *connection* if there is an inconsistency between the proposed equipment and the *connection agreement* including the *performance standards*, the *Registered Participant* or the person intending to be registered as a *Generator* must:
 - (1) advise the relevant *Network Service Provider* and, if the inconsistency relates to *performance standards*, *AEMO*, in writing of the inconsistency; and
 - (2) if necessary, negotiate in good faith with the *Network Service Provider* any necessary changes to the *connection agreement*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) If an inconsistency in a *connection agreement* including a *performance standard* is identified under paragraph (a), the *Registered Participant* or the person intending to be registered as a *Generator* and the *Network Service Provider* must not commission the *facility* in respect of a *connection* unless the *facility* or the *connection agreement* or *performance standard* has been varied to remove the inconsistency.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) **[Deleted]**

5.6.3 Additional information

A *Registered Participant* must provide any additional information in relation to its *plant* or associated equipment as the relevant *Network Service Provider* reasonably requests.

5.6.4 Advice on possible non-compliance

- (a) If the relevant *Network Service Provider* reasonably believes that the design of a proposed *facility* has potential to adversely and materially affect the performance of the *power system*, the *Network Service Provider* may require the *Registered Participant* to submit to it specified design information and drawings to enable the *Network Service Provider* to assess the performance of the *facility* in respect of its interaction with the *power system*:
- (1) after the *Registered Participant* has entered into an agreement for the supply of *plant* or associated equipment to be connected; and
 - (2) when the relevant contractor's designs have progressed to a point where preliminary designs are available but prior to manufacture of equipment.
- (b) The *Network Service Provider* must, within 40 *business days* of receipt of such information, use its reasonable endeavours to advise the *Registered Participant* in writing of any design deficiencies which the *Network Service Provider* believes would cause the design to be inconsistent with the *connection agreement* or the *Rules*.
- (c) Notwithstanding paragraph (b), it is the *Registered Participant's* sole responsibility to ensure that all *plant* and equipment associated with the *connection* complies with the *connection agreement* and the *Rules*.

5.6A [Deleted]

5.7 Inspection and Testing

5.7.1 Right of entry and inspection

- (a) If a *Registered Participant* who is party to a *connection agreement* reasonably believes that the other party to the *connection agreement* (being a party who is also a *Registered Participant*) is not complying with a technical provision of the *Rules* and that, as a consequence, the first *Registered Participant* is suffering, or is likely to suffer, a material adverse effect, then the first *Registered Participant* may enter the relevant *facility* at

the *connection point* of the other *Registered Participant* in order to assess compliance by the other *Registered Participant* with its technical obligations under the *Rules*.

- (b) A *Registered Participant* who wishes to inspect the *facilities* of another *Registered Participant* under clause 5.7.1(a) must give that other *Registered Participant* at least 2 *business days* notice of its intention to carry out an inspection.
- (c) A notice given under clause 5.7.1(b) must include the following information:
 - (1) the name of the *representative* who will be conducting the inspection on behalf of the *Registered Participant*;
 - (2) the time when the inspection will commence and the expected time when the inspection will conclude; and
 - (3) the nature of the suspected non-compliance with the *Rules*.
- (d) Neither a *Registered Participant* nor *AEMO* may carry out an inspection under this rule 5.7 within 6 *months* of any previous inspection except for the purpose of verifying the performance of corrective action claimed to have been carried out in respect of a non-conformance observed and documented on the previous inspection or (in the case of *AEMO*) for the purpose of reviewing an operating incident in accordance with clause 4.8.15.
- (e) At any time when the *representative* of a *Registered Participant* is in another *Registered Participant's facility*, that *representative* must:
 - (1) cause no damage to the *facility*;
 - (2) only interfere with the operation of the *facility* to the extent reasonably necessary and approved by the relevant *Registered Participant* (such approval not to be unreasonably withheld or delayed); and
 - (3) observe “permit to test” access to sites and clearance protocols of the operator of the *facility*, provided that these are not used by the operator of the *facility* solely to delay the granting of access to site and inspection.
- (f) Any *representative* of a *Registered Participant* conducting an inspection under this clause 5.7.1 must be appropriately qualified to perform the relevant inspection.
- (g) The costs of inspections under this clause 5.7.1 must be borne by the *Registered Participant* requesting the inspection.
- (h) *AEMO* or any of its *representatives* may, in accordance with this rule 5.7, inspect a *facility* of a *Registered Participant* and the operation and maintenance of that *facility* in order to:

- (1) assess compliance by the relevant *Registered Participant* with its operational obligations under Chapter 3 or 4, or an *ancillary services agreement*;
 - (2) investigate any possible past or potential threat to *power system security*; or
 - (3) conduct any periodic familiarisation or training associated with the operational requirements of the *facility*.
- (i) Any inspection under clause 5.7.1(a) or (h) must only be for so long as is reasonably necessary.
 - (j) Any equipment or goods installed or left on land or in premises of a *Registered Participant* after an inspection conducted under clause 5.7.1 do not become the property of the relevant *Registered Participant* (notwithstanding that they may be annexed or affixed to the relevant land or premises).
 - (k) In respect of any equipment or goods left on land or premises of a *Registered Participant* during or after an inspection, a *Registered Participant*:
 - (1) must not use any such equipment or goods for a purpose other than as contemplated in the *Rules* without the prior written approval of the owner of the equipment or goods;
 - (2) must allow the owner of any such equipment or goods to remove any such equipment or goods in whole or in part at a time agreed with the relevant *Registered Participant*, such agreement not to be unreasonably withheld or delayed; and
 - (3) must not create or cause to be created any mortgage, charge or lien over any such equipment or goods.
 - (l) A *Registered Participant* (in the case of an inspection carried out under clause 5.7.1(a)) or *AEMO* (in the case of an inspection carried out under clause 5.7.1(h)) must provide the results of that inspection to the *Registered Participant* whose *facilities* have been inspected, any other *Registered Participant* which is likely to be materially affected by the results of the test or inspection and *AEMO* (in the case of an inspection carried out under clause 5.7.1(a)).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

5.7.2 Right of testing

- (a) A *Registered Participant*, who has reasonable grounds to believe that equipment owned or operated by a *Registered Participant* with whom it has

a *connection agreement* (which equipment is associated with the *connection agreement*) may not comply with the *Rules* or the *connection agreement*, may request testing of the relevant equipment by giving notice in writing to the other *Registered Participant*.

- (b) If a notice is given under clause 5.7.2(a) the relevant test is to be conducted at a time agreed by *AEMO*.
- (c) The *Registered Participant* who receives a notice under clause 5.7.2(a) must co-operate in relation to conducting tests requested under clause 5.7.2(a).
- (d) The cost of tests requested under clause 5.7.2(a) must be borne by the *Registered Participant* requesting the test, unless the equipment is determined by the tests not to comply with the relevant *connection agreement* and the *Rules*, in which case all reasonable costs of such tests must be borne by the owner of that equipment.
- (e) Tests conducted in respect of a *connection point* under clause 5.7.2 must be conducted using test procedures agreed between the relevant *Registered Participants*, which agreement is not to be unreasonably withheld or delayed.
- (f) Tests under clause 5.7.2 must be conducted only by persons with the relevant skills and experience.
- (g) A *Transmission Network Service Provider* must give *AEMO* adequate prior notice of intention to conduct a test in respect of a *connection point* to that *Network Service Provider's network*.
- (h) The *Registered Participant* who requests a test under this clause 5.7.2 may appoint a *representative* to witness a test and the relevant *Registered Participant* must permit a *representative* appointed under this clause 5.7.2(h) to be present while the test is being conducted.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (i) A *Registered Participant* who conducts a test must submit a report to the *Registered Participant* who requested the relevant test, *AEMO* and to any other *Registered Participant* which is likely to be materially affected by the results of the test, within a reasonable period after the completion of the test and the report is to outline relevant details of the tests conducted, including but not limited to the results of those tests.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (j) A *Network Service Provider* may attach test equipment or *monitoring equipment* to *plant* owned by a *Registered Participant* or require a *Registered Participant* to attach such test equipment or *monitoring equipment*, subject to the provisions of clause 5.7.1 regarding entry and inspection.
- (k) In carrying out monitoring under clause 5.7.2(j) the *Network Service Provider* must not cause the performance of the monitored *plant* to be *constrained* in any way.

5.7.3 Tests to demonstrate compliance with connection requirements for generators

- (a) Each *Generator* must, in accordance with the time frames specified in rule 4.15, provide evidence to any relevant *Network Service Provider* with which that *Generator* has a *connection agreement* and to AEMO, that its *generating system* complies with:
 - (1) the applicable technical requirements of clause S5.2.5; and
 - (2) the relevant *connection agreement* including the *performance standards*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) **[Deleted]**
- (c) If a test required by clause 5.7.3(a) demonstrates that a *generating system* is not complying with one or more technical requirements of clause S5.2.5 or the relevant *connection agreement* or one or more of the *performance standards* then the *Generator* must:
 - (1) promptly notify the relevant *Network Service Provider* and AEMO of that fact; and
 - (2) promptly notify the *Network Service Provider* and AEMO of the remedial steps it proposes to take and the timetable for such remedial work; and
 - (3) diligently undertake such remedial work and report at monthly intervals to the *Network Service Provider* on progress in implementing the remedial action; and
 - (4) conduct further tests or monitoring on completion of the remedial work to confirm compliance with the relevant technical requirements or *performance standards* (as the case may be).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) If *AEMO* reasonably believes that a *generating system* is not complying with one or more applicable *performance standards* or one or more applicable technical requirements of clause S5.2.5 or the relevant *connection agreement*, *AEMO* may instruct the *Generator* to conduct tests within 25 *business days* to demonstrate that the relevant *generating system* complies with those *performance standards* or technical requirements.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (e) If the tests undertaken in accordance with paragraph (d) provide evidence that the *generating system* continues to comply with those requirements *AEMO* must reimburse the *Generator* for the reasonable expenses incurred as a direct result of conducting the tests.
- (f) If *AEMO*:
 - (1) is satisfied that:
 - (i) a *generating system* is not complying with the relevant *performance standards* for that system in respect of one or more of the technical requirements contained in S5.2.5, S5.2.6, S5.2.7 or S5.2.8 and the relevant *connection agreement*; or
 - (ii) a *generating system*'s performance is not adequately represented by the applicable analytical model provided under clause 5.7.6(h) or clause S5.2.4; and
 - (2) holds the reasonable opinion that the performance of the *generating system*, or inadequacy of the applicable analytical model of the *generating system* is or will impede *AEMO*'s ability to carry out its role in relation to *power system security*,

AEMO may direct the relevant *Generator* to operate the *generating system* at a particular *generated* output or in a particular mode until the relevant *Generator* submits evidence reasonably satisfactory to *AEMO* that the *generating system* is complying with the relevant *performance standard* and performing substantially in accordance with the applicable analytical model.

- (g) Each *Generator* must maintain records for 7 years for each of its *generating systems* and *power stations* setting out details of the results of all technical performance and monitoring conducted under this clause 5.7.3 and make these records available to *AEMO* on request.

5.7.3A Tests to demonstrate compliance with system strength remediation schemes

- (a) Each *Registered Participant* required under a *connection agreement* to implement a *system strength remediation scheme* by means of *facilities* owned, operated or controlled by the *Registered Participant* must at the request of *AEMO* or the relevant *Network Service Provider* made not more than once in a calendar year provide evidence that those *facilities* satisfy the requirements of the *system strength remediation scheme* set out in the *connection agreement*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) If at any time the *facilities* do not satisfy the requirements of the *system strength remediation scheme* set out in the *connection agreement*, the *Registered Participant* must:
- (1) promptly notify the relevant *Network Service Provider* and *AEMO* of that fact;
 - (2) promptly notify the *Network Service Provider* and *AEMO* of the remedial steps it proposes to take and the timetable for such remedial work;
 - (3) diligently undertake such remedial work and report at monthly intervals to the *Network Service Provider* on progress in implementing the remedial action; and
 - (4) conduct further tests or monitoring on completion of the remedial work to confirm compliance with the requirements of the *system strength remediation scheme*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) If *AEMO* reasonably believes the requirements of a *system strength remediation scheme* are not being complied with, *AEMO* may instruct the *Registered Participant* to conduct tests within 25 *business days* to demonstrate that the requirements are being met.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) If the tests undertaken in accordance with paragraph (c) provide evidence that the requirements of a *system strength remediation scheme* are being

complied with, *AEMO* must reimburse the *Registered Participant* for the reasonable expenses incurred as a direct result of conducting the tests.

(e) If *AEMO*:

- (1) is satisfied that the requirements of a *system strength remediation scheme* are not being complied with; and
- (2) holds the reasonable opinion that the failure is impeding or will impede *AEMO*'s ability to carry out its role in relation to *power system security*,

AEMO may direct the relevant *Registered Participant* to operate its *facility* at a particular output or *power transfer capability* or in a particular mode until the relevant *Registered Participant* submits evidence reasonably satisfactory to *AEMO* that the requirements of the *system strength remediation scheme* are being complied with.

- (f) Each *Registered Participant* referred to in paragraph (a) must maintain records for 7 years for each of its relevant *facilities* setting out details of the results of monitoring and testing conducted under this clause 5.7.3A and make these records available to *AEMO* on request.

5.7.4 Routine testing of protection equipment

- (a) A *Registered Participant* must co-operate with any relevant *Network Service Provider* to test the operation of equipment forming part of a *protection system* relating to a *connection point* at which that *Registered Participant* is connected to a *network* and the *Registered Participant* must conduct these tests:
- (1) prior to the *plant* at the relevant *connection point* being placed in service; and
 - (2) at intervals specified in the *connection agreement* or in accordance with an asset management plan agreed between the *Network Service Provider* and the *Registered Participant*.
- (a1) A *Network Service Provider* must institute and maintain a compliance program to ensure that its *facilities* of the following types, to the extent that the proper operation of a *facility* listed in this clause may affect *power system security*, operate reliably and in accordance with their performance requirements under schedule 5.1:
- (1) *protection systems*;
 - (2) *control systems* for maintaining or enhancing *power system* stability;
 - (3) *control systems* for controlling *voltage* or *reactive power*; and
 - (4) *control systems* for *load shedding*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (a2) A compliance program under clause 5.7.4(a1) must:
- (1) include monitoring of the performance of the *facilities*;
 - (2) to the extent reasonably necessary, include provision for periodic testing of the performance of those *facilities* upon which *power system security* depends;
 - (3) provide reasonable assurance of ongoing compliance of the *facilities* with the relevant performance requirements of schedule 5.1; and
 - (4) be in accordance with *good electricity industry practice*.
- (a3) A *Network Service Provider* must immediately notify *AEMO* if it reasonably believes that a *facility* of a type listed in clause 5.7.4(a1) does not comply with, or is likely not to comply with, its performance requirements.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (a4) A notice issued under clause 5.7.4(a3) must:
- (1) identify the *facility* and the requirement with which the *facility* does not comply;
 - (2) give an explanation of the reason why the *facility* failed to comply with its performance requirement;
 - (3) give the date and time when the *facility* failed to comply with its performance requirement;
 - (4) give the date and time when the *facility* is expected to again comply with its performance requirement; and
 - (5) describe the expected impact of the failure on the performance of the *Network Service Provider's transmission system or distribution system*.
- (b) Each *Registered Participant* must bear its own costs of conducting tests under this clause 5.7.4.

5.7.5 Testing by Registered Participants of their own plant requiring changes to normal operation

- (a) A *Registered Participant* proposing to conduct a test on equipment related to a *connection point*, which requires a change to the normal operation of that equipment, must give notice in writing to the relevant *Network Service Provider* of at least 15 *business days* except:
- (1) in an emergency; or
 - (2) where *AEMO* has notified the relevant *Network Service Provider* of the proposed date and time of a test of the *Registered Participant's* equipment to be conducted in accordance with the requirements of the *SRAS Guideline*, under an *ancillary services agreement* between *AEMO* and the *Registered Participant*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) The notice to be provided under clause 5.7.5(a) must include:
- (1) the nature of the proposed test;
 - (2) the estimated start and finish time for the proposed test;
 - (3) the identity of the equipment to be tested;
 - (4) the *power system* conditions required for the conduct of the proposed test;
 - (5) details of any potential adverse consequences of the proposed test on the equipment to be tested;
 - (6) details of any potential adverse consequences of the proposed test on the *power system*; and
 - (7) the name of the person responsible for the co-ordination of the proposed test on behalf of the *Registered Participant*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) The *Network Service Provider* must review the proposed test described in a notice provided under clause 5.7.5(a) to determine whether the test:
- (1) could adversely affect the normal operation of the *power system*;
 - (2) could cause a threat to *power system security*;

- (3) requires the *power system* to be operated in a particular way which differs from the way in which the *power system* is normally operated; or
- (4) could affect the normal *metering of energy* at a *connection point*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) If the *Network Service Provider* determines that the proposed test does fulfil one of the conditions specified in clause 5.7.5(c), then the *Registered Participant* and *Network Service Provider* must seek *AEMO's* approval prior to undertaking the test, which approval must not be unreasonably withheld or delayed.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (e) If, in *AEMO's* reasonable opinion, a test could threaten public safety, damage or threaten to damage equipment or adversely affect the operation of the *power system*, *AEMO* may direct that the proposed test procedure be modified or that the test not be conducted at the time proposed.
- (f) *AEMO* must advise *Network Service Providers* of any test which may have a possible effect on normal *metering of energy* at a *connection point*.
- (g) *AEMO* must advise any other *Registered Participants* who might be adversely affected by a proposed test and consider any reasonable requirements of those *Registered Participants* when approving the proposed test.
- (h) The *Registered Participant* who conducts a test under this clause 5.7.5 must ensure that the person responsible for the co-ordination of a test promptly advises *AEMO* when the test is complete.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (i) If *AEMO* approves a proposed test, *AEMO* must use its reasonable endeavours to ensure that *power system* conditions reasonably required for that test are provided as close as is reasonably practicable to the proposed start time of the test and continue for the proposed duration of the test.
- (j) Within a reasonable period after any such test has been conducted, the *Registered Participant* who has conducted a test under this clause 5.7.5

must provide the *Network Service Provider* with a report in relation to that test including test results where appropriate.

5.7.6 Tests of generating units requiring changes to normal operation

- (a) A *Network Service Provider* may, at intervals of not less than 12 months per *generating system*, require the testing by a *Generator* of any *generating unit connected* to the *network* of that provider in order to determine analytic parameters for modelling purposes or to assess the performance of the relevant *generating unit* or *generating system* for the purposes of a *connection agreement*, and that provider is entitled to witness such tests.
- (b) If *AEMO* reasonably considers that:
 - (1) the analytic parameters for modelling of a *generating unit* or *generating system* are inadequate; or
 - (2) available information, including results from a previous test of a *generating unit* or *generating system*, are inadequate to determine parameters for an applicable model developed in accordance with the *Power System Model Guidelines*, or otherwise agreed with *AEMO* under clause S5.2.4(c)(2),

AEMO may direct a *Network Service Provider* to require a *Generator* to conduct a test under paragraph (a), and *AEMO* may witness such a test.

- (c) Adequate notice of not less than 15 *business days* must be given by the *Network Service Provider* to the *Generator* before the proposed date of a test under paragraph (a).
- (d) The *Network Service Provider* must use its best endeavours to ensure that tests permitted under this clause 5.7.6 are conducted at a time which will minimise the departure from the *commitment* and *dispatch* that are due to take place at that time.
- (e) If not possible beforehand, a *Generator* must conduct a test under this clause 5.7.6 at the next scheduled *outage* of the relevant *generating unit* and in any event within 9 months of the request.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (f) A *Generator* must provide any reasonable assistance requested by the *Network Service Provider* in relation to the conduct of tests.
- (f1) If requested by a *Network Service Provider* who required the test under clause 5.7.6(a), a *Generator* must provide to the *Network Service Provider* any relevant information relating to the *plant* which is the subject of a test carried out under this clause 5.7.6, including model source code provided to *AEMO* under clause S5.2.4(b)(6).

- (g) Tests conducted under this clause 5.7.6 must be conducted in accordance with test procedures agreed between the *Network Service Provider* and the relevant *Generator* and a *Generator* must not unreasonably withhold its agreement to test procedures proposed for this purpose by the *Network Service Provider*.
- (h) A *Generator* must provide the test records obtained from a test under paragraph (a) to the *Network Service Provider*, who must derive the analytical parameters for the applicable model developed in accordance with the *Power System Model Guidelines*, or otherwise agreed with AEMO under clause S5.2.4(c)(2) and provide them and any new or revised model source code to the relevant *Generator*.
- (i) The *Generator*, the *Network Service Provider* and AEMO must each bear its own costs associated with tests conducted under this clause 5.7.6 and no compensation is to be payable for financial losses incurred as a result of these tests or associated activities.

5.7.7 Inter-network power system tests

- (a) For each kind of development or activity described in the first column of chart 1 below, the *Proponent* is as set out in the second column and the *Relevant Transmission Network Service Provider (Relevant TNSP)* is as set out in the third column, respectively, opposite the description of the development or activity.

Chart 1

No.	Kind of development or activity	<i>Proponent</i>	<i>Relevant TNSP</i>
	column 1	column 2	column 3
1.	A new <i>transmission line</i> between two <i>networks</i> , or within a <i>transmission network</i> , that is anticipated to have a <i>material inter-network impact</i> is commissioned.	<i>Network Service Provider</i> in respect of the new <i>transmission line</i> .	<i>Proponent</i> and the <i>Transmission Network Service Provider</i> in respect of any <i>network</i> to which the <i>transmission line</i> is connected.
2.	An existing <i>transmission line</i> between two <i>networks</i> , or within a <i>transmission network</i> , that is anticipated to have a <i>material inter-network impact</i> is <i>augmented</i> or substantially modified.	<i>Network Service Provider</i> in respect of the <i>augmentation</i> or modification of the <i>transmission line</i> .	<i>Proponent</i> and the <i>Transmission Network Service Provider</i> in respect of any <i>network</i> to which the <i>transmission line</i> is connected.
3.	A new <i>generating unit</i> or <i>facility</i> of a <i>Customer</i> or a	<i>Generator</i> in respect of the <i>generating unit</i> and	<i>Transmission Network Service Provider</i> in respect

No.	Kind of development or activity	<i>Proponent</i>	<i>Relevant TNSP</i>
	column 1	column 2	column 3
	<i>network</i> development is commissioned that is anticipated to have a <i>material inter-network impact</i> .	associated <i>connection assets</i> . <i>Customer</i> in respect of the <i>facility</i> and associated <i>connection assets</i> . <i>Network Service Provider</i> in respect of the relevant <i>network</i> .	of any <i>network</i> to which the <i>generating unit, facility</i> or <i>network</i> development is <i>connected</i> and, if a <i>network</i> development, then also the <i>Proponent</i> .
4.	Setting changes are made to any <i>power system</i> stabilisers as a result of a <i>generating unit, facility</i> of a <i>Customer</i> or <i>network</i> development being commissioned, modified or replaced.	<i>Generator</i> in respect of the <i>generating unit</i> . <i>Customer</i> in respect of the <i>facility</i> . <i>Network Service Provider</i> in respect of the relevant <i>network</i> .	<i>Transmission Network Service Provider</i> in respect of any <i>transmission network</i> to which the <i>generating unit, facility</i> or <i>network</i> development is <i>connected</i> .
5.	Setting changes are made to any <i>power system</i> stabilisers as a result of a decision by <i>AEMO</i> , which are not covered by item 4 in this chart.	<i>AEMO</i> .	None.
6.	<i>AEMO</i> determines that a test is required to verify the performance of the <i>power system</i> in light of the results of planning studies or simulations or one or more system incidents.	<i>AEMO</i> .	None.

- (b) A *Registered Participant*, not being a *Transmission Network Service Provider*, determined in accordance with clause 5.7.7(a) to be a *Proponent* for a development or activity detailed in chart 1, may require the *Relevant TNSP* corresponding to that development or activity to undertake on their behalf their obligations as the *Proponent* and, where the *Relevant TNSP* receives a written request to undertake those obligations, the *Relevant TNSP* must do so.

- (c) Where, in this clause 5.7.7, there is a reference to a *Proponent* that reference includes a *Relevant TNSP* required in accordance with clause 5.7.7(b) to undertake the obligations of another *Registered Participant*.
- (d) If a *Relevant TNSP* is required by a *Registered Participant* in respect of a *scheduled generating unit*, a *semi-scheduled generating unit*, a *scheduled load* or a *market network service*, any of which have a *nameplate rating* in excess of 30 MW, to act as a *Proponent* in accordance with clause 5.7.7(b), that *Relevant TNSP* is entitled to recover all reasonable costs incurred from the *Registered Participant* that required the *Relevant TNSP* to act as the *Proponent*.
- (e) A *Registered Participant* wishing to undertake a development or conduct an activity listed in item 1, 2, 3 or 4 of chart 1 must notify *AEMO* not less than 80 *business days* before the *transmission line*, *generating unit*, *facility* or *network* development is planned to be commissioned, modified or replaced, giving details of the development or activity.
- (f) If *AEMO* receives a notice under clause 5.7.7(e), then it must provide a copy of the notice to each *jurisdictional planning representative* and consult with each *jurisdictional planning representative* about the potential impact of the development or activity.
- (g) *AEMO* or the *Relevant TNSP* for a development or activity may notify the *Proponent* of the development or activity that *AEMO* or the *Relevant TNSP* believes an *inter-network test* is required for that development or activity.
- (h) *AEMO* or the *Relevant TNSP* may only give a notice under clause 5.7.7(g) if:
 - (1) *AEMO* or the *Relevant TNSP* considers that the development or activity may have a material impact on the magnitude of the *power transfer capability* of more than one *transmission network* and, in the circumstances, an *inter-network test* is required; or
 - (2) an *inter-network test* is required having regard to guidelines *published* under clause 5.7.7(k) and the surrounding circumstances.
- (i) If the *Relevant TNSP* gives a notice under clause 5.7.7(g), then it must also promptly give a copy of the notice to *AEMO*.
- (j) A *Registered Participant* undertaking a development or activity listed in chart 1 must provide information reasonably requested by *AEMO* or the *Relevant TNSP* for making an assessment under this clause.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (k) *AEMO* may develop, *publish* and amend from time to time, in accordance with the *Rules consultation procedures*, a set of guidelines to assist

Registered Participants to determine when an *inter-network test* may be required.

- (l) *AEMO* and the *Relevant TNSP* must consider any relevant guidelines in determining whether an *inter-network test* is required.
- (m) If *AEMO* or the *Relevant TNSP* gives notice under clause 5.7.7(g), then the *Proponent* must, in consultation with *AEMO*, prepare a draft *test program* for the *inter-network test* and provide it to *AEMO*, each *jurisdictional planning representative* and the *Relevant TNSP* (if the *Relevant TNSP* gave the notice).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (n) However, if *AEMO* determines that an *inter-network test* is required for a reason contemplated in item 5 or 6 of chart 1, then it must prepare a draft *test program* for the *inter-network test* in consultation with the *jurisdictional planning representatives* and provide that draft *test program* to each *jurisdictional planning representative*.
- (o) If a *jurisdictional planning representative* considers that any changes should be made to a draft *test program*, the *jurisdictional planning representative* must, within 10 *business days* after being provided with the draft *test program*, make a recommendation to *AEMO* that identifies the changes it proposes should be made to the draft *test program*.
- (p) *AEMO* must:
 - (1) *publish* a copy of the draft *test program* and any relevant changes recommended by any *jurisdictional planning representative* and invite interested *Registered Participants* to make written submissions; and
 - (2) only accept as valid submissions received not later than the closing date for submissions specified in the notice *publishing* the copy of the draft *test program* (not to be less than 14 days after the date of *publication*); and
 - (3) provide the *jurisdictional planning representatives* with copies of all valid submissions and seek any further recommendations they may have.
- (q) *AEMO* must determine and *publish* in accordance with clause 3.13.13 the *test program* for an *inter-network test* after taking into account the recommendations of the *jurisdictional planning representatives* and any valid submissions received from *Registered Participants*.
- (r) In determining the *test program*, *AEMO* must so far as practicable have regard to the following principles:

- (1) *power system security* must be maintained in accordance with Chapter 4; and
 - (2) the variation from the *central dispatch* outcomes that would otherwise occur if there were no *inter-network test* should be minimised; and
 - (3) the duration of the tests should be as short as possible consistently with test requirements and *power system security*; and
 - (4) the test facilitation costs to be borne by the *Proponent* under paragraph (aa) should be kept to the minimum consistent with this paragraph.
- (s) **[Deleted]**
- (t) An *inter-regional test* must not be conducted within 20 *business days* after *AEMO publishes the test program* for the *inter-network test* determined by *AEMO* under clause 5.7.7(r).
- (u) The *Proponent* in respect of an *inter-network test* must seek to enter into agreements with other *Registered Participants* to provide the test facilitation services identified in the *test program* in order to ensure that the *power system* conditions required by the *test program* are achieved.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (v) If the *Proponent* approaches another *Registered Participant* seeking to enter into an agreement under clause 5.7.7(u) then the *Proponent* and the *Registered Participant* must negotiate in good faith concerning the provision of the relevant test facilitation service.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (w) If:
- (1) a *Proponent* approaches another *Registered Participant* as described in clause 5.7.7(v); and
 - (2) the *Proponent* and the other *Registered Participant* have not agreed the terms and conditions to be included in the agreement under which the *Registered Participant* will provide the test facilitation service requested within 15 *business days* of the approach,

then those terms and conditions must be determined in accordance with rule 8.2 and a dispute of this type is deemed to fall within clause 8.2.5(c)(2).

- (x) If the dispute concerns the price which the *Proponent* is to pay for a test facilitation service, then it must be resolved applying the following principles:
 - (1) the other *Registered Participant* is entitled to recover the costs it incurs, and a reasonable rate of return on the capital it employs, in providing the test facilitation service, determined taking into account the additional costs associated with:
 - (i) maintaining the equipment necessary to provide the test facilitation service;
 - (ii) any labour required to operate and maintain the equipment used to provide the test facilitation service; and
 - (iii) any materials consumed when the test facilitation service is utilised; and
 - (2) the other *Registered Participant* is entitled to be compensated for any commercial opportunities foregone by providing the test facilitation service.
- (y) When the terms and conditions are determined in accordance with rule 8.2 under this clause 5.7.7, then the *Proponent* and the other *Registered Participant* must enter into an agreement setting out those terms and conditions.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (z) If *AEMO* is not the *Proponent* in respect of an *inter-network test*, the *Proponent* must:
 - (1) prior to the scheduled date of the *inter-network test*, confirm to *AEMO* that the test facilitation services identified in the *test program* will be available to be utilised, who will be providing them and the operational arrangements for utilising them;
 - (2) provide sufficient information to enable *AEMO* to utilise the test facilitation services in conducting the *inter-network test*; and
 - (3) respond promptly to any queries *AEMO* raises with the *Proponent* concerning the availability of the test facilitation services and *AEMO's* ability to utilise those services in conducting the *inter-network tests*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (aa) The *Proponent* in respect of an *inter-network test* must bear all of the following costs associated with that *inter-network test*:
- (1) any amounts payable under an agreement under which test facilitation services are provided;
 - (2) the *Proponent's* own costs associated with the *inter-network test* and in negotiating and administering the agreements referred to in clause 5.7.7(u); and
 - (3) if the *Proponent* is not *AEMO* and the amount of *settlements residue* on any *directional interconnector* for a *trading interval* during which there is an impact on *central dispatch* outcomes as a result of the *inter-network test* is negative, then the *Proponent* must enter into an agreement with *AEMO* to pay that amount to *AEMO*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (ab) If the *Proponent* is *AEMO* and the amount of *settlements residue* on any *directional interconnector* for a *trading interval* during which there is an impact on *central dispatch* outcomes as a result of the *inter-network test* is negative, then *AEMO* must adjust that residue to be zero and must recover the amount as provided for in clause 2.11.3(b)(2A).
- (ac) *AEMO* must establish operational conditions to achieve the particular *power transfer* levels for each stage of the *inter-network test* as contemplated by the *test program*:
- (1) utilizing where practicable and economic to do so the test facilitation services identified in the *test program*; and
 - (2) otherwise, by applying to the minimum extent necessary to fulfil the test requirements, *inter-network testing constraints*.
- (ad) An *inter-network test* must be coordinated by an officer nominated by *AEMO* who has authority to stop the test or any part of it or vary the procedure within pre-approved guidelines determined by *AEMO* if that officer considers any of these actions to be reasonably necessary.
- (ae) Each *Registered Participant* must:
- (1) cooperate with *AEMO* in planning, preparing for and conducting *inter-regional tests*;
 - (2) act in good faith in respect of, and not unreasonably delay, an *inter-network test*; and
 - (3) comply with any instructions given to it by *AEMO* under clause 5.7.7(af).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (af) *AEMO* may utilise test facilitation services under agreements entered into by the *Proponent* under this clause 5.7.7 during an *inter-network test* in order to achieve operational conditions on the *power system* which are reasonably required to achieve valid test results.

5.7.8 Contestable IUSA components

- (a) Before commissioning, the *Primary Transmission Network Service Provider* must ensure that *contestable IUSA components* are built to the standards specified in the functional specification provided under clause 5.3.3(b)(9) and the *Connection Applicant* for the *identified user shared asset* must provide access to the *Primary Transmission Network Service Provider* to make inspections, and agree to such tests, as is reasonably required for that purpose.
- (b) The *Connection Applicant* for the *identified user shared asset* must pay the reasonable costs of inspections and tests which are reasonably required by the *Transmission Network Service Provider* under paragraph (a).

5.8 Commissioning

5.8.1 Requirement to inspect and test equipment

- (a) A *Registered Participant* must ensure that any of its new or replacement equipment is inspected and tested to demonstrate that it complies with relevant *Australian Standards*, the *Rules* and any relevant *connection agreement* prior to or within an agreed time after being *connected* to a *transmission network* or *distribution network*, and the relevant *Network Service Provider* is entitled to witness such inspections and tests.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) The *Registered Participant* must produce test certificates on demand by the relevant *Network Service Provider* showing that the equipment has passed the tests and complies with the standards set out in clause 5.8.1(a) before *connection* to a *network*, or within an agreed time thereafter.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

5.8.2 Co-ordination during commissioning

A *Registered Participant* seeking to connect to a *network* must co-operate with the relevant *Network Service Provider(s)* and *AEMO* to develop procedures to ensure that the commissioning of the *connection* and *connected facility* is carried out in a manner that:

- (a) does not adversely affect other *Registered Participants* or affect *power system security* or quality of *supply* of the *power system*; and
- (b) minimises the threat of damage to any other *Registered Participant's* equipment.

5.8.3 Control and protection settings for equipment

- (a) Not less than 3 months prior to the proposed commencement of commissioning by a *Registered Participant* of any new or replacement equipment that could reasonably be expected to alter performance of the *power system* (other than replacement by identical equipment), the *Registered Participant* must submit to the relevant *Network Service Provider* sufficient design information including proposed parameter settings to allow critical assessment including analytical modelling of the effect of the new or replacement equipment on the performance of the *power system*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) The *Network Service Provider* must:
 - (1) consult with other *Registered Participants* and *AEMO* as appropriate; and
 - (2) within 20 *business days* of receipt of the design information under clause 5.8.3(a), notify the *Registered Participant* and *AEMO* of any comments on the proposed parameter settings for the new or replacement equipment.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) If the *Network Service Provider's* comments include alternative parameter settings for the new or replacement equipment, then the *Registered Participant* must notify the *Network Service Provider* that it either accepts or disagrees with the alternative parameter settings suggested by the *Network Service Provider*.

- (d) The *Network Service Provider* and the *Registered Participant* must negotiate parameter settings that are acceptable to them both and if there is any unresolved disagreement between them, the matter must be referred to *AEMO* whose decision must be given within 20 *business days* of referral of the dispute and, once a decision is given, it is to be final.
- (e) The *Registered Participant* and the *Network Service Provider* must co-operate with each other to ensure that adequate grading of protection is achieved so that faults within the *Registered Participant's facility* are cleared without adverse effects on the *power system*.

5.8.4 Commissioning program

- (a) Prior to the proposed commencement of commissioning by a *Registered Participant* of any new or replacement equipment that could reasonably be expected to alter performance of the *power system*, the *Registered Participant* must advise the relevant *Network Service Provider* and *AEMO* in writing of the commissioning program including test procedures and proposed test equipment to be used in the commissioning.
- (b) Notice under clause 5.8.4(a) must be given not less than 3 months prior to commencement of commissioning for a *connection* to a *transmission network* and not less than 1 month prior to commencement of commissioning for a *connection* to a *distribution network*.
- (c) The relevant *Network Service Provider* and *AEMO* must, within 15 *business days* of receipt of such advice under clause 5.8.4(a), notify the *Registered Participant* either that they:
 - (1) agree with the proposed commissioning program; or
 - (2) require changes to it in the interest of maintaining *power system security*, safety or quality of *supply*.
- (d) If the relevant *Network Service Provider* or *AEMO* require changes to the proposed commissioning program, then the parties must co-operate to reach agreement and finalise the commissioning program within a reasonable period.
- (e) A *Registered Participant* must not commence the commissioning until the commissioning program has been finalised and the relevant *Network Service Provider* and *AEMO* must not unreasonably delay finalising a commissioning program.

5.8.5 Commissioning tests

- (a) The relevant *Network Service Provider* and/or *AEMO* has the right to witness commissioning tests relating to new or replacement equipment that could reasonably be expected to alter performance of the *power system* or the accurate *metering* of *energy*.

- (b) The relevant *Network Service Provider* must, within a reasonable period of receiving advice of commissioning tests, notify the *Registered Participant* whose new or replacement equipment is to be tested under this clause 5.8.5 whether or not it:
 - (1) wishes to witness the commissioning tests; and
 - (2) agrees with the proposed commissioning times.
 - (c) A *Registered Participant* whose new or replacement equipment is tested under this clause 5.8.5 must submit to the relevant *Network Service Provider* the commissioning test results demonstrating that a new or replacement item of equipment complies with the *Rules* or the relevant *connection agreement* or both to the satisfaction of the relevant *Network Service Provider*.
- Note**
- This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)
- (d) If the commissioning tests conducted in relation to a new or replacement item of equipment demonstrates non-compliance with one or more requirements of the *Rules* or the relevant *connection agreement* then the *Registered Participant* whose new or replacement equipment was tested under this clause 5.8.5 must promptly meet with the *Network Service Provider* to agree on a process aimed at achievement of compliance of the relevant item with the *Rules*.
 - (e) On request by a *Network Service Provider*, *AEMO* may direct that the commissioning and subsequent *connection* of the *Registered Participant's* equipment must not proceed if the relevant equipment does not comply with the requirements described in clause 5.8.1(a).

5.9 Disconnection and Reconnection

5.9.1 Voluntary disconnection

- (a) Unless agreed otherwise and specified in a *connection agreement*, a *Registered Participant* must give to the relevant *Network Service Provider* notice in writing of its intention to permanently *disconnect* a *facility* from a *connection point*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) A *Registered Participant* is entitled, subject to the terms of the relevant *connection agreement*, to require voluntary permanent *disconnection* of its equipment from a *network* in which case appropriate operating procedures

necessary to ensure that the *disconnection* will not threaten *power system security* must be implemented in accordance with clause 5.9.2.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) The *Registered Participant* must pay all costs directly attributable to the voluntary *disconnection* and *decommissioning*.

5.9.2 Decommissioning procedures

- (a) In the event that a *Registered Participant's facility* is to be permanently *disconnected* from a *network*, whether in accordance with clause 5.9.1 or otherwise, the *Network Service Provider* and the *Registered Participant* must, prior to such *disconnection* occurring, follow agreed procedures for *disconnection*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) The *Network Service Provider* must notify *AEMO* and any *Registered Participants* with whom it has a *connection agreement* if it believes, in its reasonable opinion, the terms and conditions of such a *connection agreement* will be affected by procedures for *disconnection* or proposed procedures agreed with any other *Registered Participant*. The parties must negotiate any amendments to the procedures for *disconnection* or the *connection agreement* that may be required.
- (c) Any *disconnection* procedures agreed to or determined under clause 5.9.2(a) must be followed by all relevant *Network Service Providers* and *Registered Participants*.

5.9.3 Involuntary disconnection

- (a) *AEMO* may direct a *Network Service Provider* to, or a *Network Service Provider* may (either on its own initiative or in accordance with a direction from *AEMO*), *disconnect* a *Registered Participant's facilities* from a *network*, or a *Registered Participant's market loads*, in the following circumstances:
 - (1) pursuant to a direction for a disconnection made by a court under:
 - (a) section 62 or 63 of the *National Electricity Law*;
 - (b) section 44AAG of the *Competition and Consumer Act 2010* (Cth); or

- (c) section 44AAGA of the *Competition and Consumer Act 2010* (Cth).
 - (2) during an emergency in accordance with clause 5.9.5;
 - (3) in accordance with the *National Electricity Law*; or
 - (4) in accordance with the provisions of the *Registered Participant's connection agreement*.
- (b) In all cases of *disconnection* by a *Network Service Provider* at AEMO's direction during an emergency in accordance with clause 5.9.5, AEMO must undertake a review under clause 4.8.15 and AEMO must then provide a report to the *Registered Participant*, the AEMC and the AER advising of the circumstances requiring such action.
- (c) A *Network Service Provider* that has received a direction from AEMO under this clause 5.9.3 must comply with that direction promptly

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) A *Registered Participant's facilities* or *market loads* may be *disconnected* from a *network* by automatic operation of an *emergency frequency control scheme*.

5.9.4 Direction to disconnect

- (a) Where a *disconnection* is made pursuant to clause 5.9.3(a)(1), neither AEMO nor the relevant *Network Service Provider* is liable in any way for any loss or damage suffered or incurred by the *Registered Participant* by reason of the *disconnection* and neither AEMO nor the relevant *Network Service Provider* is obliged for the duration of the *disconnection* to fulfil any agreement to convey electricity to or from the *Registered Participant's facility*.
- (b) A *Registered Participant* must not bring proceedings against AEMO or a *Network Service Provider* to seek to recover any amount for any loss or damage described in clause 5.9.4(a).
- (c) *Transmission service* charges and *distribution service* charges must be paid by a *Registered Participant* whose *facilities* have been *disconnected* under clause 5.9.3 as if any *disconnection* had not occurred.
- (d) A *Network Service Provider* that has received a direction from AEMO to *disconnect* a *Registered Participant's facilities* in the circumstances described in clause 5.9.3(a)(1) must comply with that direction promptly.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

5.9.4A Notification of disconnection

If the AER applies to a court for a direction, under section 62 or 63 of the *National Electricity Law* or pursuant to regulations made under section 44AAG of the *Competition and Consumer Act 2010* (Cth), that a *Registered Participant's* market loads be disconnected, the AER must promptly notify AEMO and the participating jurisdictions which the AER considers may be affected.

5.9.5 Disconnection during an emergency

- (a) Where AEMO may direct a *Network Service Provider* to disconnect a *Registered Participant's* facilities during an emergency under the Rules or otherwise, then AEMO may:
 - (1) require the relevant *Registered Participant* to reduce the power transfer at the proposed point of disconnection to zero in an orderly manner and then direct a *Network Service Provider* to disconnect the *Registered Participant's* facility by automatic or manual means; or
 - (2) direct a *Network Service Provider* to immediately disconnect the *Registered Participant's* facilities by automatic or manual means where, in AEMO's reasonable opinion, it is not appropriate to follow the procedure set out in clause 5.9.5(a)(1) because action is urgently required as a result of a threat to safety of persons, hazard to equipment or a threat to power system security.
- (b) A *Network Service Provider* that has received a direction from AEMO under this clause 5.9.5 must comply with that direction promptly.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

5.9.6 Obligation to reconnect

- (a) Either AEMO (by directing the *Network Service Provider*) or the relevant *Network Service Provider* (either on its own initiative or in accordance with a direction from AEMO) must reconnect a *Registered Participant's* facilities to a transmission network or distribution network at a reasonable cost to the *Registered Participant* as soon as practicable if:
 - (1) AEMO is reasonably satisfied that there no longer exists an emergency due to which the *Registered Participant's* facilities were disconnected under clause 5.9.5;

- (2) *AEMO* is reasonably satisfied that there no longer exists a reason for the *disconnection* under the *National Electricity Law* or the *Registered Participant's connection agreement*;
- (3) one of the following occurs:
 - (i) a breach of the *Rules* giving rise to the *disconnection* has been remedied;
 - (ii) where the breach is not capable of remedy, compensation has been agreed and paid by the *Registered Participant* to the affected parties or, failing agreement, the amount of compensation payable has been determined in accordance with the dispute resolution procedure in rule 8.2 and that amount has been paid;
 - (iii) where the breach is not capable of remedy and the amount of compensation has not been agreed or determined, assurances for the payment of reasonable compensation have been given to the satisfaction of *AEMO*, the *Network Service Provider* and the parties affected; or
 - (iv) the *Registered Participant* has taken all necessary steps to prevent the re-occurrence of the breach and has delivered binding undertakings to *AEMO* or the *Network Service Provider* that the breach will not re-occur.
- (4) *AEMO* is reasonably satisfied that there no longer exists the *power system conditions* due to which the *Registered Participant's facilities* or *loads* were *disconnected* by operation of an *emergency frequency control scheme*.
- (b) In carrying out its obligations under clause 5.9.6(a), *AEMO* must, to the extent practicable, arrange for the implementation of an equitable sharing of the reconnection of *facilities* across *interconnected regions* up to the *power transfer capability* of the *network* and, in performing these obligations within a *region*, both *AEMO* and the relevant *Network Service Provider* must, to the extent practicable, give priority to reconnection of a *region's sensitive loads*.
- (c) A *Network Service Provider* that has received a direction from *AEMO* under this clause 5.9.6 must comply with that direction promptly.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

Part D Network Planning and Expansion

Note:

Parts B and C will be inserted by Schedule 2 of the National Electricity Amendment (Transmission Connection and Planning Arrangements) Rule 2017 No. 4 which commences on 1 July 2018.

5.10 Network development generally

5.10.1 Content of Part D

- (a) Clause 5.10.2 sets out local definitions used in Part D.
- (b) Clause 5.11.1 sets out obligations regarding forecasts for connection points to the *transmission network*.
- (c) Clause 5.11.2 sets out the obligations of *Network Service Providers* relating to the identification of network limitations.
- (d) Clause 5.12 sets out planning and reporting obligations for *Transmission Network Service Providers*.
- (e) Clause 5.13 sets out planning and reporting obligations for *Distribution Network Service Providers*.
- (e1) Clause 5.13A sets out the obligations to provide distribution zone substation information.
- (f) Clause 5.14 sets out joint planning obligations of *Network Service Providers*.
- (f1) Rule 5.14B relates to guidelines for *Transmission Annual Planning Reports*.
- (g) Clause 5.15 relates to regulatory investment tests generally.
- (h) Clause 5.16 relates to the *regulatory investment test for transmission*.
- (i) Clause 5.17 relates the *regulatory investment test for distribution*.
- (j) Clause 5.18 relates to the construction of *funded augmentations*.
- (j1) Rule 5.18A sets out the obligations of *Transmission Network Service Providers* in relation to a register of large generator connections.
- (j2) Rule 5.18B sets out obligations of *Distribution Network Service Providers* in relation to completed embedded generation projects.

Note:

Rule 5.18B commences operation on 1 July 2018 when clause 5.4.5 is renumbered as rule 5.18B under the National Electricity Amendment (Transmission Connection and Planning Arrangements) Rule 2017 No. 4

- (k) Clause 5.19 relates to Scale Efficient Network Extensions.
- (l) Clause 5.20 relates to *AEMO's* National Transmission Planning responsibilities.
- (m) Clause 5.20A relates to *power system frequency* management planning.
- (m1) Clause 5.20B sets out the process for identifying and providing the *inertia requirements* for *inertia sub-networks*.
- (m2) Clause 5.20C sets out the process for identifying and providing the *system strength requirements* for each *region*.
- (n) Clause 5.21 sets out *AEMO's* obligations to *publish* information and guidelines and provide advice regarding network development.
- (o) Clause 5.22 relates to the *AEMC's last resort planning powers*.

5.10.2 Definitions

In this Part D and schedules 5.8, 5.9 and 5.4A:

asset management means the development and implementation of plans and processes, encompassing management, financial, consumer, engineering, information technology and other business inputs to ensure assets achieve the expected level of performance and minimise costs to consumers over the expected life cycle of the assets.

cost threshold means a cost threshold specified in clause 5.15.3(b) or 5.15.3(d) (as relevant).

cost threshold determination means a final determination under clause 5.15.3(i).

cost threshold review means a review conducted under clause 5.15.3(e).

credible option has the meaning given to it in clause 5.15.2(a).

demand side engagement document means the document *published* by the *Distribution Network Service Provider* under clause 5.13.1(g).

demand side engagement register means a facility by which a person can register with a *Distribution Network Service Provider* their interest in being notified of developments relating to *distribution network* planning and expansion.

demand side engagement strategy means the strategy developed by a *Distribution Network Service Provider* under clause 5.13.1(e) and described in its demand side engagement document.

de-rate means, in respect of a *Network Service Provider*, a reduction in the *network capability* of a *network element* in the *network* of that *Network Service Provider*.

design fault level means the maximum level of fault current that a *facility* can sustain while maintaining operation at an acceptable *performance standard*.

dispute notice has the meaning given in clause 5.16.5(c)(1) and 5.17.5(c)(1).

disputing party has the meaning given in clause 5.16.5(c) and 5.17.5(c).

distribution asset means the apparatus, equipment and plant, including *distribution lines*, *substations* and sub-transmission lines, of a *distribution system*.

draft project assessment report means the report prepared under clause 5.17.4(i).

final project assessment report means the report prepared under clauses 5.17.4(o) or (p).

firm delivery capacity means the maximum allowable output or load of a *network* or *facility* under *single contingency* conditions, including any short term overload capacity having regard to external factors, such as ambient temperature, that may affect the capacity of the *network* or *facility*.

forward planning period means the period determined by the *Distribution Network Service Provider* under clause 5.13.1(a)(1).

joint planning project means a project the purpose of which is to address a need identified under clause 5.14.1(d)(3) or clause 5.14.2(a) or clause 5.14.3(a).

load transfer capacity means meeting the *load* requirements for a *connection point* by the reduction of *load* or group of *loads* at the *connection point* and increasing the *load* or group of *loads* at a different *connection point*.

non-network options report means the report prepared under clause 5.17.4(b).

non-network provider means a person who provides *non-network options*.

normal cyclic rating means the normal level of allowable *load* on a primary distribution feeder having regard to external factors, such as ambient temperature and wind speed, that may affect the capacity of the primary distribution feeder.

potential credible option means an option which a RIT-D proponent or RIT-T proponent (as the case may be) reasonably considers has the potential to be a credible option based on its initial assessment of the *identified need*.

potential transmission project means investment in a transmission asset of a *Transmission Network Service Provider* which:

- (a) is an *augmentation*; and
- (b) has an estimated capital cost in excess of \$5 million (as varied in accordance with a cost threshold determination); and

- (c) the person who identifies the project considers is likely, if constructed, to relieve forecast constraints in respect of *national transmission flow paths* between *regional reference nodes*.

preferred option has the meaning given in clause 5.16.1(b) and 5.17.1(b).

primary distribution feeder means a *distribution line* connecting a sub-transmission asset to either other *distribution lines* that are not sub-transmission lines, or to distribution assets that are not sub-transmission assets.

project assessment conclusions report means the report prepared under clause 5.16.4(t) or (u).

project assessment draft report means the report prepared under clause 5.16.4(j).

project specification consultation report means the report prepared under clause 5.16.4(b).

protected event EFCS investment means investment by a *Transmission Network Service Provider* or a *Distribution Network Service Provider* for the purposes of installing or modifying an *emergency frequency control scheme* applicable in respect of the *Network Service Provider's transmission or distribution system* in accordance with a *protected event EFCS standard*.

reconfiguration investment has the meaning given to it in clause 5.16.3(a)(5).

regulatory investment test for distribution application guidelines means the guidelines developed and *published* by the *AER* in accordance with clause 5.17.2 as in force from time to time, and include amendments made in accordance with clause 5.17.2(e).

regulatory investment test for transmission application guidelines means the guidelines developed and *published* by the *AER* in accordance with clause 5.16.2 as in force from time to time, and include amendments made in accordance with clause 5.16.2(e).

reliability corrective action means investment by a *Transmission Network Service Provider* or a *Distribution Network Service Provider* in respect of its *transmission network* or *distribution network* for the purpose of meeting the service standards linked to the technical requirements of schedule 5.1 or in *applicable regulatory instruments* and which may consist of *network options* or *non-network options*.

RIT-D project means:

- (a) a project the purpose of which is to address an *identified need* identified by a *Distribution Network Service Provider*; or
- (b) a joint planning project that is not a RIT-T project.

RIT-D proponent means the *Network Service Provider* applying the *regulatory investment test for distribution* to a RIT-D project to address an *identified need*. The RIT-D proponent may be:

- (a) if the *identified need* is identified during joint planning under clause 5.14.1(d)(3), a *Distribution Network Service Provider* or a *Transmission Network Service Provider*; or
- (b) in any other case, a *Distribution Network Service Provider*.

RIT-T project means:

- (a) a project the purpose of which is to address an *identified need* identified by a *Transmission Network Service Provider*; or
- (b) a joint planning project if:
 - (1) at least one potential credible option to address the *identified need* includes investment in a *network* or *non-network option* on a *transmission network* (other than *dual function assets*) with an estimated capital cost greater than the cost threshold that applies under clause 5.16.3(a)(2); or
 - (2) the *Network Service Providers* affected by the joint planning project have agreed that the *regulatory investment test for transmission* should be applied to the project.

RIT-T proponent means the *Network Service Provider* applying the *regulatory investment test for transmission* to a RIT-T project to address an *identified need*. The RIT-T proponent may be:

- (a) if the *identified need* is identified during joint planning under clause 5.14.1(d)(3), a *Distribution Network Service Provider* or a *Transmission Network Service Provider*; or
- (b) in any other case (including under clause 5.14.3(a)), a *Transmission Network Service Provider*.

sub-transmission means any part of the *power system* which operates to deliver electricity from the *transmission system* to the *distribution network* and which may form part of the *distribution network*, including zone substations.

sub-transmission line means a power line connecting a sub-transmission asset to either the *transmission system* or another sub-transmission asset.

system limitation means a limitation identified by a *Distribution Network Service Provider* under clause 5.13.1(d)(2).

system limitation template means a template developed and *published* by the AER under clause 5.13.3(a).

TAPR Guidelines means the guidelines *published* by the AER under clause 5.14B.1.

total capacity means the theoretical maximum allowable output or *load* of a *network* or *facility* with all network components and equipment intact.

transmission asset means the apparatus, equipment and plant, including *transmission lines* and *substations* of a *transmission system*.

transmission-distribution connection point means:

- (a) subject to paragraph (b), the agreed point of supply established between a *transmission network* and a *distribution network*;
- (b) in relation to the *declared transmission system* of an *adoptive jurisdiction*, the agreed point of supply between the transmission assets of the *declared transmission system operator* and a *distribution network*.

zone substation means a *substation* for the purpose of connecting a *distribution network* to a sub-transmission network.

5.10.3 Interpretation

The terms *Network Service Provider*, *Transmission Network Service Provider* and *Distribution Network Service Provider* when used in rules 5.11 to 5.17 and schedules 5.8 and 5.9 are not intended to refer to, and are not to be read or construed as referring to, any *Network Service Provider* in its capacity as a *Market Network Service Provider*.

5.11 Forecasts of connection to transmission network and identification of system limitations

5.11.1 Forecasts for connection to transmission network

- (a) The relevant *Network Service Provider* must give at least 40 *business days* written notice to each relevant *Registered Participant* of the annual date by which the *Registered Participant* must provide the relevant *Network Service Provider* with the short and long term electricity *generation*, *market network service* and *load* forecast information listed in schedule 5.7 in relation to each *connection point* which *connects* the *Registered Participant* to a *transmission network* of that *Network Service Provider* and any other relevant information as reasonably required by the *Network Service Provider*.
- (b) Details of planned future *generating units*, *market network services* and *loads*, being details regarding the proposed commencing date, *active power capability* and *reactive power capability*, *power transfer capability*, operating times/seasons and special operating requirements, must be given by each relevant *Registered Participant* to the relevant *Network Service Provider* on reasonable request.

- (c) Each relevant *Registered Participant* must use reasonable endeavours to provide accurate information under paragraph (a) which must include details of any factors which may impact on *load* forecasts or proposed *facilities* for *generation* or *market network services*.
- (d) If the *Network Service Provider* reasonably believes any forecast information to be inaccurate, the *Network Service Provider* may modify that forecast information and must advise the relevant *Registered Participant* and *AEMO* in writing of this action and the reason for the modification. The *Network Service Provider* is not responsible for any adverse consequences of this action or for failing to modify forecast information under this paragraph (d).

5.11.2 Identification of network limitations

Each *Network Service Provider* must:

- (a) extrapolate the forecasts provided to it by *Registered Participants* for the purpose of planning;
- (b) if the analysis required by paragraph (a) indicates that any relevant technical limits of the *transmission or distribution systems* will be exceeded, either in normal conditions or following the contingencies specified in schedule 5.1, notify any affected *Registered Participants* and *AEMO* of these limitations; and
- (c) notify any affected *Registered Participants* and *AEMO* of the expected time for undertaking proposed corrective action which may consist of:
 - (1) *dual function assets* or an investment in a *transmission network* designed to address limitations in respect of a *distribution network* notified under paragraph (b); and
 - (2) *network options* or *non-network options* or modifications to *connection facilities*, designed to address the limitations notified under paragraph (b).

5.12 Transmission annual planning process

5.12.1 Transmission annual planning review

- (a) Each *Transmission Network Service Provider* must analyse the expected future operation of its *transmission networks* over an appropriate planning period, taking into account the relevant forecast *loads*, any future *generation*, *market network service*, demand side and *transmission* developments and any other relevant data.
- (b) Each *Transmission Network Service Provider* must conduct an annual planning review which must:

- (1) incorporate the forecast *loads* as submitted or modified in accordance with clause 5.11.1; and
 - (2) include a review of the adequacy of existing *connection points* and relevant parts of the *transmission system* and planning proposals for future *connection points*; and
 - (3) take into account the most recent *NTNDP* and *power system frequency risk review*; and
 - (4) consider the potential for *augmentations*, or non-*network* alternatives to *augmentations*, that are likely to provide a net economic benefit to all those who produce, consume and transport electricity in the *market*;
 - (5) consider the condition of *network* assets; and
 - (6) consider the potential for replacements of *network* assets, or non-*network options* to replacements of *network* assets, that are likely to provide a net economic benefit to all those who produce, consume and transport electricity in the *market*.
- (c) The minimum planning period for the purposes of the annual planning review is 10 years for *transmission networks*.

5.12.2 Transmission Annual Planning Report

- (a) Subject to paragraph (b), by 30 June each year all *Transmission Network Service Providers* must *publish* a *Transmission Annual Planning Report* setting out the results of the annual planning review conducted in accordance with clause 5.12.1.
- (b) If a *Network Service Provider* is a *Transmission Network Service Provider* only because it owns, operates or controls *dual function assets* then it may *publish* its *Transmission Annual Planning Report* in the same document and at the same time as its *Distribution Annual Planning Report*.
- (c) The *Transmission Annual Planning Report* must be consistent with the TAPR Guidelines and set out:
 - (1) the forecast *loads* submitted by a *Distribution Network Service Provider* in accordance with clause 5.11.1 or as modified in accordance with clause 5.11.1(d), including at least:
 - (i) a description of the forecasting methodology, sources of input information, and the assumptions applied in respect of the forecast *loads*;
 - (ii) a description of high, most likely and low growth scenarios in respect of the forecast *loads*;

- (iii) an analysis and explanation of any aspects of forecast *loads* provided in the *Transmission Annual Planning Report* that have changed significantly from forecasts provided in the *Transmission Annual Planning Report* from the previous year; and
 - (iv) an analysis and explanation of any aspects of forecast *loads* provided in the *Transmission Annual Planning Report* from the previous year which are significantly different from the actual outcome;
- (1A) for all *network* asset retirements, and for all *network* asset de-ratings that would result in a *network constraint*, that are planned over the minimum planning period specified in clause 5.12.1(c), the following information in sufficient detail relative to the size or significance of the asset:
- (i) a description of the *network* asset, including location;
 - (ii) the reasons, including methodologies and assumptions used by the *Transmission Network Service Provider* for deciding that it is necessary or prudent for the *network* asset to be retired or de-rated, taking into account factors such as the condition of the *network* asset;
 - (iii) the date from which the *Transmission Network Service Provider* proposes that the *network* asset will be retired or de-rated; and
 - (iv) if the date to retire or de-rate the *network* asset has changed since the previous *Transmission Annual Planning Report*, an explanation of why this has occurred;
- (1B) for the purposes of subparagraph (1A), where two or more *network* assets are:
- (i) of the same type;
 - (ii) to be retired or de-rated across more than one location;
 - (iii) to be retired or de-rated in the same calendar year; and
 - (iv) each expected to have a replacement cost less than \$200,000 (as varied by a cost threshold determination),
- those assets can be reported together by setting out in the *Transmission Annual Planning Report*:
- (v) a description of the *network* assets, including a summarised description of their locations;
 - (vi) the reasons, including methodologies and assumptions used by the *Transmission Network Service Provider*, for deciding that it

- is necessary or prudent for the *network* assets to be retired or de-rated, taking into account factors such as the condition of the *network* assets;
- (vii) the date from which the *Transmission Network Service Provider* proposes that the *network* assets will be retired or de-rated; and
 - (viii) if the calendar year to retire or de-rate the *network* assets has changed since the previous *Transmission Annual Planning Report*, an explanation of why this has occurred;
- (2) planning proposals for future *connection points*;
 - (3) a forecast of *constraints* and inability to meet the *network* performance requirements set out in schedule 5.1 or relevant legislation or regulations of a *participating jurisdiction* over 1, 3 and 5 years, including at least:
 - (i) a description of the *constraints* and their causes;
 - (ii) the timing and likelihood of the *constraints*;
 - (iii) a brief discussion of the types of planned future projects that may address the *constraints* over the next 5 years, if such projects are required; and
 - (iv) sufficient information to enable an understanding of the *constraints* and how such forecasts were developed;
 - (4) in respect of information required by subparagraph (3), where an estimated reduction in forecast *load* would defer a forecast *constraint* for a period of 12 months, include:
 - (i) the year and months in which a *constraint* is forecast to occur;
 - (ii) the relevant *connection points* at which the estimated reduction in forecast *load* may occur;
 - (iii) the estimated reduction in forecast *load* in MW needed; and
 - (iv) a statement of whether the *Transmission Network Service Provider* plans to issue a request for proposals for *augmentation*, replacement of *network* assets, or a *non-network option* identified by the annual planning review conducted under clause 5.12.1(b) and if so, the expected date the request will be issued;
 - (5) for all proposed *augmentations* to the *network* and proposed replacements of *network* assets the following information, in sufficient detail relative to the size or significance of the project and the proposed operational date of the project:

- (i) project/asset name and the month and year in which it is proposed that the asset will become operational;
 - (ii) the reason for the actual or potential *constraint*, if any, or inability, if any, to meet the *network* performance requirements set out in schedule 5.1 or relevant legislation or regulations of a *participating jurisdiction*, including *load* forecasts and all assumptions used;
 - (iii) the proposed solution to the *constraint* or inability to meet the *network* performance requirements identified in subparagraph (ii), if any;
 - (iv) total cost of the proposed solution;
 - (v) whether the proposed solution will have a *material inter-network impact*. In assessing whether an *augmentation* to the *network* will have a *material inter-network impact* a *Transmission Network Service Provider* must have regard to the objective set of criteria *published* by AEMO in accordance with clause 5.21 (if any such criteria have been *published* by AEMO); and
 - (vi) other reasonable *network options* and *non-network options* considered to address the actual or potential *constraint* or inability to meet the *network* performance requirements identified in subparagraph (ii), if any. Other reasonable *network* and *non-network options* include, but are not limited to, *interconnectors*, *generation* options, demand side options, *market network service* options and options involving other *transmission* and *distribution networks*;
- (6) the manner in which the proposed *augmentations* and proposed replacements of *network* assets relate to the most recent *NTNDP* and the development strategies for current or potential *national transmission flow paths* that are specified in that *NTNDP*;
- (6A) for proposed new or modified *emergency frequency control schemes*, the manner in which the project relates to the most recent *power system frequency risk review*;
- (7) information on the *Transmission Network Service Provider's* asset management approach, including:
- (i) a summary of any asset management strategy employed by the *Transmission Network Service Provider*;
 - (ii) a summary of any issues that may impact on the system *constraints* identified in the *Transmission Annual Planning Report* that has been identified through carrying out asset management; and

- (iii) information about where further information on the asset management strategy and methodology adopted by the *Transmission Network Service Provider* may be obtained.
 - (8) any information required to be included in a *Transmission Annual Planning Report* under:
 - (i) clause 5.16.3(c) in relation to a *network* investment which is determined to be required to address an urgent and unforeseen *network* issue; or
 - (ii) clauses 5.20B.4(h) and (i) and clauses 5.20C.3(f) and (g) in relation to *network* investment and other activities to provide *inertia network services, inertia support activities* or *system strength services*.
 - (9) emergency controls in place under clause S5.1.8, including the *Network Service Provider's* assessment of the need for new or altered emergency controls under that clause;
 - (10) *facilities* in place under clause S5.1.10;
 - (11) an analysis and explanation of any other aspects of the *Transmission Annual Planning Report* that have changed significantly from the preceding year's *Transmission Annual Planning Report*, including the reasons why the changes have occurred; and
 - (12) the results of joint planning (if any) undertaken with a *Transmission Network Service Provider* under clause 5.14.3 in the preceding year, including a summary of the process and methodology used by the *Transmission Network Service Providers* to undertake joint planning and the outcomes of that joint planning.
- (d) A *declared transmission system operator* for all or part of the *declared shared network* must provide to *AEMO* within a reasonable period of receiving a request, such information as reasonably requested by *AEMO* to enable it to comply with:
- (1) clause 5.12.1(b)(5);
 - (2) clause 5.12.1(b)(6);
 - (3) clause 5.12.2(c)(1A);
 - (4) clauses 5.12.2(c)(4), (5) and (6) as they relate to the proposed replacement of *network* assets; and
 - (5) clause 5.12.2(c)(7).

5.13 Distribution annual planning process

5.13.1 Distribution annual planning review

Scope

- (a) A *Distribution Network Service Provider* must:
 - (1) subject to paragraph (b), determine an appropriate forward planning period for its distribution assets; and
 - (2) analyse the expected future operation of its *network* over the forward planning period in accordance with this clause 5.13.1.
- (b) The minimum forward planning period for the purposes of the *distribution* annual planning review is 5 years.
- (c) The *distribution* annual planning review must include all assets that would be expected to have a material impact on the *Distribution Network Service Provider's network* over the forward planning period.

Requirements

- (d) Each *Distribution Network Service Provider* must, in respect of its *network*:
 - (1) prepare forecasts covering the forward planning period of *maximum demands* for:
 - (i) sub-transmission lines;
 - (ii) zone substations; and
 - (iii) to the extent practicable, primary distribution feeders,having regard to:
 - (iv) the number of customer *connections*;
 - (v) *energy* consumption; and
 - (vi) estimated total output of known *embedded generating units*;
 - (2) identify, based on the outcomes of the forecasts in subparagraph (1), limitations on its *network*, including limitations caused by one or more of the following factors:
 - (i) forecast *load* exceeding total capacity;
 - (ii) the requirement for asset refurbishment or replacement;
 - (iii) the requirement for *power system security* or *reliability* improvement;

- (iv) design fault levels being exceeded;
 - (v) the requirement for *voltage* regulation and other aspects of quality of supply to other *Network Users*; and
 - (vi) the requirement to meet any *regulatory obligation or requirement*;
- (3) identify whether corrective action is required to address any system limitations identified in subparagraph (2) and, if so, identify whether the *Distribution Network Service Provider* is required to:
 - (i) carry out the requirements of the *regulatory investment test for distribution*; and
 - (ii) carry out demand side engagement obligations as required under paragraph (f); and
- (4) take into account any *jurisdictional electricity legislation*.

Demand side engagement obligations

- (e) Each *Distribution Network Service Provider* must develop a strategy for:
 - (1) engaging with non-network providers; and
 - (2) considering *non-network options*.
- (f) A *Distribution Network Service Provider* must engage with non-network providers and consider *non-network options* for addressing system limitations in accordance with its demand side engagement strategy.
- (g) A *Distribution Network Service Provider* must document its demand side engagement strategy in a demand side engagement document which must be *published* by no later than 31 August 2013.
- (h) A *Distribution Network Service Provider* must include the information specified in schedule 5.9 in its demand side engagement document.
- (i) A *Distribution Network Service Provider* must review and *publish* a revised demand side engagement document at least once every three years.
- (j) A *Distribution Network Service Provider* must establish and maintain a facility by which parties can register their interest in being notified of developments relating to *distribution network* planning and expansion. A *Distribution Network Service Provider* must have in place a facility under this paragraph (j) no later than the date of publication of the *Distribution Network Service Provider's* demand side engagement document under paragraph (g).

5.13.2 Distribution Annual Planning Report

- (a) For the purposes of this clause 5.13.2:

DAPR date means for a *Distribution Network Service Provider*:

- (1) the date by which it is required to *publish* a *Distribution Annual Planning Report* under *jurisdictional electricity legislation*; or
- (2) if no such date is specified in *jurisdictional electricity legislation*, 31 December.

- (b) By the DAPR date each year, a *Distribution Network Service Provider* must *publish* the *Distribution Annual Planning Report* setting out the results of the *distribution* annual planning review for the forward planning period.

Note

Under clause 5.12.2(b), if a person is a *Transmission Network Service Provider* only because it owns, operates or controls *dual function assets* then it may *publish* its *Transmission Annual Planning Report* in the same document and at the same time as its *Distribution Annual Planning Report* under this clause 5.13.2.

- (c) A *Distribution Network Service Provider* must include the information specified in schedule 5.8 in its *Distribution Annual Planning Report*.
- (d) Despite paragraph (c), a *Distribution Network Service Provider* is not required to include in its *Distribution Annual Planning Report* information required in relation to transmission-distribution connection points if it is required to do so under *jurisdictional electricity legislation*.
- (e) As soon as practicable after it *publishes* a *Distribution Annual Planning Report* under paragraph (b), a *Distribution Network Service Provider* must *publish* on its website the contact details for a suitably qualified staff member of the *Distribution Network Service Provider* to whom queries on the report may be directed.

5.13.3 Distribution system limitation template

- (a) The *AER* must develop and *publish* a system limitation template in accordance with paragraph (c) and having regard to paragraph (b). The system limitation template must be developed by the *AER* in consultation with *Distribution Network Service Providers* and any persons who have identified themselves to the *AER* as having an interest in the form or contents of the system limitation template.
- (b) The purpose of the system limitation template is to facilitate the publication by *Distribution Network Service Providers* of information on system limitations referred to in their *Distribution Annual Planning Reports* in a useable, consistent, accessible format to assist third parties to propose alternative options to address system limitations.
- (c) The system limitation template must:

- (1) provide a template for the reporting of the following information:
 - (i) the name (or identifier) and location of *substations*, sub-transmission lines, zone substations and, where appropriate, primary feeders, where there is a system limitation or a projected system limitation during the forward planning period that has been identified in a *Distribution Network Service Provider's Distribution Annual Planning Report*;
 - (ii) the estimated timing (months(s) and year) of the system limitation or projected system limitation identified in subparagraph (i);
 - (iii) the *Distribution Network Service Provider's* proposed option to address the system limitation;
 - (iv) the estimated capital or operating cost of the proposed option; and
 - (v) the amount by which peak demand at the location of the system limitation or projected system limitation would need to be reduced in order to defer the proposed solution, and the dollar value to the *Distribution Network Service Provider* of each year of deferral; and
- (2) include a statement that any information provided using the system limitation template must be read in conjunction with the reporting *Distribution Network Service Provider's Distribution Annual Planning Report*.
- (d) At the same time as it *publishes* its *Distribution Annual Planning Report* each year, a *Distribution Network Service Provider* must *publish* a report which contains the information specified in paragraph (c) in the form required by the system limitation template.

5.13A Distribution zone substation information

Definitions

- (a) In this rule:

annual zone substation report means a report containing historical zone substation information for a reporting year (other than a reporting year covered by the ten year zone substation report).

reporting year for a *Distribution Network Service Provider* means a period of one year that ends on the same date in each reporting year (e.g. a period of one year ending on 30 June).

ten year zone substation report means a report containing historical zone substation information that is available for the ten reporting years prior to the commencement of this rule 5.13A.

zone substation information means the information specified in paragraph (b).

Zone substation information

- (b) Zone substation information means the following information for each zone substation on the *Distribution Network Service Provider's distribution network*:
- (1) the name or other identifier for the zone substation that corresponds to that used by the *Distribution Network Service Provider* in the regional development plan referred to in clause S5.8(n);
 - (2) if the *Distribution Network Service Provider* has determined under paragraph (g) that the *load* for the zone substation should not be disclosed, a statement to the effect that the information has not been provided for that zone substation for reasons of confidentiality;
 - (3) each date and time interval for which *load* data is available for the zone substation;
 - (4) for each date and time interval specified under subparagraph (b)(3), *load* (in kW or MW); and
 - (5) any additional information relating to *load* at the zone substation that the *Distribution Network Service Provider* wishes to provide.

Note

The following are examples of additional information that may be provided by a *Distribution Network Service Provider* under clause 5.13A(b)(5):

- (a) apparent power measured in kVA or MVA;
 - (b) reactive power measured in kVAr or MVAr; or
 - (c) power factor.
- (c) The *Distribution Network Service Provider's* obligation to provide zone substation information under subparagraphs (b)(4) and (5) is to provide raw data. A *Distribution Network Service Provider* is not required to analyse, assess or validate the quality or accuracy of that data before it is provided to a person who requests it under this rule 5.13A.

Requests for zone substation information

- (d) A *Distribution Network Service Provider* must publish on its website:
- (1) information on how a person may request a ten year zone substation report and/or annual zone substation reports;
 - (2) the electronic format (and any other format) in which the *Distribution Network Service Provider* can make zone substation information available;

- (3) the end date of the *Distribution Network Service Provider's* reporting year;
 - (4) the start and end dates of the period to which the ten year zone substation report relates;
 - (5) details of the annual zone substation reports that are available on request;
 - (6) information on when the next annual zone substation report will be available on request; and
 - (7) the amount of the fee payable to the *Distribution Network Service Provider* for provision of the ten year zone substation report and each annual zone substation report. Any fee specified must be no more than that required to meet the reasonable costs anticipated to be incurred by the *Distribution Network Service Provider* in providing the relevant zone substation reports.
- (e) Any person may request a *Distribution Network Service Provider* to provide zone substation information. A request for zone substation information must:
- (1) specify whether the person requires:
 - (i) a ten year zone substation report; and/or
 - (ii) one or more annual zone substation reports;
 - (2) specify the format in which the person wishes to receive the reports under subparagraph (e)(1), which must be a format specified by the *Distribution Network Service Provider* under paragraph (d)(2);
 - (3) include an acknowledgment that:
 - (i) any zone substation information provided by the *Distribution Network Service Provider* under subparagraphs (b)(4) and (5) is raw data and the *Distribution Network Service Provider* has not analysed, assessed or validated the quality or accuracy of that data; and
 - (ii) the *Distribution Network Service Provider* makes no warranty or guarantee as to the quality, accuracy or suitability for any particular purpose of the zone substation information;
 - (4) be accompanied by any applicable fees specified on the *Distribution Network Service Provider's* website; and
 - (5) otherwise be in the format reasonably required by the *Distribution Network Service Provider* and as specified on its website.

Obligations of Distribution Network Service Providers to provide zone substation information

- (f) If a *Distribution Network Service Provider* receives a request in accordance with paragraph (e) it:
 - (1) must provide the report(s) requested as soon as practicable but, in any event, within 30 *business days* of the date of the request; and
 - (2) must not require the person who requested the report(s) to meet any further conditions or make any further acknowledgments or undertakings to the *Distribution Network Service Provider* before providing the report(s).
- (g) A *Distribution Network Service Provider* is not required to provide information under subparagraphs (b)(3) and (4) for a zone substation if, in the reasonable opinion of the *Distribution Network Service Provider*, that information is confidential or commercially-sensitive to a third party.

5.14 Joint planning

5.14.1 Joint planning obligations of Transmission Network Service Providers and Distribution Network Service Providers

- (a) Subject to paragraphs (b) and (c):
 - (1) each *Distribution Network Service Provider* must conduct joint planning with each *Transmission Network Service Provider* of the *transmission networks* to which the *Distribution Network Service Provider's networks* are connected; and
 - (2) each *Transmission Network Service Provider* must conduct joint planning with each *Distribution Network Service Provider* of the *distribution networks* to which the *Transmission Network Service Provider's networks* are connected.
- (b) In the case of the *declared shared network* of an *adoptive jurisdiction*, the relevant *declared transmission system operator*, the relevant *Distribution Network Service Provider*, AEMO and any *interested party* that has informed AEMO of its interest in the relevant plans, shall conduct joint planning.
- (c) For the purposes of this clause 5.14.1, a *Transmission Network Service Provider* does not include a *Network Service Provider* that is a *Transmission Network Service Provider* only because it owns, controls or operates *dual function assets*.
- (d) The relevant *Distribution Network Service Provider* and *Transmission Network Service Provider* must:
 - (1) assess the adequacy of existing *transmission* and *distribution networks* and the assets associated with transmission-distribution connection

points over the next five years and to undertake joint planning of projects which relate to both *networks* (including, where relevant, *dual function assets*);

- (2) use best endeavours to work together to ensure efficient planning outcomes and to identify the most efficient options to address the needs identified in accordance with subparagraph (4);
- (3) identify any limitations or constraints:
 - (i) that will affect both the *Transmission Network Service Provider's* and *Distribution Network Service Provider's network*; or
 - (ii) which can only be addressed by corrective action that will require coordination by the *Transmission Network Service Provider* and the *Distribution Network Service Provider*; and
- (4) where the need for a joint planning project is identified under subparagraph (3):
 - (i) jointly determine plans that can be considered by relevant *Registered Participants*, *AEMO*, *interested parties*, and parties registered on the demand side engagement register of each *Distribution Network Service Provider* involved in joint planning;
 - (ii) determine whether the joint planning project is a RIT-T project or a RIT-D project; and
 - (iii) may agree on a lead party to be responsible for carrying out the *regulatory investment test for transmission* or the *regulatory investment test for distribution* (as the case may be) in respect of the joint planning project.
- (e) If a *Network Service Provider*, as the lead party for one or more *Network Service Providers*, undertakes the *regulatory investment test for transmission* or the *regulatory investment test for distribution* (as the case may be) in respect of a joint planning project, the other *Network Service Providers* will be taken to have discharged their obligation to undertake the relevant test in respect of that project.

5.14.2 Joint planning obligations of Distribution Network Service Providers and Distribution Network Service Providers

- (a) *Distribution Network Service Providers* must undertake joint planning with other *Distribution Network Service Providers* where there is a requirement to consider the need for any *augmentation* or *non-network options* that affect more than one *Distribution Network Service Provider's network*.

- (b) *Distribution Network Service Providers* involved in joint planning may agree on a lead party to be responsible for carrying out the *regulatory investment test for distribution* in respect of the joint planning project.
- (c) If a *Distribution Network Service Provider*, as the lead party for one or more *Distribution Network Service Providers*, undertakes the *regulatory investment test for distribution* in respect of a joint planning project, the other *Distribution Network Service Providers* will be taken to have discharged their obligation to undertake the *regulatory investment test for distribution* in respect of that project.

5.14.3 Joint planning obligations of Transmission Network Service Providers

Transmission Network Service Providers must undertake joint planning if:

- (a) a possible credible option to address a *constraint* in a *transmission network* is an *augmentation* to the *transmission network* of another *Transmission Network Service Provider*; and
- (b) that *constraint* is not already being considered under other processes under the *Rules*.

5.14A Joint planning in relation to retirement or de-ratings of network assets forming part of the Declared Shared Network

- (a) In the case of a proposed retirement or de-rating of a *network* asset that forms part of the *declared shared network* of an *adoptive jurisdiction*, *AEMO* and the relevant *declared transmission system operator* must conduct joint planning in respect of that proposed retirement or de-rating if an *identified need* arises from that proposed retirement or de-rating.
- (b) In conducting joint planning under paragraph (a), *AEMO* and the *declared transmission system operator* must use best endeavours to work together to identify the most efficient options to address the relevant *identified need*.

5.14B TAPR Guidelines

5.14B.1 Development of TAPR Guidelines

- (a) The *AER* must, in accordance with the *transmission consultation procedures*, make and *publish* TAPR Guidelines that set out the required format of *Transmission Annual Planning Reports*.
- (b) The *AER* must develop and *publish* the first TAPR Guidelines under the *Rules* by the date specified in the *Rules* and there must be TAPR Guidelines in force at all times after that date.
- (c) Subject to paragraph (d), the *AER* may, from time to time and in accordance with the *transmission consultation procedures*, amend or replace the TAPR Guidelines.

- (d) The *AER* may make administrative or minor amendments to the TAPR Guidelines without complying with the *transmission consultation procedures*.

5.15 Regulatory investment tests generally

5.15.1 Interested parties

In clauses 5.16.4, 5.16.5, 5.17.4 and 5.17.5, *interested party* means a person including an end user or its *representative* who, in the *AER*'s opinion, has the potential to suffer a material and adverse *National Electricity Market* impact from the investment identified as the preferred option in the project assessment conclusions report or the final project assessment report (as the case may be).

5.15.2 Identification of a credible option

- (a) A credible option is an option (or group of options) that:
 - (1) addresses the *identified need*;
 - (2) is (or are) commercially and technically feasible; and
 - (3) can be implemented in sufficient time to meet the *identified need*,and is (or are) identified as a credible option in accordance with paragraphs (b) or (d) (as relevant).
- (b) In applying the *regulatory investment test for transmission*, the RIT-T proponent must consider, in relation to a RIT-T project other than those described in clauses 5.16.3(a)(1)-(8), all options that could reasonably be classified as credible options taking into account:
 - (1) energy source;
 - (2) technology;
 - (3) ownership;
 - (4) the extent to which the credible option enables *intra-regional* or *inter-regional* trading of electricity;
 - (5) whether it is a *network option* or a *non-network option*;
 - (6) whether the credible option is intended to be regulated;
 - (7) whether the credible option has a proponent; and
 - (8) any other factor which the RIT-T proponent reasonably considers should be taken into account.
- (c) In applying the *regulatory investment test for distribution*, the RIT-D proponent must consider, in relation to a RIT-D project other than those

described in clauses 5.17.3(a)(1)-(7), all options that could reasonably be classified as credible options, without bias as to:

- (1) energy source;
 - (2) technology;
 - (3) ownership; and
 - (4) whether it is a *network option* or a *non-network option*.
- (d) The absence of a proponent does not exclude an option from being considered a credible option.

5.15.3 Review of costs thresholds

Regulatory investment test for transmission thresholds

- (a) Every 3 years the *AER* must undertake a review of the changes in the input costs used to calculate the estimated capital costs in relation to *transmission* investment as referred to in paragraph (b), for the purposes of determining whether the cost thresholds specified in paragraph (b) need to be changed to maintain the appropriateness of the cost thresholds over time by adjusting those cost thresholds to reflect any increase or decrease in the input costs since:
- (1) July 2009 in respect of the first cost threshold review; and
 - (2) the date of the previous review in respect of every subsequent cost threshold review.

Note

The cost thresholds are regularly reviewed by the *AER* under paragraph (b). The current thresholds are specified in the latest cost threshold determination available on the *AER*'s website www.aer.gov.au.

- (b) For the purposes of paragraph (a), the cost thresholds for review are the following amounts:
- (1) **[Deleted]**
 - (1A) of less than \$200,000 referred to in clause 5.12.2(c)(1B)(iv);
 - (2) of less than \$5 million referred to in clause 5.16.3(a)(2);
 - (3) **[Deleted]**
 - (4) of less than \$5 million referred to in clause 5.16.3(a)(5);
 - (5) of less than \$35 million referred to in clause 5.16.4(z1)(1); and

- (6) in excess of \$5 million in relation to investment in transmission assets of the type referred to in the definition of potential transmission project in clause 5.10.2.

Regulatory investment test for distribution costs thresholds

- (c) Subject to paragraph (f)(2), every 3 years, and at the same time as it undertakes its review of the cost thresholds for *regulatory investment test for transmission* under paragraph (a), the AER must undertake a review of the changes in the input costs used to calculate the estimated capital costs in relation to:

- (1) projects subject to the *regulatory investment test for distribution*; and
- (2) the cost threshold for committed investments that are to address an urgent and unforeseen *network* need subject to the *Distribution Annual Planning Report*,

for the purposes of determining whether the costs thresholds specified in paragraph (d) need to be changed to maintain the appropriateness of the cost thresholds over time by adjusting those cost thresholds to reflect any increase or decrease in the input costs since:

- (3) 1 January 2013 in respect of the first cost threshold review; and
 - (4) the date of the previous review in respect of every subsequent cost threshold review.
- (d) For the purposes of paragraph (c), the cost thresholds for review are the following amounts:
 - (1) \$5 million referred to in clause 5.17.3(a)(2);
 - (2) **[Deleted]**;
 - (3) \$10 million referred to in clause 5.17.4(n)(2);
 - (4) \$20 million referred to in clause 5.17.4(s);
 - (4A) of less than \$200,000 referred to in S5.8(b2)(4);
 - (5) \$2 million referred to in S5.8(g).

Note

The cost thresholds are regularly reviewed by the AER under paragraph (b). The current thresholds are specified in the latest cost threshold determination available on the AER's website www.aer.gov.au.

Cost threshold reviews

- (e) Each cost threshold review is to be commenced by the AER by 31 July of the relevant year.

- (f) The first review of the cost thresholds for: :
 - (1) the *regulatory investment test for transmission* under paragraph (a) must be initiated in 2012; and
 - (2) the *regulatory investment test for distribution* under paragraph (c) must be initiated in 2015.
- (g) Within six weeks following the commencement of a cost threshold review, the *AER* must *publish* a draft determination outlining:
 - (1) whether the *AER* has formed the view that any of the cost thresholds need to be amended to reflect increases or decreases in the input costs to ensure that the appropriateness of the cost thresholds is maintained over time;
 - (2) its reasons for determining whether the cost thresholds need to be varied to reflect increases or decreases in the input costs;
 - (3) if there is to be a variation in a cost threshold, the amount of the new cost threshold and the date the new cost threshold will take effect; and
 - (4) its reasons for determining the amount of the new cost threshold.
- (h) At the same time as it *publishes* the draft determination under paragraph (f), the *AER* must *publish* a notice seeking submissions on the draft determination. The notice must specify the period within which written submissions can be made (the cost threshold consultation period) which must be no less than 5 weeks from the date of the notice.
- (i) The *AER* must consider any written submissions received during the cost threshold consultation period in making its final determination in respect of the matters outlined in paragraph (g).
- (j) The final determination on cost thresholds must be made and *published* by the *AER* within 5 weeks following the end of the cost threshold consultation period.
- (k) The *AER* may *publish* a draft determination under paragraph (g), a notice under paragraph (h), or a final determination under paragraph (j) for any cost threshold reviews under paragraphs (a) and (c) as a single document.

5.15.4 Costs determinations

- (a) Where the *AER* engages a consultant to assist in making a determination under clauses 5.16.5, 5.16.6 or 5.17.5 the *AER* may make a costs determination.
- (b) Where a costs determination is made, the *AER* may:
 - (1) render the RIT-T proponent or the RIT-D proponent (as the case may be) an invoice for the costs; or

- (2) determine that the costs should:
 - (i) be shared by all the parties to the dispute, whether in the same proportion or differing proportions; or
 - (ii) be borne by a party or parties to the dispute other than the RIT-T proponent or the RIT-D proponent (as the case may be) whether in the same proportion or differing proportions; and
 - (iii) the *AER* may render invoices accordingly.
- (c) If an invoice is rendered under subparagraph (b)(2)(iii), the *AER* must specify a time period for the payment of the invoice that is no later than 30 *business days* from the date the *AER* makes a determination under paragraph (a).

5.16 Regulatory investment test for transmission

5.16.1 Principles

- (a) The *AER* must develop and *publish* the *regulatory investment test for transmission* in accordance with the *transmission consultation procedures* and this rule 5.16.1.
- (b) The purpose of the *regulatory investment test for transmission* is to identify the credible option that maximises the present value of net economic benefit to all those who produce, consume and transport electricity in the *market* (the preferred option). For the avoidance of doubt, a preferred option may, in the relevant circumstances, have a negative net economic benefit (that is, a net economic cost) where the *identified need* is for reliability corrective action or the provision of *inertia network services* required under clause 5.20B.4 or the provision of *system strength services* required under clause 5.20C.3.
- (c) The *regulatory investment test for transmission* must:
 - (1) be based on a cost-benefit analysis that is to include an assessment of reasonable scenarios of future supply and demand if each credible option were implemented compared to the situation where no option is implemented;
 - (2) not require a level of analysis that is disproportionate to the scale and likely impact of each of the credible options being considered;
 - (3) be capable of being applied in a predictable, transparent and consistent manner;
 - (4) require the RIT-T proponent to consider the following classes of market benefits that could be delivered by the credible option:
 - (i) changes in fuel consumption arising through different patterns of *generation dispatch*;

- (ii) changes in voluntary *load* curtailment;
 - (iii) changes in involuntary *load shedding*, with the market benefit to be considered using a reasonable forecast of the value of electricity to consumers;
 - (iv) changes in costs for parties, other than the RIT-T proponent, due to:
 - (A) differences in the timing of new *plant*;
 - (B) differences in capital costs; and
 - (C) differences in the operating and maintenance costs;
 - (v) differences in the timing of expenditure;
 - (vi) changes in *network* losses;
 - (vii) changes in *ancillary services* costs;
 - (viii) competition benefits;
 - (ix) any additional option value (where this value has not already been included in the other classes of market benefits) gained or foregone from implementing that credible option with respect to the likely future investment needs of the *market*; and
 - (x) other classes of market benefits that are:
 - (A) determined to be relevant by the RIT-T proponent and agreed to by the *AER* in writing before the date the relevant project specification consultation report is made available to other parties under clause 5.16.4; or
 - (B) specified as a class of market benefit in the *regulatory investment test for transmission*;
- (5) require a RIT-T proponent to include a quantification of all classes of market benefits which are determined to be material in the RIT-T proponent's reasonable opinion;
- (6) require a RIT-T proponent to consider all classes of market benefits as material unless it can, in the project assessment draft report, or in respect of a proposed preferred option which is subject to the exemption contained in clause 5.16.4(z1), in the project specification consultation report, provide reasons why:
- (i) a particular class of market benefit is likely not to affect materially the outcome of the assessment of the credible options under the *regulatory investment test for transmission*; or

- (ii) the estimated cost of undertaking the analysis to quantify the market benefit is likely to be disproportionate to the scale, size and potential benefits of each credible option being considered in the report;
- (7) with respect to the classes of market benefits set out in subparagraphs (4)(ii) and (iii), ensure that, if the credible option is for reliability corrective action, the quantification assessment required by paragraph (5) will only apply insofar as the market benefit delivered by the credible option exceeds the minimum standard required for reliability corrective action;
- (8) require the RIT-T proponent to quantify the following classes of costs:
 - (i) costs incurred in constructing or providing the credible option;
 - (ii) operating and maintenance costs in respect of the credible option;
 - (iii) the cost of complying with laws, regulations and applicable administrative requirements in relation to the construction and operation of the credible option; and
 - (iv) any other class of costs that are:
 - (A) determined to be relevant by the RIT-T proponent and agreed to by the AER in writing before the date the relevant project specification consultation report is made available to other parties under clause 5.16.4; or
 - (B) specified as a class of cost in the *regulatory investment test for transmission*;
- (9) provide that any cost or market benefit which cannot be measured as a cost or market benefit to *Generators, Distribution Network Service Providers, Transmission Network Service Providers* or consumers of electricity may not be included in any analysis under the *regulatory investment test for transmission*;
- (10) specify:
 - (i) the method or methods permitted for estimating the magnitude of the different classes of market benefits;
 - (ii) the method or methods permitted for estimating the magnitude of the different classes of costs;
 - (iii) the method or methods permitted for estimating market benefits which may occur outside the region in which the *networks* affected by the RIT-T project are located; and

- (iv) the appropriate method and value for specific inputs, where relevant, for determining the discount rate or rates to be applied;
- (11) specify that a sensitivity analysis is required of any modelling relating to the cost-benefit analysis; and
- (12) reflect that the credible option that maximises the present value of net economic benefit to all those who produce, consume or transport electricity in the market may, in some circumstances, have a negative net economic benefit (that is, a net economic cost) where the *identified need* is for reliability corrective action.

5.16.2 Regulatory investment test for transmission application guidelines

- (a) At the same time as the *AER* develops and *publishes* a proposed *regulatory investment test for transmission* under the *transmission consultation procedure*, the *AER* must also develop and *publish* guidelines for the operation and application of the *regulatory investment test for transmission* (the regulatory investment test for transmission application guidelines) in accordance with the *transmission consultation procedures* and this rule 5.16.
- (b) The regulatory investment test for transmission application guidelines must:
 - (1) give effect to and be consistent with this clause 5.16.2 and clauses 5.15.2, 5.16.3, 5.16.4 and 5.16.5; and
 - (2) provide guidance on:
 - (i) the operation and application of the *regulatory investment test for transmission*;
 - (ii) the process to be followed in applying the *regulatory investment test for transmission*; and
 - (iii) how disputes raised in relation to the *regulatory investment test for transmission* and its application will be addressed and resolved.
- (c) The regulatory investment test for transmission application guidelines must provide guidance and worked examples as to:
 - (1) what constitutes a credible option;
 - (2) acceptable methodologies for valuing the costs of a credible option;
 - (3) what may constitute an externality under the *regulatory investment test for transmission*;
 - (4) the classes of market benefits to be considered for the purposes of clause 5.16.1(c)(4);

- (5) the suitable modelling periods and approaches to scenario development;
 - (6) the acceptable methodologies for valuing the market benefits of a credible option referred to clause 5.16.1(c)(4), including the option value, competition benefits and market benefits that accrue across regions;
 - (7) the appropriate approach to undertaking a sensitivity analysis for the purposes of clause 5.16.1(c)(11);
 - (8) the appropriate approaches to assessing uncertainty and risks; and
 - (9) when a person is sufficiently committed to a credible option for reliability corrective action to be characterised as a proponent for the purposes of clause 5.15.2(b)(7).
- (d) The AER must ensure that there is a *regulatory investment test for transmission* and regulatory investment test for transmission application guidelines in force at all times.
 - (e) The AER may, from time to time, amend or replace the *regulatory investment test for transmission* and regulatory investment test for transmission application guidelines in accordance with the *transmission consultation procedures*, provided the AER publishes any amendments to, or replacements of, the *regulatory investment test for transmission* or regulatory investment test for transmission application guidelines at the same time.
 - (f) An amendment referred to in paragraph (e) does not apply to a current application of the *regulatory investment test for transmission* and the regulatory investment test for transmission application guidelines under the Rules by RIT-T proponent.
 - (g) For the purposes of paragraph (f), a "current application" means any action or process initiated under the Rules which relies on or is referenced to the *regulatory investment test for transmission* and/or the regulatory investment test for transmission application guidelines and is not completed at the date of the relevant amendment to the *regulatory investment test for transmission* and/or the regulatory investment test for transmission application guidelines.

5.16.3 Investments subject to the regulatory investment test for transmission

- (a) A RIT-T proponent must apply the *regulatory investment test for transmission* to a RIT-T project except in circumstances where:
 - (1) the RIT-T project is required to address an urgent and unforeseen *network* issue that would otherwise put at risk the *reliability* of the *transmission network* as described in paragraph (b);

- (2) the estimated capital cost of the most expensive option to address the *identified need* which is technically and economically feasible is less than \$5 million (as varied in accordance with a cost threshold determination);
- (3) the proposed expenditure relates to maintenance and is not intended to *augment* the *transmission network* or replace *network* assets;
- (4) **[Deleted]**;
- (5) the proposed relevant *network* investment is an investment undertaken by a *Transmission Network Service Provider* which:
 - (i) re-routes one or more paths of a *network* for the long term; and
 - (ii) has a substantial primary purpose other than the need to *augment* a *network*,(a reconfiguration investment) and which the RIT-T proponent reasonably estimates to have an estimated capital cost of less than \$5 million (as varied in accordance with a cost threshold determination) or which has, or is likely to have, no material impact on *network* users;
- (6) the *identified need* can only be addressed by expenditure on a *connection asset* which provides services other than *prescribed transmission services* or *standard control services*;
- (7) the cost of addressing the *identified need* is to be fully recovered through charges other than charges in respect of *prescribed transmission services* or *standard control services*;
- (8) the proposed expenditure relates to protected event EFCS investment and is not intended to *augment* the *transmission network*; or
- (9) the proposed expenditure is an *inertia service payment* or a *system strength service payment*;
- (10) the proposed expenditure is for *network* investment undertaken by the *Transmission Network Service Provider* to satisfy its obligation as an *Inertia Service Provider* under clause 5.20B.4 to make available *inertia network services* in relation to an *inertia shortfall* for an *inertia sub-network* and:
 - (i) immediately prior to the notice of the *inertia shortfall* being given by AEMO under clause 5.20B.3(c), the *Inertia Service Provider* is not under an obligation to provide *inertia network services* for that *inertia sub-network* (including under rule 11.100); and

- (ii) the time by which the *Inertia Service Provider* must make the *inertia network services* available is less than 18 months after the notice is given by *AEMO* under clause 5.20B.3(c); or
- (11) the proposed expenditure is for *network* investment undertaken by the *Transmission Network Service Provider* to satisfy its obligation as a *System Strength Service Provider* under clause 5.20C.3 to make available *system strength services* in relation to a *fault level shortfall* for a *fault level node* and:
 - (i) immediately prior to the notice of the *fault level shortfall* being given by *AEMO* under clause 5.20C.2(c), the *System Strength Service Provider* is not under an obligation to provide *system strength services* for that *fault level node* (including under rule 11.101); and
 - (ii) the time by which the *System Strength Service Provider* must make the *system strength services* available is less than 18 months after the notice is given by *AEMO* under clause 5.20C.2(c).
- (b) For the purposes of paragraph (a)(1), a RIT-T project will be required to address an urgent and unforeseen *network* issue that would otherwise put at risk the *reliability* of the *transmission network* if:
 - (1) it is necessary that the assets or services to address the issue be operational within 6 months of the issue being identified;
 - (2) the event or circumstances causing the *identified need* was not reasonably foreseeable by, and was beyond the reasonable control of, the *Network Service Provider(s)* that identified the *identified need*;
 - (3) a failure to address the *identified need* is likely to materially adversely affect the *reliability* and *secure operating state* of the *transmission network*; and
 - (4) it is not a *contingent project*.
- (c) If a proposed relevant *network* investment is determined to be required to address an urgent and unforeseen *network* issue as described in paragraph (b), and the *Network Service Provider* making the investment is a *Transmission Network Service Provider*, then the *Transmission Network Service Provider* must provide the following information in its next *Transmission Annual Planning Report* following the identification of the need for the relevant *network* investment:
 - (1) the date when the proposed relevant *network* investment became or will become operational;
 - (2) the purpose of the proposed relevant *network* investment; and
 - (3) the total cost of the proposed relevant *network* investment.

- (d) With the exception of *funded augmentations*, for each RIT-T project to which the *regulatory investment test for transmission* does not apply in accordance with paragraphs (a)-, the *Network Service Providers* affected by the RIT-T project must ensure, acting reasonably, that the investment required to address the *identified need* is planned and developed at least cost over the life of the investment.
- (e) A RIT-T proponent must not treat different parts of an integrated solution to an *identified need* as distinct and separate options for the purposes of determining whether the *regulatory investment test for transmission* applies to each of those parts.

5.16.4 Regulatory investment test for transmission procedures

- (a) If a RIT-T project is subject to the *regulatory investment test for transmission* under clause 5.16.3, then the RIT-T proponent must consult all *Registered Participants*, *AEMO* and *interested parties* on the RIT-T project in accordance with this clause 5.16.4.

Project specification consultation report

- (b) A RIT-T proponent must prepare a report (the project specification consultation report), which must include:
 - (1) a description of the *identified need*;
 - (2) the assumptions used in identifying the *identified need* (including, in the case of proposed reliability corrective action, why the RIT-T proponent considers reliability corrective action is necessary);
 - (3) the technical characteristics of the *identified need* that a non-network option would be required to deliver, such as:
 - (i) the size of *load* reduction or additional supply;
 - (ii) location; and
 - (iii) operating profile;
 - (4) if applicable, reference to any discussion on the description of the identified need or the credible options in respect of that *identified need* in the most recent *NTNDP*;
 - (5) a description of all credible options of which the RIT-T proponent is aware that address the *identified need*, which may include, without limitation, alternative *transmission* options, *interconnectors*, *generation*, demand side management, *market network services* or other *network options*;
 - (6) for each credible option identified in accordance with subparagraph (5), information about:

- (i) the technical characteristics of the credible option;
 - (ii) whether the credible option is reasonably likely to have a *material inter-network impact*;
 - (iii) the classes of market benefits that the RIT-T proponent considers are likely not to be material in accordance with clause 5.16.1(c)(6), together with reasons of why the RIT-T proponent considers that these classes of market benefits are not likely to be material;
 - (iv) the estimated construction timetable and commissioning date; and
 - (v) to the extent practicable, the total indicative capital and operating and maintenance costs.
- (c) The RIT-T proponent must make the project specification consultation report available to all *Registered Participants*, *AEMO* and other *interested parties*.
- (d) The RIT-T proponent must:
 - (1) provide a summary of the project specification consultation report to *AEMO* within 5 *business days* of making the project specification consultation report; and
 - (2) upon request by an *interested party*, provide a copy of the project specification consultation report to that person within 3 *business days* of the request.
- (e) Within 3 *business days* of receipt of the summary, *AEMO* must *publish* the summary of the project specification consultation report on its website.
- (f) The RIT-T proponent must seek submissions from *Registered Participants*, *AEMO* and *interested parties* on the credible options presented, and the issues addressed, in the project specification consultation report.
- (g) The period for consultation referred to in paragraph (f) must be not less than 12 weeks from the date that *AEMO publishes* the summary of the project specification consultation report on its website.
- (h) A RIT-T proponent that is a *Transmission Network Service Provider* may discharge its obligation under paragraph (c) to make the project specification consultation report available by including the project specification consultation report as part of its *Transmission Annual Planning Report*.
- (i) A RIT-T proponent that is a *Distribution Network Service Provider* may discharge its obligation under paragraph (c) to make the project specification consultation report available by including the project

specification consultation report as part of its *Distribution Annual Planning Report*.

Project assessment draft report

- (j) If one or more *Network Service Providers* wishes to proceed with a RIT-T project, within 12 months of the end date of the consultation period referred to in paragraph (g), or such longer time period as is agreed in writing by the *AER*, the RIT-T proponent for the relevant RIT-T project must prepare a report (the project assessment draft report), having regard to the submissions received, if any, under paragraph (f) and make that report available to all *Registered Participants*, *AEMO* and *interested parties*.
- (k) The project assessment draft report must include:
 - (1) a description of each credible option assessed;
 - (2) a summary of, and commentary on, the submissions to the project specification consultation report;
 - (3) a quantification of the costs, including a breakdown of operating and capital expenditure, and classes of material market benefit for each credible option;
 - (4) a detailed description of the methodologies used in quantifying each class of material market benefit and cost;
 - (5) reasons why the RIT-T proponent has determined that a class or classes of market benefit are not material;
 - (6) the identification of any class of market benefit estimated to arise outside the *region* of the *Transmission Network Service Provider* affected by the RIT-T project, and quantification of the value of such market benefits (in aggregate across all regions);
 - (7) the results of a net present value analysis of each credible option and accompanying explanatory statements regarding the results;
 - (8) the identification of the proposed preferred option;
 - (9) for the proposed preferred option identified under subparagraph (8), the RIT-T proponent must provide:
 - (i) details of the technical characteristics;
 - (ii) the estimated construction timetable and commissioning date;
 - (iii) if the proposed preferred option is likely to have a *material inter-network impact* and if the *Transmission Network Service Provider* affected by the RIT-T project has received an *augmentation technical report*, that report; and

- (iv) a statement and the accompanying detailed analysis that the preferred option satisfies the *regulatory investment test for transmission*.
- (l) If a *Network Service Provider* affected by a RIT-T project elects to proceed with a project which is for reliability corrective action, it can only do so where the proposed preferred option has a proponent. The RIT-T proponent must identify that proponent in the project assessment draft report.
- (m) A RIT-T proponent that is a *Transmission Network Service Provider* may discharge its obligation under paragraph (j) to make the project assessment draft report available by including the project assessment draft report as part of its *Transmission Annual Planning Report* provided that report is *published* within 12 months of the end date of the consultation period required under paragraph (g) or within 12 months of the end of such longer time period as is agreed by the *AER* in writing under paragraph (j).
- (n) A RIT-T proponent that is a *Distribution Network Service Provider* may discharge its obligation under paragraph (j) to make the project assessment draft report available by including the project assessment draft report as part of its *Distribution Annual Planning Report* provided that report is *published* within 12 months of the end date of the consultation period required under paragraph (g) or within 12 months of the end of such longer time period as is agreed by the *AER* in writing under paragraph (j).
- (o) The RIT-T proponent must:
 - (1) provide a summary of the project assessment draft report to *AEMO* within 5 *business days* of making the project assessment draft report; and
 - (2) upon request by an *interested party*, provide a copy of the project assessment draft report to that person within 3 *business days* of the request.
- (p) Within 3 *business days* of receipt of the summary, *AEMO* must *publish* the summary of the project assessment draft report on its website.
- (q) The RIT-T proponent must seek submissions from *Registered Participants*, *AEMO* and *interested parties* on the preferred option presented, and the issues addressed, in the project assessment draft report.
- (r) The period for consultation referred to in paragraph (q) must be not less than 6 weeks from the date that *AEMO publishes* the summary of the report on its website.
- (s) Within 4 weeks after the end of the consultation period required under paragraph (r), at the request of an *interested party*, a *Registered Participant* or *AEMO* (each being a relevant party for the purposes of this paragraph), the relevant *Network Service Provider* must meet with the relevant party if a meeting is requested by two or more relevant parties and may meet with a relevant party if after having considered all submissions, the relevant

Network Service Provider, acting reasonably, considers that the meeting is necessary.

Project assessment conclusions report

- (t) As soon as practicable after the end of the consultation period on the project assessment draft report referred to in paragraph (r), the RIT-T proponent must, having regard to the submissions received, if any, under paragraph (q) and the matters discussed at any meetings held, if any, under paragraph (s), prepare and make available to all *Registered Participants*, *AEMO* and *interested parties* and *publish* a report (the project assessment conclusions report).
- (u) If:
 - (1) the RIT-T proponent is exempt from making a project assessment draft report under paragraph (z1); and
 - (2) a *Network Service Provider* affected by a RIT-T project, within 12 months of the end date of the period for consultation referred to in paragraph (g), or within 12 months of the end date of such longer time period as is agreed in writing by the *AER* elects to proceed with the proposed *transmission investment*,

the relevant *Network Service Provider* must, having regard to the submissions received, if any, under paragraph (g) as soon as practicable prepare and make available to all *Registered Participants*, *AEMO* and *interested parties* and *publish* a report (the project assessment conclusions report).
- (v) The project assessment conclusions report must set out:
 - (1) the matters detailed in the project assessment draft report as required under paragraph (k); and
 - (2) a summary of, and the RIT-T proponent's response to, submissions received, if any, from *interested parties* sought under paragraph (q).
- (w) The RIT-T proponent must:
 - (1) provide a summary of the project assessment conclusions report to *AEMO* within 5 *business days* of making the project assessment conclusions report; and
 - (2) upon request by an *interested party*, provide a copy of the project assessment conclusions report to that person within 3 *business days* of the request.
- (x) Within 3 *business days* of receipt of the summary, *AEMO* must *publish* the summary of the project assessment conclusions report on its website.

- (y) A RIT-T proponent that is a *Transmission Network Service Provider* may discharge its obligation under paragraph (t) and (u) to make the project assessment conclusions report available by including the project assessment conclusions report as part of its *Transmission Annual Planning Report* provided that the report is *published* within 4 weeks from the date of making available the project assessment conclusions report under paragraph (t) or (u), as the case may be.
- (z) A RIT-T proponent that is a *Distribution Network Service Provider* may discharge its obligation under paragraph (t) and (u) to make the project assessment conclusions report available by including the project assessment conclusions report as part of its *Distribution Annual Planning Report* provided that the report is *published* within 4 weeks from the date of making available the project assessment conclusions report under paragraph (t) or (u), as the case may be.

Exemption from drafting a project assessment draft report for RIT-T projects without material market benefits

- (z1) A RIT-T proponent is exempt from paragraphs (j) to (s) if:
 - (1) the estimated capital cost of the proposed preferred option is less than \$35 million (as varied in accordance with a cost threshold determination);
 - (2) the relevant *Network Service Provider* has identified in its project specification consultation report:
 - (i) its proposed preferred option;
 - (ii) its reasons for the proposed preferred option; and
 - (iii) that its RIT-T project has the benefit of this exemption;
 - (3) the RIT-T proponent considers, in accordance with clause 5.16.1(c)(6), that the proposed preferred option and any other credible option in respect of the *identified need* will not have a material market benefit for the classes of market benefit specified in clause 5.16.1(c)(4) except those classes specified in clauses 5.16.1(c)(4)(ii) and (iii), and has stated this in its project specification consultation report; and
 - (4) the RIT-T proponent forms the view that no submissions were received on the project specification consultation report which identified additional credible options that could deliver a material market benefit.
- (z2) The RIT-T proponent must address in the project assessment conclusions report any issues that were raised in relation to a proposed preferred option to which paragraph (z1) applies during the consultation on the project specification consultation report.

Reapplication of regulatory investment test for transmission

(z3) If:

- (1) a RIT-T proponent has *published* a project assessment conclusions report in respect of a RIT-T project;
- (2) a *Network Service Provider* still wishes to undertake the RIT-T project to address the *identified need*; and
- (3) there has been a material change in circumstances which, in the reasonable opinion of the RIT-T proponent means that the preferred option identified in the project assessment conclusions report is no longer the preferred option,

then the RIT-T proponent must reapply the *regulatory investment test for transmission* to the RIT-T project, unless otherwise determined by the *AER*.

(z4) For the purposes of paragraph (z3), a material change in circumstances may include, but is not limited to, a change to the key assumptions used in identifying:

- (1) the *identified need* described in the project assessment conclusions report; or
- (2) the credible options assessed in the project assessment conclusions report.

(z5) When making a determination under paragraph (z3) the *AER* must have regard to:

- (1) the credible options (other than the preferred option) identified in the project assessment conclusions report;
- (2) the change in circumstances identified by the RIT-T proponent; and
- (3) whether a failure to promptly undertake the RIT-T project is likely to materially affect the *reliability* and *secure operating state* of the *transmission network* or a significant part of that *network*.

Declared transmission system operator may request assistance from AEMO to conduct market benefits assessments for replacement RIT-T projects

(z6) Where a RIT-T proponent is a *declared transmission system operator* within a *declared shared network*, it may in relation to RIT-T projects to address an *identified need* that arises from the retirement or de-rating of *network* assets, request assistance and information from *AEMO* as reasonably required for it to consider and conduct market benefits assessments as required by:

- (1) clause 5.16.4(b)(6)(iii);

- (2) clause 5.16.4(k)(3) to (k)(6); and
- (3) clause 5.16.4(v).
- (z7) *AEMO* must provide assistance and information requested under paragraph (z6) to the *declared transmission system operator* within a reasonable period of time.

5.16.5 Disputes in relation to application of regulatory investment test for transmission

- (a) *Registered Participants*, the *AEMC*, *Connection Applicants*, *Intending Participants*, *AEMO* and *interested parties* may, by notice to the *AER*, dispute conclusions made by the RIT-T proponent in the project assessment conclusions report in relation to:
 - (1) the application of the *regulatory investment test for transmission*;
 - (2) the basis on which the RIT-T proponent has classified the preferred option as being for reliability corrective action; or
 - (3) the RIT-T proponent's assessment regarding whether the preferred option will have a *material inter-network impact*, in accordance with any criteria for a *material inter-network impact* that are in force at the time of the preparation of the project assessment conclusions report.
- (b) A dispute under this clause 5.16.5 may not be raised in relation to any matters set out in the project assessment conclusions report which:
 - (1) are treated as externalities by the *regulatory investment test for transmission*; or
 - (2) relate to an individual's personal detriment or property rights.
- (c) Within 30 days of the date of *publication* of the project assessment conclusions report under clause 5.16.4 (t), (u), (y) or (z) (as the case may be), the party disputing a conclusion made in the project assessment conclusions report (a disputing party) must:
 - (1) give notice of the dispute in writing setting out the grounds for the dispute (the dispute notice) to the *AER*; and
 - (2) at the same time, give a copy of the dispute notice to the RIT-T proponent.
- (d) Subject to paragraph (f)(3), within 40 days of receipt of the dispute notice or within an additional period of up to 60 days where the *AER* notifies *interested parties* that the additional time is required to make a determination because of the complexity or difficulty of the issues involved, the *AER* must either:

- (1) reject any dispute by written notice to the person who initiated the dispute if the *AER* considers that the grounds for the dispute are misconceived or lacking in substance; and
 - (2) notify the RIT-T proponent that the dispute has been rejected; or
 - (3) subject to paragraph (f), make and *publish* a determination:
 - (i) directing the RIT-T proponent to amend the matters set out in the project assessment conclusions report; or
 - (ii) stating that, based on the grounds of the dispute, the RIT-T proponent will not be required to amend the project assessment conclusions report.
- (e) The RIT-T proponent must comply with an *AER* determination made under paragraph (d)(3)(i) within a timeframe specified by the *AER* in its determination.
- (f) In making a determination under paragraph (d)(3), the *AER*:
- (1) must only take into account information and analysis that the RIT-T proponent could reasonably be expected to have considered or undertaken at the time that it performed the *regulatory investment test for transmission*;
 - (2) must *publish* its reasons for making a determination;
 - (3) may request further information regarding the dispute from the disputing party or the RIT-T proponent in which case the period of time for rejecting a dispute or making a determination under paragraph (d) is extended by the time it takes the relevant party to provide the requested further information to the *AER*;
 - (4) may disregard any matter raised by the disputing party or the RIT-T proponent that is misconceived or lacking in substance; and
 - (5) where making a determination under subparagraph (d)(3)(i), must specify a reasonable timeframe for the RIT-T proponent to comply with the *AER*'s direction to amend the matters set out in the project assessment conclusions report.
- (g) The *AER* may only make a determination under subparagraph (d)(3)(i) if it determines that:
- (1) the RIT-T proponent has not correctly applied the *regulatory investment test for transmission* in accordance with the *Rules*;
 - (2) the RIT-T proponent has erroneously classified the preferred option as being for reliability corrective action;

- (3) the RIT-T proponent has not correctly assessed whether the preferred option will have a *material inter-network impact*; or
 - (4) there was a manifest error in the calculations performed by the RIT-T proponent in applying the *regulatory investment test for transmission*.
- (h) A disputing party or the RIT-T proponent (as the case may be) must as soon as reasonably practicable provide any information requested under paragraph (f)(3) to the *AER*.
- (i) The relevant period of time in which the *AER* must make a determination under paragraph (d)(3) is automatically extended by the period of time taken by the RIT-T proponent or a disputing party to provide any additional information requested by the *AER* under this clause 5.16.5, provided:
 - (1) the *AER* makes the request for the additional information at least 7 *business days* prior to the expiry of the relevant period; and
 - (2) the RIT-T proponent or the disputing party provides the additional information within 14 *business days* of receipt of the request.

5.16.6 Determination that preferred option satisfies the regulatory investment test for transmission

- (a) After the expiry of the 30 day period referred to in clause 5.16.5(c) and where a preferred option is not for reliability corrective action, the RIT-T proponent may request, in writing to the *AER*, that the *AER* make a determination as to whether the preferred option satisfies the *regulatory investment test for transmission*.
- (b) The *AER*:
 - (1) must, within 120 *business days* of receipt of the request from the applicant, subject to paragraph (c), make and *publish* a determination, including reasons for its determination;
 - (2) must use the findings and recommendations in the project assessment conclusions report in making its determination under subparagraph (1);
 - (3) may request further information from the RIT-T proponent; and
 - (4) may have regard to any other matter the *AER* considers relevant.
- (c) The relevant period of time in which the *AER* must make a determination under paragraph (b) is automatically extended by the period of time taken by the RIT-T proponent to provide any additional information requested by the *AER* under this clause 5.16.6, provided:
 - (1) the *AER* makes the request for the additional information at least 7 *business days* prior to the expiry of the relevant period; and

- (2) the RIT-T proponent provides the additional information within 14 *business days* of receipt of the request.

5.17 Regulatory investment test for distribution

5.17.1 Principles

- (a) The AER must develop and *publish* the *regulatory investment test for distribution* in accordance with the *distribution consultation procedures* and this clause 5.17.1.
- (b) The purpose of the *regulatory investment test for distribution* is to identify the credible option that maximises the present value of the net economic benefit to all those who produce, consume and transport electricity in the *National Electricity Market* (the preferred option). For the avoidance of doubt, a preferred option may, in the relevant circumstances, have a negative net economic benefit (that is, a net economic cost) where the *identified need* is for reliability corrective action.
- (c) The *regulatory investment test for distribution* must:
 - (1) be based on a cost-benefit analysis that must include an assessment of reasonable scenarios of future supply and demand;
 - (2) not require a level of analysis that is disproportionate to the scale and likely impact of each of the credible options being considered;
 - (3) be capable of being applied in a predictable, transparent and consistent manner;
 - (4) require the RIT-D proponent to consider whether each credible option could deliver the following classes of market benefits:
 - (i) changes in voluntary *load* curtailment;
 - (ii) changes in involuntary *load shedding* and *customer* interruptions caused by *network* outages, using a reasonable forecast of the value of electricity to *customers*;
 - (iii) changes in costs for parties, other than the RIT-D proponent, due to differences in:
 - (A) the timing of new *plant*;
 - (B) capital costs; and
 - (C) the operating and maintenance costs;
 - (iv) differences in the timing of expenditure;
 - (v) changes in load transfer capacity and the capacity of *Embedded Generators* to take up *load*;

- (vi) any additional option value (where this value has not already been included in the other classes of market benefits) gained or foregone from implementing the credible option with respect to the likely future investment needs of the *National Electricity Market* ;
 - (vii) changes in *electrical energy losses*; and
 - (viii) any other class of market benefit determined to be relevant by the *AER*.
- (5) with respect to the classes of market benefits set out in subparagraphs (4)(i) and (ii), ensure that, if a credible option is for reliability corrective action, the consideration and any quantification assessment of these classes of market benefits will only apply insofar as the market benefit delivered by that credible option exceeds the minimum standard required for reliability corrective action;
- (6) require the RIT-D proponent to consider whether the following classes of costs would be associated with each credible option and, if so, quantify the:
 - (i) financial costs incurred in constructing or providing the credible option;
 - (ii) operating and maintenance costs over the operating life of the credible option;
 - (iii) cost of complying with laws, regulations and applicable administrative requirements in relation to the construction and operation of the credible option; and
 - (iv) any other financial costs determined to be relevant by the *AER*.
- (7) require a RIT-D proponent, in exercising judgement as to whether a particular class of market benefit or cost applies to each credible option, to have regard to any submissions received on the non-network options report and/or draft project assessment report where relevant;
- (8) provide that any market benefit or cost which cannot be measured as a market benefit or cost to persons in their capacity as *Generators*, *Distribution Network Service Providers*, *Transmission Network Service Providers* or consumers of electricity must not be included in any analysis under the *regulatory investment test for distribution*; and
- (9) specify:
 - (i) the method or methods permitted for estimating the magnitude of the different classes of market benefits;

- (ii) the method or methods permitted for estimating the magnitude of the different classes of costs;
 - (iii) the appropriate method and value for specific inputs, where relevant, for determining the discount rate or rates to be applied;
 - (iv) that a sensitivity analysis is required for modelling the cost-benefit analysis; and
 - (v) that the credible option that maximises the present value of net economic benefit to all those who produce, consume or transport electricity in the *National Electricity Market* may, in some circumstances, be a negative net economic benefit (that is, a net economic cost) where the *identified need* is for reliability corrective action.
- (d) A RIT-D proponent may, under the *regulatory investment test for distribution*, quantify each class of market benefits under paragraph (c)(4) where the RIT-D proponent considers that:
- (1) any applicable market benefits may be material; or
 - (2) the quantification of market benefits may alter the selection of the preferred option.
- (e) The *regulatory investment test for distribution* permits a single assessment of an integrated set of related and similar investments.

5.17.2 Regulatory investment test for distribution application guidelines

- (a) At the same time as the AER develops and publishes a proposed *regulatory investment test for distribution* under the *distribution consultation procedure*, the AER must also develop and publish guidelines for the operation and application of the *regulatory investment test for distribution* in accordance with the *distribution consultation procedures* and this clause 5.17.2.
- (b) The regulatory investment test for distribution application guidelines must:
- (1) give effect to and be consistent with this clause 5.17.2 and clauses 5.15.2, 5.17.3, 5.17.4 and 5.17.5; and
 - (2) provide guidance on:
 - (i) the operation and application of the *regulatory investment test for distribution*;
 - (ii) the process to be followed in applying the *regulatory investment test for distribution*;

- (iii) what will be considered to be a material and adverse *National Electricity Market* impact for the purposes of the definition of *interested parties* in clause 5.15.1.
 - (iv) how disputes raised in relation to the *regulatory investment test for distribution* and its application will be addressed and resolved.
- (c) The regulatory investment test for distribution application guidelines must provide guidance and worked examples as to:
 - (1) how to make a determination under clause 5.17.4(c);
 - (2) what constitutes a credible option;
 - (3) the suitable modelling periods and approaches to scenario development;
 - (4) the classes of market benefits to be considered for the purposes of clause 5.17.1(c)(4);
 - (5) the acceptable methodologies for valuing the market benefits of a credible option referred to in clause 5.17.1(c)(4);
 - (6) acceptable methodologies for valuing the costs of a credible option referred to in clause 5.17.1(c)(6);
 - (7) the appropriate approach to undertaking a sensitivity analysis for the purposes of clause 5.17.1(c)(9)(iv);
 - (8) the appropriate approaches to assessing uncertainty and risks; and
 - (9) what may constitute an externality under the *regulatory investment test for distribution*.
- (d) The AER must develop and *publish* the first *regulatory investment test for distribution* and regulatory investment test for distribution application guidelines by 31 August 2013, and there must be a *regulatory investment test for distribution* and regulatory investment test for distribution application guidelines in force at all times after that date.
- (e) The AER may, from time to time, amend or replace the *regulatory investment test for distribution* and regulatory investment test for distribution application guidelines in accordance with the *distribution consultation procedures*, provided the AER *publishes* any amendments to, or replacements of, the *regulatory investment test for distribution* or regulatory investment test for distribution application guidelines at the same time.
- (f) An amendment referred to in paragraph (e) does not apply to a current application of the *regulatory investment test for distribution* and the

regulatory investment test for distribution application guidelines under the *Rules* by a RIT-D proponent.

- (g) For the purposes of paragraph (f), a “current application” means any action or process initiated under the *Rules* which relies on or is referenced to the *regulatory investment test for distribution* and/or the regulatory investment test for distribution application guidelines and is not completed at the date of the relevant amendment to the *regulatory investment test for distribution* and/or the regulatory investment test for distribution application guidelines.
- (h) The *AER* may *publish* the *regulatory investment test for distribution*, the regulatory investment test for distribution application guidelines, the *regulatory investment test for transmission* and the regulatory investment test for transmission application guidelines in a single document.

5.17.3 Projects subject to the regulatory investment test for distribution

- (a) A RIT-D proponent must apply the *regulatory investment test for distribution* to a RIT-D project except in circumstances where:
 - (1) the RIT-D project is required to address an urgent and unforeseen *network* issue that would otherwise put at risk the reliability of the *distribution network* or a significant part of that *network* as described in paragraph (c);
 - (2) the estimated capital cost to the *Network Service Providers* affected by the RIT-D project of the most expensive potential credible option to address the *identified need* is less than \$5 million (as varied in accordance with a cost threshold determination);
 - (3) the cost of addressing the *identified need* is to be fully recovered through charges other than charges in respect of *standard control services* or *prescribed transmission services*;
 - (4) the *identified need* can only be addressed by expenditure on a *connection asset* which provides services other than *standard control services* or *prescribed transmission services*;
 - (5) the RIT-D project is related to the maintenance of existing assets and is not intended to *augment* a *network* or replace *network* assets;
 - (6) **[Deleted]**; or
 - (7) the proposed expenditure relates to protected event EFCS investment and is not intended to *augment* a *network*.
- (b) If a potential credible option to address an *identified need* includes expenditure on a *dual function asset*, the project must be assessed under the *regulatory investment test for distribution* unless the *identified need* was identified through joint planning under rule 5.14 and the project to address the *identified need* is a RIT-T project.

- (c) For the purposes of paragraph (a)(1), a RIT-D project will be required to address an urgent and unforeseen *network* issue that would otherwise put at risk the *reliability* of the *distribution network* or a significant part of that *network* if:
 - (1) it is necessary that the assets or services to address the issue be operational within six months of the issue being identified;
 - (2) the event or circumstances causing the *identified need* was not reasonably foreseeable by, and was beyond the reasonable control of, the *Network Service Provider(s)* that identified the *identified need*;
 - (3) a failure to address the *identified need* is likely to materially adversely affect the *reliability* and *secure operating state* of the *distribution network* or a significant part of that *network*; and
 - (4) it is not a *contingent project*.
- (d) With the exception of *negotiated distribution services* and *negotiated transmission services*, for each RIT-D project to which the *regulatory investment test for distribution* does not apply in accordance with paragraph (a)(1)-(6), the *Network Service Providers* affected by the RIT-D project must ensure, acting reasonably, that the investment required to address the *identified need* is planned and developed at least cost over the life of the investment.
- (e) A RIT-D proponent must not treat different parts of an integrated solution to an *identified need* as distinct and separate options for the purposes of determining whether the *regulatory investment test for distribution* applies to each of those parts.

5.17.4 Regulatory investment test for distribution procedures

- (a) If a RIT-D project is subject to the *regulatory investment test for distribution* under clause 5.17.3, then the RIT-D proponent must consult with the following persons on the RIT-D project in accordance with this clause 5.17.4:
 - (1) all *Registered Participants*, *AEMO*, *interested parties* and non-network providers; and
 - (2) if the RIT-D proponent is a *Distribution Network Service Provider*, persons registered on its demand side engagement register.

Screening for non-network options

- (b) Subject to paragraph (c), a RIT-D proponent must prepare and *publish* a non-network options report under paragraph (e) if a RIT-D project is subject to the *regulatory investment test for distribution* under clause 5.17.3.
- (c) A RIT-D proponent is not required to comply with paragraph (b) if it determines on reasonable grounds that there will not be a *non-network*

option that is a potential credible option, or that forms a significant part of a potential credible option, for the RIT-D project to address the identified need.

- (d) If a RIT-D proponent makes a determination under paragraph (c), then as soon as possible after making the determination it must *publish* a notice setting out the reasons for its determination, including any methodologies and assumptions it used in making its determination.

Non-network options report

- (e) A non-network options report must include:
 - (1) a description of the *identified need*;
 - (2) the assumptions used in identifying the *identified need* (including, in the case of proposed reliability corrective action, why the RIT-D proponent considers reliability corrective action is necessary);
 - (3) if available, the relevant annual deferred *augmentation* charge associated with the *identified need*;
 - (4) the technical characteristics of the *identified need* that a non-network option would be required to deliver, such as:
 - (i) the size of *load* reduction or additional *supply*;
 - (ii) location;
 - (iii) contribution to *power system security* or *reliability*;
 - (iv) contribution to *power system* fault levels as determined under clause 4.6.1; and
 - (v) the operating profile;
 - (5) a summary of potential credible options to address the *identified need*, as identified by the RIT-D proponent, including *network options* and *non-network options*.
 - (6) for each potential credible option, the RIT-D proponent must provide information, to the extent practicable, on:
 - (i) a technical definition or characteristics of the option;
 - (ii) the estimated construction timetable and commissioning date (where relevant); and
 - (iii) the total indicative cost (including capital and operating costs); and
 - (7) information to assist non-network providers wishing to present alternative potential credible options including details of how to

submit a non-*network* proposal for consideration by the RIT-D proponent.

- (f) The non-network options report must be *published* in a timely manner having regard to the ability of parties to identify the scope for, and develop, alternative potential credible options or variants to the potential credible options.
- (g) At the same time as *publishing* the non-network options report, the RIT-D proponent, if it is a *Distribution Network Service Provider*, must notify persons registered on its demand side engagement register of the report's *publication*.
- (h) *Registered Participants, AEMO, interested parties*, non-network providers and (if relevant) persons registered on the *Distribution Network Service Provider's* demand side engagement register must be provided with not less than three months in which to make submissions on the non-network options report from the date that the RIT-D proponent *publishes* the report.

Draft project assessment report

- (i) If one or more *Network Service Providers* wishes to proceed with a RIT-D project following a determination under paragraph (c) or the *publication* of a non-network options report then the RIT-D proponent, having regard, where relevant, to any submissions received on the non-network options report, must prepare and *publish* a draft project assessment report within:
 - (1) 12 months of:
 - (i) the end of the consultation period on a non-network options report; or
 - (ii) where a non-network options report is not required, the publication of a notice under paragraph (d); or
 - (2) any longer time period as agreed to in writing by the *AER*.
- (j) The draft project assessment report must include the following:
 - (1) a description of the *identified need* for the investment;
 - (2) the assumptions used in identifying the *identified need* (including, in the case of proposed reliability corrective action, reasons that the RIT-D proponent considers reliability corrective action is necessary);
 - (3) if applicable, a summary of, and commentary on, the submissions on the non-network options report;
 - (4) a description of each credible option assessed;

- (5) where a *Distribution Network Service Provider* has quantified market benefits in accordance with clause 5.17.1(d), a quantification of each applicable market benefit for each credible option;
 - (6) a quantification of each applicable cost for each credible option, including a breakdown of operating and capital expenditure;
 - (7) a detailed description of the methodologies used in quantifying each class of cost and market benefit;
 - (8) where relevant, the reasons why the RIT-D proponent has determined that a class or classes of market benefits or costs do not apply to a credible option;
 - (9) the results of a net present value analysis of each credible option and accompanying explanatory statements regarding the results;
 - (10) the identification of the proposed preferred option;
 - (11) for the proposed preferred option, the RIT-D proponent must provide:
 - (i) details of the technical characteristics;
 - (ii) the estimated construction timetable and commissioning date (where relevant);
 - (iii) the indicative capital and operating cost (where relevant);
 - (iv) a statement and accompanying detailed analysis that the proposed preferred option satisfies the *regulatory investment test for distribution*; and
 - (v) if the proposed preferred option is for reliability corrective action and that option has a proponent, the name of the proponent; and
 - (12) contact details for a suitably qualified staff member of the RIT-D proponent to whom queries on the draft report may be directed.
- (k) The RIT-D proponent must *publish* a request for submissions on the matters set out in the draft project assessment report, including the proposed preferred option, from:
- (1) *Registered Participants, AEMO, non-network providers and interested parties*; and
 - (2) if the RIT-D proponent is a *Distribution Network Service Provider*, persons on its demand side engagement register.
- (l) If the proposed preferred option has the potential to, or is likely to, have an adverse impact on the quality of service experienced by consumers of electricity, including:

- (1) anticipated changes in voluntary *load* curtailment by consumers of electricity; or
- (2) anticipated changes in involuntary *load shedding* and customer interruptions caused by *network* outages,

then the RIT-D proponent must consult directly with those affected customers in accordance with a process reasonably determined by the RIT-D proponent.

- (m) The consultation period on the draft project assessment report must not be less than six weeks from the *publication* of the report.

Exemption from the draft project assessment report

- (n) A RIT-D proponent is not required to prepare and *publish* a draft project assessment report under paragraph (i) if:
 - (1) the RIT-D proponent made a determination under paragraph (c) and has *published* a notice under paragraph (d); and
 - (2) the estimated capital cost to the *Network Service Providers* affected by the RIT-D project of the proposed preferred option is less than \$10 million (varied in accordance with a cost threshold determination).

Final project assessment report

- (o) As soon as practicable after the end of the consultation period on the draft project assessment report, the RIT-D proponent must, having regard to any submissions received on the draft project assessment report, *publish* a final project assessment report.
- (p) If the RIT-D project is exempt from the draft project assessment report stage under paragraph (n), the RIT-D proponent must *publish* the final project assessment report as soon as practicable after the publication of the notice under paragraph (d).
- (q) At the same time as *publishing* the final project assessment report, a RIT-D proponent that is a *Distribution Network Service Provider* must notify persons on its demand side engagement register of the report's *publication*.
- (r) The final project assessment report must set out:
 - (1) if a draft project assessment report was prepared:
 - (i) the matters detailed in that report as required under paragraph (j); and
 - (ii) a summary of any submissions received on the draft project assessment report and the RIT-D proponent's response to each such submission; and

- (2) if no draft project assessment report was prepared, the matters specified in paragraph (j).
- (s) If the preferred option outlined in the final project assessment report has an estimated capital cost to the *Network Service Providers* affected by the RIT-D project of less than \$20 million (varied in accordance with a cost threshold determination), the RIT-D proponent may discharge its obligations to *publish* its final project assessment report under paragraphs (o) and (p) by including the final project assessment report as part of its *Distribution Annual Planning Report* (where the RIT-D proponent is a *Distribution Network Service Provider*) or its *Transmission Annual Planning Report* (where the RIT-D proponent is a *Transmission Network Service Provider*).

Reapplication of regulatory investment test for distribution

- (t) If:
 - (1) a RIT-D proponent has *published* a final project assessment report in respect of a RIT-D project;
 - (2) a *Network Service Provider* still wishes to undertake the RIT-D project to address the *identified need*; and
 - (3) there has been a material change in circumstances which, in the reasonable opinion of the RIT-D proponent means that the preferred option identified in the final project assessment report is no longer the preferred option,then the RIT-D proponent must reapply the *regulatory investment test for distribution* to the RIT-D project, unless otherwise determined by the *AER*.
- (u) For the purposes of paragraph (t), a material change in circumstances may include, but is not limited to, a change to the key assumptions used in identifying:
 - (1) the *identified need* described in the final project assessment report; or,
 - (2) the credible options assessed in, the final project assessment report.
- (v) When making a determination under paragraph (t) the *AER* must have regard to:
 - (1) the credible options (other than the preferred option) identified in the final project assessment report;
 - (2) the change in circumstances identified by the RIT-D proponent; and
 - (3) whether a failure to promptly undertake the RIT-D project is likely to materially affect the *reliability* and *secure operating state* of the *distribution network* or a significant part of that *network*.

5.17.5 Disputes in relation to application of regulatory investment test for distribution

- (a) *Registered Participants*, the *AEMC*, *Connection Applicants*, *Intending Participants*, *AEMO*, *interested parties*, and non-network providers may, by notice to the *AER*, dispute conclusions made by the RIT-D proponent in the final project assessment report on the grounds that:
 - (1) the RIT-D proponent has not applied the *regulatory investment test for distribution* in accordance with the *Rules*; or
 - (2) there was a manifest error in the calculations performed by the RIT-D proponent in applying the *regulatory investment test for distribution*.
- (b) A dispute under this clause 5.17.5 may not be raised in relation to any matters set out in the final project assessment report which:
 - (1) are treated as externalities by the *regulatory investment test for distribution*; or
 - (2) relate to an individual's personal detriment or property rights.
- (c) Within 30 days of the date of *publication* of the final project assessment report under clause 5.17.4(o), (p) or (s) (as the case may be), the party disputing matters in the final project assessment report (a disputing party) must:
 - (1) give notice of the dispute in writing setting out the grounds for the dispute (the dispute notice) to the *AER*; and
 - (2) at the same time, give a copy of the dispute notice to the RIT-D proponent.
- (d) Subject to paragraph (h), within 40 days of receipt of the dispute notice or within an additional period of up to 60 days where the *AER* notifies a relevant party that the additional time is required to make a determination because of the complexity or difficulty of the issues involved, the *AER* must either:
 - (1) reject any dispute by written notice to the person who initiated the dispute if the *AER* considers that the grounds for the dispute are invalid, misconceived or lacking in substance; and
 - (2) notify the RIT-D proponent that the dispute has been rejected; or
 - (3) subject to paragraph (f) and (g), make and *publish* a determination:
 - (i) directing the RIT-D proponent to amend the matters set out in the final project assessment report; or

- (ii) stating that, based on the grounds of the dispute, the RIT-D proponent will not be required to amend the final project assessment report.
- (e) A RIT-D proponent must comply with an *AER* determination made under subparagraph (d)(3)(i) within a timeframe specified by the *AER* in its determination.
- (f) In making a determination under paragraph (d)(3), the *AER*:
 - (1) must only take into account information and analysis that the RIT-D proponent could reasonably be expected to have considered or undertaken at the time that it performed the *regulatory investment test for distribution*;
 - (2) must *publish* its reasons for making a determination;
 - (3) may disregard any matter raised by the disputing party or the RIT-D proponent that is misconceived or lacking in substance; and
 - (4) where making a determination under subparagraph (d)(3)(i), must specify a reasonable timeframe for the RIT-D proponent to comply with the *AER*'s direction to amend the matters set out in the final project assessment report.
- (g) The *AER* may only make a determination under subparagraph (d)(3)(i) if it determines that:
 - (1) the RIT-D proponent has not correctly applied the *regulatory investment test for distribution* in accordance with the *Rules*; or
 - (2) there was a manifest error in the calculations performed by the RIT-D proponent in applying the *regulatory investment test for distribution*.
- (h) The *AER* may request additional information regarding the dispute from the disputing party or the RIT-D proponent in which case the period of time for rejecting a dispute under paragraph (d)(1) or making a determination under paragraph (d)(3) is automatically extended by the time it takes the relevant party to provide the additional information to the *AER* provided:
 - (1) the *AER* makes the request for additional information at least seven days prior to the expiry of the relevant period; and
 - (2) the RIT-D proponent or disputing party provides the additional information within 14 days of receipt of the request under subparagraph (1).
- (i) A disputing party or the RIT-D proponent (as the case may be) must as soon as reasonably practicable provide any information requested under paragraph (h) to the *AER*.

5.18 Construction of funded augmentations

- (a) The term *Transmission Network Service Provider* when used in this rule 5.18 is not intended to refer to, and is not to be read or construed as referring to, any *Transmission Network Service Provider* in its capacity as a *Market Network Service Provider*.
- (b) A *Transmission Network Service Provider* who proposes to construct a *funded augmentation* must make available to all *Registered Participants* and *AEMO* a notice which must set out:
 - (1) a detailed description of the proposed *funded augmentation*;
 - (2) all relevant technical details concerning the proposed *funded augmentation*, the impact of the *funded augmentation* on the relevant *transmission network's Transmission Network Users* and the construction timetable and commissioning date for the *funded augmentation*;
 - (3) an *augmentation technical report* prepared by *AEMO* if, and only if, the *funded augmentation* is reasonably likely to have a *material inter-network impact* and the *Transmission Network Service Provider* has not received consent to proceed with construction from all *Transmission Network Service Providers* whose *transmission networks* are materially affected by the *funded augmentation*. In assessing whether a *funded augmentation* is reasonably likely to have a *material inter-network impact*, the *Transmission Network Service Provider* must have regard to the objective set of criteria *published* by *AEMO* (if any such criteria have been *published* by *AEMO*).
- (c) The *Transmission Network Service Provider* must provide a summary of the notice prepared in accordance with paragraph (b) to *AEMO*. Within 3 *business days* of receipt of the summary, *AEMO* must *publish* the summary on its website.
- (d) The *Transmission Network Service Provider* must consult with any *interested parties*, in accordance with the *Rules consultation procedures*, on any matter set out in the notice prepared in accordance with paragraph (b).

5.18A Large generator connections

5.18A.1 Definitions

- (a) In this rule 5.18A:

assessment date means, in respect of a new large generator connection, the first TAPR date that falls no earlier than 18 months after the commissioning date for that large generator connection.

commissioning date means, in respect of a new large generator connection, the date of commencement of commissioning of the *connection* and *connected facilities* of that large generator connection.

connections register has the meaning given in clause 5.18A.2.

impact assessment has the meaning given in clause 5.18A.3.

large generator connection means *generating units* that:

- (1) have a *nameplate rating* of 30MW or greater; or
- (2) are part of a group of *generating units* connected at a common *connection point* with a combined *nameplate rating* of 30 MW or greater,

which are owned, operated or controlled by a *Generator* and are *connected* to the *Transmission Network Service Provider's network*.

TAPR date means the date under clause 5.12.2 by which a *Transmission Network Service Provider* must publish its *Transmission Annual Planning Report*.

5.18A.2 Register of large generator connections

- (a) A *Transmission Network Service Provider* must establish, maintain and publish, on its website, a register of information regarding large generator connections (**connections register**), including but not limited to the following information in respect of each large generator connection:
 - (1) location of the *connection point* for the large generator connection;
 - (2) person who is registered by *AEMO* as a *Generator* in respect of the large generator connection at that *connection point*;
 - (3) technology of the *generating units* (e.g. hydro, open cycle gas turbine, steam sub-critical etc);
 - (4) aggregate *nameplate rating* capacity of all *generating units* comprised in the large generator connection;
 - (5) date of cessation of a person's registration with *AEMO* as *Generator* in respect of the large generator connection, where relevant; and
 - (6) impact assessment of that large generator connection, prepared in accordance with clause 5.18A.3 (if any).
- (b) Subject to satisfying any relevant exemptions contained in clause 8.6.2, the *Transmission Network Service Provider* must not publish *confidential information* as part of, or in connection with, the connections register.
- (c) The *Transmission Network Service Provider* must:

- (1) include in the first connections register the details contained in subparagraphs (a)(1)-(5), for all large generator connections on its *network* with a commissioning date after 13 December 1998; and
- (2) by the TAPR date each year, update the connections register to include:
 - (i) the details contained in subparagraphs (a)(1)-(6) for all new large generator connections on its *network*; and
 - (ii) updated information for all large generator connections contained in the connections register where the information listed in subparagraphs (a)(1)-(5) has changed.

5.18A.3 Impact assessment of large generator connections

- (a) Following the commissioning date of a new large generator connection on a *Transmission Network Service Provider's network*, the *Transmission Network Service Provider* must prepare an assessment of the impact of that large generator connection on its *network* by the assessment date (**impact assessment**).
- (b) An impact assessment prepared in accordance with this clause 5.18A.3 is not required to be updated by the *Transmission Network Service Provider* at any future point in time.
- (c) The purpose of the impact assessment is to identify any material effects of the large generator connection on the *Transmission Network Service Provider's network*, as compared with the absence of that large generator connection on its *network*.
- (d) Subject to paragraph (e), when preparing an impact assessment, a *Transmission Network Service Provider* must consider whether the new large generator connection has resulted in changes to:
 - (1) *ancillary service* requirements to the extent such changes relate specifically to the *Transmission Network Service Provider's network*;
 - (2) the level, and pattern, of *network* congestion on its *network*;
 - (3) the timing of expenditure for the *Transmission Network Service Provider* on its *network*; and
 - (4) the level of *interconnector power transfer capability* on its *network*,and if such changes have occurred, include details of the changes in the impact assessment to the extent they have had a material impact on the *Transmission Network Services Provider's network*.
- (e) If the *Transmission Network Service Provider* considers any of the changes referred to in paragraph (d) to have an immaterial impact on its *network*, outline the reasons why it has determined such impacts to be immaterial.

- (f) The impact assessment must:
 - (1) be based on historical data;
 - (2) consider the impacts referred to in paragraph (d) for the 12 months immediately preceding the commissioning date as compared to the 12 months following the commissioning date; and
 - (3) include a detailed description of the methodologies or data used in quantifying each impact referred to in paragraph (d).

5.18B Completed embedded generation projects

5.18B.1 Definitions

- (a) For the purposes of this rule 5.18B:

completed embedded generation projects means all *embedded generating units* owned, operated or controlled by:

- (1) a *Generator*; or
- (2) a person who was required to apply to *AEMO* for an exemption from the requirement to register as a *Generator* in respect of an *embedded generating unit*,

and are connected to the *Distributor Network Service Provider's network*.

DAPR date has the same meaning as in clause 5.13.2.

5.18B.2 Register of completed embedded generation projects

- (a) In relation to completed embedded generation projects, a *Distribution Network Service Provider* must establish and *publish*, on its website, a register of the *plant*, including but not limited to:
 - (1) technology of *generating unit* (e.g. *synchronous generating unit*, induction generator, photovoltaic array, etc) and its make and model;
 - (2) maximum power *generation* capacity of all *embedded generating units* comprised in the relevant *generating system*;
 - (3) contribution to fault levels;
 - (4) the size and rating of the relevant *transformer*;
 - (5) a single line diagram of the *connection* arrangement;
 - (6) *protection systems* and communication systems;
 - (7) *voltage* control and *reactive power capability*; and

- (8) details specific to the location of a *facility connected* to the *network* that are relevant to any of the details in subparagraphs (1)-(7).
- (b) Subject to satisfying any relevant exemptions contained in clause 8.6.2, the *Distribution Network Service Provider* must not *publish confidential information* as part of, or in connection with, the register.
- (c) The *Distribution Network Service Provider* must:
 - (1) include in the register the details contained in paragraph (b) for all completed embedded generation projects within the 5 year period preceding the establishment of the register; and
 - (2) update the register by the DAPR date each year thereafter with details of all completed embedded generation projects in the 5 year period preceding the DAPR date.

5.19 SENE Design and Costing Study

5.19.1 Definitions

In this rule 5.19:

forecast generation scenarios means different assumptions made by the *Transmission Network Service Provider* conducting a SENE Design and Costing Study about the likely timing and capacity of future *connections* of *generating systems* in the geographic area relevant to the study and the probability of that capacity materialising.

Scale Efficient Network Extension means an *augmentation* to a *transmission network* which is capable of facilitating the future *connection* to the *transmission network* of two or more *generating systems* in the same geographic area that have different owners, operators or controllers.

SENE Design and Costing Study means a study undertaken by a *Transmission Network Service Provider* in accordance with this rule 5.19 which compares the cost of forecast *connections* of *generating systems* to a *transmission network augmented* by a Scale Efficient Network Extension and the cost of those forecast *connections connecting* to the *national grid* in the same geographic area in the absence of the Scale Efficient Network Extension.

SENE Study Proponent means a person that makes a request under clause 5.19.2(a).

SENE study information means:

- (a) any data or information provided to a *Transmission Network Service Provider* by a *Network Service Provider* under clause 5.19.5 for the purposes of a SENE Design and Costing Study;
- (b) any data or information provided to a *Transmission Network Service Provider* by a person for the purposes of a SENE Design and Costing Study,

provided that the person has registered its interest in response to an invitation under clause 5.19.3(e)(3); and

- (c) any data or information contained in a SENE Design and Costing Study published under clause 5.19.6.

5.19.2 Interpretation

In this rule 5.19:

- (a) a reference to a *Transmission Network Service Provider* does not include a *Distribution Network Service Provider* in its capacity as owner, controller or operator of a *dual function asset*; and
- (b) a reference to a *transmission network* does not include *dual function assets*.

5.19.3 Request for SENE Design and Costing Study

- (a) Any person may request a *Transmission Network Service Provider* to undertake a SENE Design and Costing Study in relation to the construction of a Scale Efficient Network Extension for *connection* to its *transmission network*.
- (b) If the *Transmission Network Service Provider* receives a request under paragraph (a), the *Transmission Network Service Provider* must undertake a SENE Design and Costing Study if the following conditions are satisfied:
 - (1) at the time the study is requested, the *Transmission Network Service Provider* is not undertaking another SENE Design and Costing Study in relation to the same geographic area;
 - (2) it has agreed the scope and timing of the SENE Design and Costing Study with the SENE Study Proponent in accordance with paragraph (c); and
 - (3) the SENE Study Proponent or any other person or group of persons (which may include the SENE Study Proponent) has agreed to pay all the reasonable costs incurred by the *Transmission Network Service Provider* in undertaking the study, including any costs it incurs in meeting its obligation under clause 5.19.5(b).
- (c) The *Transmission Network Service Provider*:
 - (1) must in accordance with clause 5.19.4, negotiate with the SENE Study Proponent in good faith to reach agreement on the cost, scope and timeframes for undertaking the SENE Design and Costing Study; and
 - (2) without limiting subparagraph (1), must not unreasonably withhold its consent to undertake a SENE Design and Costing Study in accordance with the scope and timeframes for the study proposed by the SENE Study Proponent.

- (d) The *Transmission Network Service Provider* must undertake the SENE Design and Costing Study in accordance with the agreement reached with the SENE Study Proponent under paragraph (c).
- (e) As soon as practicable after the conditions referred to in paragraph (b) are satisfied in relation to a SENE Design and Costing Study, the relevant *Transmission Network Service Provider* must publish on its website a notice of the commencement of the study. A notice under this paragraph (e) must:
 - (1) specify the geographic area that is being considered in the study;
 - (2) specify the dates agreed between the *Transmission Network Service Provider* and the SENE Study Proponent for completion of the study and any other milestones for the study;
 - (3) invite any person who may be interested in providing SENE study information to the *Transmission Network Service Provider* to register their interest by written notice to the *Transmission Network Service Provider* within a period specified in the notice, being a period not less than 10 *business days* from the date the notice is published; and
 - (4) include a statement to the effect that by registering with the *Transmission Network Service Provider* in accordance with subparagraph (3), the person is giving consent to the use and disclosure of the SENE study information subsequently provided by that person in accordance with clause 5.19.7.

5.19.4 Content of SENE Design and Costing Study

In negotiating the scope of the SENE Design and Costing Study with the SENE Study Proponent under clause 5.19.3(c), the *Transmission Network Service Provider* must consider the following matters:

- (a) the construction of future *generating systems* and the capacity of those *generating systems* in the relevant geographic area that are considered likely to require *connection* to the *national grid*, based on forecast generation scenarios;
- (b) having regard to each forecast generation scenario:
 - (1) the most appropriate location of the point of *connection* of the Scale Efficient Network Extension to the present *transmission network*;
 - (2) the configuration of the Scale Efficient Network Extension including the point at which *generating systems* may connect to the Scale Efficient Network Extension;
 - (3) the capacity and technical specifications of the Scale Efficient Network Extension;

- (4) indicative development, operating and other costs for the Scale Efficient Network Extension, based on an indicative timetable for development of the Scale Efficient Network Extension;
- (5) opportunities for developing the Scale Efficient Network Extension incrementally;
- (6) the likely impact of the Scale Efficient Network Extension on its *transmission network*, including the type and estimated cost of any other *augmentation* that would be required to ensure that the Scale Efficient Network Extension did not increase congestion on its *transmission network*;
- (7) a comparison between:
 - (i) the estimated total project expenditure (excluding any revenue impact) of forecast *connections of generating systems* to the *Transmission Network Service Provider's network* as *augmented* by a Scale Efficient Network Extension; and
 - (ii) the estimated total project expenditure (excluding any revenue impact) of forecast *connections of generating systems* to the *Transmission Network Service Provider's network*, or, if different, the *Local Network Service Provider's network*, in the same geographic area in the absence of the Scale Efficient Network Extension; and
- (c) the most recent *NTNDP* and the *Transmission Network Service Provider's* most recent *Transmission Annual Planning Report* (to the extent relevant).

5.19.5 Co-operation of other Network Service Providers

- (a) A *Network Service Provider* must co-operate with any *Transmission Network Service Provider* that is undertaking a SENE Design and Costing Study to enable that *Transmission Network Service Provider* to undertake the study expeditiously and consider the matters referred to in clause 5.19.4.
- (b) A *Transmission Network Service Provider* may request data or information (including *confidential information*) or assistance from another *Network Service Provider* for the purposes of undertaking a SENE Design and Costing Study but must meet the reasonable costs of the *Network Service Provider* in complying with the request.
- (c) A *Network Service Provider* may, but is not required to, provide such data, information or assistance as requested under paragraph (b). If a *Network Service Provider* provides such information or data it must identify any information or data that is *confidential information*.

5.19.6 Publication of SENE Design and Costing Study report

As soon as practicable after the SENE Design and Costing Study is completed, the *Transmission Network Service Provider* that undertook the study must publish on its website a report of the study that includes:

- (a) a description of the scope of the SENE Design and Costing Study;
- (b) a description of the Scale Efficient Network Extension for each forecast generation scenario considered in the study, including its configuration;
- (c) any assumptions made as part of the study;
- (d) a summary of the key matters considered as part of the SENE Design and Costing Study; and
- (e) the study's conclusions as well as an explanation of the reasoning which underlies those conclusions.

5.19.7 Provision and use of information

- (a) The SENE study information must:
 - (1) be prepared, given and used in good faith; and
 - (2) not be disclosed or made available by the relevant *Transmission Network Service Provider* to a third party except as set out in this clause 5.19.7 or in accordance with rule 8.6 as if it were *confidential information* for the purposes of that rule.
- (b) A *Transmission Network Service Provider* conducting a SENE Design and Costing Study may disclose SENE study information to another *Network Service Provider* if the relevant *Transmission Network Service Provider* considers the data or information is materially relevant to that provider for the purposes of providing information or assistance under clause 5.19.5.
- (c) If a *Transmission Network Service Provider* intends to disclose information under paragraph (b), it must first advise the relevant information provider of the extent of the disclosure, unless the information may be disclosed in accordance with rule 8.6.
- (d) A *Transmission Network Service Provider* may:
 - (1) use SENE study information to prepare the relevant SENE Design and Costing Study or any future SENE Design and Costing Study; and
 - (2) subject to paragraph (e), include SENE study information in a report published under clause 5.19.6.
- (e) A *Transmission Network Service Provider* must not include in a report published under clause 5.19.6, SENE study information which the relevant

Network Service Provider has identified as *confidential information* under clause 5.19.5(c).

5.20 National transmission planning

In this rule:

NSCAS trigger date means for any *NSCAS gap* identified in clause 5.20.2(c)(8)(i), the date that the *NSCAS gap* first arises.

NSCAS tender date means for any *NSCAS gap* identified in clause 5.20.2(c)(8)(i), the date or indicative date that *AEMO* would need to act so as to call for offers to acquire *NSCAS* to meet that *NSCAS gap* by the relevant *NSCAS* trigger date in accordance with clause 3.11.3(c)(4).

5.20.1 Preliminary consultation

- (a) By no later than 30 January each year, *AEMO* must *publish*:
 - (1) a document that sets out the *NTNDP inputs* that it proposes to use for the preparation or revision of the *NTNDP* for the following calendar year; and
 - (2) a document (the **statement of material issues**):
 - (i) summarising the issues *AEMO* considers to be the material issues involved in the preparation or revision of the *NTNDP* for the following calendar year; and
 - (ii) giving an indication of *AEMO*'s preliminary views on how those issues should be resolved; and
 - (3) the *inertia requirements methodology* and the *system strength requirements methodology*.
- (b) At the same time as it *publishes* the documents referred to in paragraph (a), *AEMO* must *publish* an invitation for written submissions to be made to *AEMO* within a period (at least 30 *business days*) specified in the invitation on:
 - (1) the proposed *NTNDP inputs*; and
 - (2) the content of the *NTNDP* as it applies for the current year, including the location of the current and potential *national transmission flow paths* identified in the *NTNDP*; and
 - (3) the issues raised in the statement of material issues; and
 - (4) the *inertia requirements methodology* and the *system strength requirements methodology*.

- (c) A person may make a written submission to *AEMO* on the proposed *NTNDP inputs*, the content of the *NTNDP* as it applies for the current year, the *inertia requirements methodology*, the *system strength requirements methodology* or an issue raised in the statement of material issues within the period specified in the invitation.

5.20.2 Publication of NTNDP

- (a) By no later than 31 December each year, *AEMO* must *publish* the *NTNDP* for the following year.
- (b) In preparing the *NTNDP* that is to be *published* under paragraph (a), *AEMO* must:
 - (1) take into account the submissions made in response to the invitation referred to in clause 5.20.1(b); and
 - (2) consider the following matters:
 - (i) the quantity of electricity that flowed, the periods in which the electricity flowed, and *constraints* on the *national transmission flow paths* over the previous year;
 - (ii) the forecast quantity of electricity that is expected to flow, the periods in which the electricity is expected to flow, and the magnitude and significance of future *network losses* and *constraints*, on the current and potential *national transmission flow paths* over the year in which the *NTNDP* is to apply or some other period to which a scenario that is used for the purposes of the *NTNDP* applies;
 - (iii) the projected capabilities of the *national transmission grid*, and the *network support and control ancillary services* required to support the existing and future capabilities of the *national transmission grid*, under each of the scenarios that is being used for the purposes of the *NTNDP*;
 - (iv) relevant intra-jurisdictional developments and any incremental works that may be needed to co-ordinate *national transmission flow path* planning with intra-jurisdictional planning;
 - (v) such other matters as *AEMO*, in consultation with the *participating jurisdictions*, considers appropriate; and
 - (3) have regard to the following documents:
 - (i) the most recent *Transmission Annual Planning Reports* that have been *published*;
 - (ii) the most recent *statement of opportunities* that has been *published*;

- (iii) the most recent gas statement of opportunities published under the National Gas Law;
 - (iv) the current revenue determination for each *Transmission Network Service Provider*;
 - (v) any other documents that *AEMO* considers relevant.
- (c) An *NTNDP* that is *published* under paragraph (a) must:
 - (1) consider and assess an appropriate course for the efficient development of the *national transmission grid* for a planning horizon of at least 20 years from the beginning of the year in which the *NTNDP* applies; and
 - (2) take into account all *transmission elements* which are part of, or materially affect, the transmission capability of any current or potential *national transmission flow paths*; and
 - (3) take into account all *NSCAS* provided; and
 - (4) identify a range of credible scenarios for the geographic pattern of the demand for, and supply of, electricity for the planning horizon of the *NTNDP*; and
 - (5) identify the location of current *national transmission flow paths* and specify their transmission capability; and
 - (6) identify the location of the potential *national transmission flow paths* over the planning horizon of the *NTNDP* under each of the scenarios referred to in subparagraph (3); and
 - (7) specify a development strategy for each current and potential *national transmission flow path* in accordance with clause 5.20.3; and
 - (8) include an assessment that identifies:
 - (i) any *NSCAS gap*; and
 - (ii) for any *NSCAS gap* identified in subparagraph (i) required to maintain *power system security* and reliability of *supply* of the *transmission network* in accordance with the *power system security standards* and the *reliability standard*, the relevant *NSCAS* trigger date;
 - (iii) for any *NSCAS gap* identified in subparagraph (i) required to maintain *power system security* and reliability of *supply* of the *transmission network* in accordance with the *power system security standards* and the *reliability standard*, the relevant *NSCAS* tender date;

- (9) report on *NSCAS* acquired by *AEMO* in the previous *NTNDP* year; and
 - (10) include a summary of the information specified in rule 3.7A in relation to congestion on each current *national transmission flow path*; and
 - (11) include a consolidated summary of the *augmentations* proposed by each *Transmission Network Service Provider* in the most recent *Transmission Annual Planning Reports* they have *published* and an analysis of the manner in which the proposed *augmentations* relate to the *NTNDP* and any previous *NTNDP*; and
 - (12) summarise the material issues arising from the submissions received in response to the invitation referred to in clause 5.20.1(b), explain how those issues have been addressed in the *NTNDP* and give reasons for not addressing any of those issues in the *NTNDP*; and
 - (13) describe the boundaries of the *inertia sub-networks* and related *inertia requirements* determined by *AEMO* under rule 5.20B since the last *NTNDP* and details of *AEMO*'s assessment of any *inertia shortfall* and *AEMO*'s forecast of any *inertia shortfall* arising at any time within a planning horizon of at least 5 years; and
 - (14) describe the *system strength requirements* determined by *AEMO* under rule 5.20C since the last *NTNDP* and details of *AEMO*'s assessment of any *fault level shortfall* and *AEMO*'s forecast of any *fault level shortfall* arising at any time within a planning horizon of at least 5 years.
- (d) *AEMO* must *publish* the first *NTNDP* (the ***NTNDP for 2011***) no later than 31 December 2010.
 - (e) If, after the *publication* of the most recent *NTNDP*, *AEMO* becomes aware of information that shows the *NTNDP* to be incorrect in a material respect, *AEMO* must *publish* a correction of the *NTNDP* as soon as practicable.

5.20.3 Development strategies for national transmission flow paths

A development strategy for a current or potential *national transmission flow path* that is specified in accordance with clause 5.20.2(c)(7) must:

- (a) be proposed for each of the scenarios referred to in clause 5.20.2(c)(4); and
- (b) to the extent reasonably practicable and appropriate, be consistent with:
 - (1) the co-optimisation of *network* and non-*network* investment; and
 - (2) the maximisation of net economic benefit to all those who produce, consume and transport electricity to the *market*; and

- (3) the service standards that are linked to the technical requirements of schedule 5.1 or in *applicable regulatory instruments*; and
- (c) take into account the following matters:
 - (1) the current or likely capacity of the *national transmission flow path*, and the need to increase that capacity to relieve current or likely *constraints* and congestion points; and
 - (2) technically feasible *network* and *non-network options* (including additional *generation* and demand side options) for relieving current or likely *constraints* or congestion points; and
 - (3) possible market benefits associated with each of the options identified under subparagraph (2); and
- (d) include a high level assessment as to:
 - (1) which of the options, or combination of options, identified under paragraph (c)(2) provides the most efficient strategy for the development of the *national transmission grid* under each of the scenarios referred to in clause 5.20.2(c)(4); and
 - (2) the manner in which each such option, or combination of options, relates to the overall development of the *power system*.

5.20.4 NTNDP database

- (a) AEMO must establish, maintain and make available to the public a database (the *NTNDP database*) that includes *NTNDP inputs* used by it in preparing the most recent *NTNDP*.
- (b) The *NTNDP inputs* for an *NTNDP* include:
 - (1) assumptions made about the cost of fuel used for the generation of electricity (including gas and coal); and
 - (2) the conversion factors used to relate the consumption of a given quantity of fuel to the production of electricity using that quantity of fuel; and
 - (3) assumptions about the capital costs associated with the generation of electricity; and
 - (4) prevailing location of generation capacity; and
 - (5) assumptions about the price of carbon; and
 - (6) electricity demand forecasts.
- (b1) Subject to paragraph (b2), AEMO must include the following in the *NTNDP database*:

- (i) any forecasts prepared under clause 5.20.6(b)(i); and
 - (ii) sufficient information used to develop the forecasts referred to in paragraph (i) to enable an understanding of how such forecasts were developed.
- (b2) The information referred to in paragraph (b1)(ii) must be included in the *NTNDP database* at the same time as, or as soon as reasonably practical after, the inclusion of the forecasts in the database.
- (d) A part of the database established for *confidential information* is not to be accessible to the public.

Note:

The disclosure of *protected information* to the public may however be authorised under the *National Electricity Law*.

5.20.5 Jurisdictional planning bodies and jurisdictional planning representatives

- (a) A *jurisdictional planning body* must provide assistance *AEMO* reasonably requests in connection with the performance of its *NTP functions*.
- (b) If there is no *jurisdictional planning body* or no *jurisdictional planning representative* for a *participating jurisdiction*, *AEMO* may assume the functions of such a body or representative under the *Rules*.

5.20.6 NTP Functions

- (a) This rule has effect for the purposes of section 49(2)(e) of the *National Electricity Law*.
- (b) The *NTP functions* also include the following:
 - (i) developing any forecasts of electricity demand at a *regional* or *connection point* level.
- (c) To avoid doubt, the *NTP functions* do not include determining the *inertia requirements* or the assessment of *inertia shortfalls* or the *system strength requirements* or the assessment of any *fault level shortfalls*.

5.20.7 Inertia and system strength requirements methodologies

- (a) The *inertia requirements methodology* determined by *AEMO* must provide for *AEMO* to take the following matters into account in determining the *secure operating level of inertia*:
 - (1) the capabilities and expected response times provided by *generating units* providing *market ancillary services* (other than the *regulating raise service* or *regulating lower service*) in the *inertia sub-network*;

- (2) the maximum *load shedding* or *generation shedding* expected to occur on the occurrence of any *credible contingency event* affecting the *inertia sub-network* when the *inertia sub-network* is islanded;
 - (3) additional *inertia* needed to account for the possibility of a reduction in *inertia* if the *contingency event* that occurs is the loss or unavailability of a *synchronous generating unit*, *synchronous condenser* or any other *facility* or service that is material in determining *inertia requirements*;
 - (4) any *constraints* that could reasonably be applied to the *inertia sub-network* when islanded to achieve a *secure operating state* and any *unserved energy* that might result from the *constraints*; and
 - (5) any other matters as AEMO considers appropriate.
- (b) The *system strength requirements methodology* determined by AEMO must provide for AEMO to take the following matters into account in determining the *fault level nodes* and the minimum *three phase fault level*:
- (1) the combination of *three phase fault levels* at each *fault level node* in the *region* that could reasonably be considered to be sufficient for the *power system* to be in a *secure operating state*;
 - (2) the maximum *load shedding* or *generation shedding* expected to occur on the occurrence of any *credible contingency event* or *protected event* affecting the *region*;
 - (3) the stability of the *region* following any *credible contingency event* or *protected event*;
 - (4) the risk of *cascading outages* as a result of any *load shedding* or *generating system* or *market network service facility* tripping as a result of a *credible contingency event* or *protected event* in the *region*;
 - (5) additional contribution to the *three phase fault level* needed to account for the possibility of a reduction in the *three phase fault level* at a *fault level node* if the *contingency event* that occurs is the loss or unavailability of a *synchronous generating unit* or any other *facility* or service that is material in determining the *three phase fault level* at the *fault level node*;
 - (6) the stability of any equipment that is materially contributing to the *three phase fault level* or *inertia* within the *region*; and
 - (7) any other matters as AEMO considers appropriate.

5.20A Frequency management planning

5.20A.1 Power system frequency risk review

- (a) *AEMO* must, through a *power system frequency risk review* under this rule, review:
 - (1) *non-credible contingency events* the occurrence of which *AEMO* expects would be likely to involve uncontrolled increases or decreases in *frequency* (alone or in combination) leading to *cascading outages*, or *major supply disruptions*;
 - (2) current arrangements for management of the *non-credible contingency events* described in sub-paragraph (1); and
 - (3) options for future management of those events.
- (b) the options referred to in subparagraph (a)(3) may include:
 - (1) new or modified *emergency frequency control schemes*;
 - (2) declaration of the event as a *protected event*;
 - (3) *network augmentation*; and
 - (4) *non-network alternatives to augmentation*.
- (c) a *power system frequency risk review* must:
 - (1) identify *non-credible contingency events* referred to in paragraph (a) that *AEMO* considers should be priorities for assessment having regard to:
 - (i) the likely *power system security* outcomes if the event occurs;
 - (ii) the likelihood of the event occurring;
 - (iii) whether in *AEMO*'s opinion there are reasonably likely to be options for management of the event that are technically feasible, and (on the basis of *AEMO*'s preliminary assessment of the estimated costs and benefits of that option) are economically feasible; and
 - (iv) other factors that *AEMO* considers relevant;
 - (2) for events identified under subparagraph (1):
 - (i) assess options for future management of the event that are technically and economically feasible;
 - (ii) assess the expected costs and time for implementation of each option and any other factors that *AEMO* considers should be taken into account in selecting a recommended option; and

- (iii) identify the recommended option or range of options;
- (3) for current *protected events*:
 - (i) assess the adequacy and costs of the arrangements for management of the event;
 - (ii) consider whether to recommend a request to the *Reliability Panel* to revoke the declaration of the event as a *protected event*; and
 - (iii) except where a recommendation is to be made under subparagraph (ii), identify any need for changes to the arrangements for management of the event and where applicable, identify the options for change and in relation to each option, the matters referred to in subparagraphs (2)(ii) and (iii); and
- (4) assess the performance of existing *emergency frequency control schemes* and identify any need to modify the scheme.

5.20A.2 Power system frequency risk review process

- (a) *AEMO* must undertake a *power system frequency risk review* at least every two years.
- (b) *AEMO* must put in place arrangements it considers appropriate to consult with and take into account the views of *Transmission Network Service Providers* in the conduct of a *power system frequency risk review*.
- (c) Where *AEMO* is considering a new or modified *emergency frequency control scheme*, *AEMO* must consult with *Distribution Network Service Providers* whose *distribution system* is likely to be directly affected by the scheme.
- (d) When undertaking a *power system frequency risk review*, *AEMO* may consult with any other parties it considers appropriate, including without limitation, *Jurisdictional System Security Coordinators*.

5.20A.3 Power system frequency risk review report

- (a) On completion of a *power system frequency risk review*, *AEMO* must publish a draft report setting out its findings and recommendations on the matters set out in clause 5.20A.1, and invite written submissions to be made within a period of at least 10 *business days* specified in the invitation. *AEMO* must publish its final report as soon as reasonably practicable following the receipt of submissions.
- (b) Where a *power system frequency risk review* identifies the need for a new or modified *emergency frequency control scheme* (alone or in combination with the declaration of a *protected event*) the report under this clause must:

- (1) specify the areas of the *power system* to which the *emergency frequency control scheme* will apply and whether it is an *over frequency scheme*, *under frequency scheme*, or both; and
 - (2) include the anticipated time required to design, procure and commission the new or modified scheme.
- (c) Where, as the result of a *power system frequency risk review*, AEMO recommends seeking declaration or revocation of a *non-credible contingency event* as a *protected event*, the report under this clause must include the proposed timetable for submission of a request to the *Reliability Panel* under clause 5.20A.4 or clause 5.20A.5 (as applicable).

5.20A.4 Request for protected event declaration

- (a) AEMO must develop and submit to the *Reliability Panel* a request for declaration of a *non-credible contingency event* as a *protected event* in accordance with the recommendations of a *power system frequency risk review* and taking into account any guidelines issued by the *Reliability Panel* under clause 8.8.1(a)(2d) as to the timing and content of requests under this clause.
- (b) A request under this clause must include:
- (1) information explaining the nature and likelihood of the *non-credible contingency event* and the consequences for the *power system* if the event were to occur including AEMO's estimate of *unserved energy*;
 - (2) options for managing the *non-credible contingency event* as a *protected event*, AEMO's recommended option or range of options and the rationale for the recommendation;
 - (3) for each recommended option under subparagraph (2), AEMO's estimate of the additional costs to operate the *power system* in accordance with the *power system security principles* in clause 4.2.6 if the event is declared to be a *protected event* including a description of the mechanisms that may be used;
 - (4) where a recommended option for managing the *non-credible contingency event* includes a new or modified *emergency frequency control scheme*:
 - (i) the *target capabilities* proposed to be included in the *protected event EFCS standard* for the scheme, the rationale for the proposed *target capabilities* and the corresponding expected *power system security* outcomes including AEMO's estimate of *unserved energy* associated with operation of the scheme; and
 - (ii) AEMO's estimate of the costs to procure and commission the scheme and maintain its availability and performance, including upfront costs and ongoing maintenance costs;

- (5) *AEMO's proposals for other matters that may be determined by the Reliability Panel under clause 8.8.4 in connection with the request; and*
- (6) *other information AEMO considers reasonably necessary to assist the Reliability Panel to consider the request.*

5.20A.5 Request to revoke a protected event declaration

- (a) *If AEMO recommends in a power system frequency risk review that a non-credible contingency event should no longer be managed as a protected event, AEMO must submit to the Reliability Panel a request to revoke the declaration of a non-credible contingency event as a protected event in accordance with the recommendations of the power system frequency risk review.*
- (b) *A request under this clause must include:*
 - (1) *information explaining the nature of the non-credible contingency event and the consequences for the power system if the event were to cease to be managed as a protected event; and*
 - (2) *other information AEMO considers reasonably necessary to assist the Reliability Panel to consider the request.*

5.20B Inertia sub-networks and requirements

5.20B.1 Boundaries of inertia sub-networks

- (a) *For the purpose of determining the required levels of inertia in the national grid, the connected transmission systems forming part of the national grid are to be divided into inertia sub-networks.*
- (b) *AEMO must determine the boundaries of inertia sub-networks and may from time to time adjust the boundaries, including adjustments that result in new inertia sub-networks.*
- (c) *The boundaries of an inertia sub-network must be aligned with the boundaries of a region or wholly confined within a region.*
- (d) *Subject to paragraph (c), in determining and adjusting the boundaries of inertia sub-networks, AEMO must take into account the following matters:*
 - (1) *synchronous connections between the proposed inertia sub-network and adjacent parts of the national grid;*
 - (2) *the likelihood of the proposed inertia sub-network being islanded; and*
 - (3) *the criticality and practicality of maintaining the proposed inertia sub-network in a satisfactory operating state if it is islanded and being able to return to a secure operating state while islanded.*

- (e) In determining and adjusting the boundaries of *inertia sub-networks*, AEMO must comply with the *Rules consultation procedures*.
- (f) AEMO must publish the boundaries of the *inertia sub-networks* and any adjustments in the *NTNDP*.

5.20B.2 Inertia requirements

- (a) AEMO must from time to time determine the *inertia requirements* for *inertia sub-networks* applying the *inertia requirements methodology*. AEMO must make a determination under this paragraph:
 - (1) subject to subparagraph (2) and any other requirements under the *Rules*, for any *inertia sub-network*, no more than once in every 12 month period; and
 - (2) for each affected *inertia sub-network*, as soon as reasonably practical after becoming aware of a material change to the *power system* likely to affect the *inertia requirements* for the *inertia sub-network* where the timing, occurrence or impact of the change was unforeseen.
- (b) The *inertia requirements* to be determined for each *inertia sub-network* are:
 - (1) the *minimum threshold level of inertia*, being the minimum level of *inertia* required to operate the *inertia sub-network* in a *satisfactory operating state* when the *inertia sub-network* is *islanded*; and
 - (2) the *secure operating level of inertia*, being the minimum level of *inertia* required to operate the *inertia sub-network* in a *secure operating state* when the *inertia sub-network* is *islanded*.
- (c) AEMO must *publish* the *inertia requirements* determined for each *inertia sub-network* together with the results of its assessment under clause 5.20B.3 in the *NTNDP*.

5.20B.3 Inertia shortfalls

- (a) AEMO must as soon as practicable following its determination of the *inertia requirements* for an *inertia sub-network* under clause 5.20B.2 assess:
 - (1) the level of *inertia* typically provided in the *inertia sub-network* having regard to typical patterns of *dispatched generation* in *central dispatch*;
 - (2) whether in AEMO's reasonable opinion, there is or is likely to be an *inertia shortfall* in the *inertia sub-network* and AEMO's forecast of the period over which the *inertia shortfall* will exist; and
 - (3) where AEMO has previously assessed that there was or was likely to be an *inertia shortfall*, whether in AEMO's reasonable opinion that *inertia shortfall* has been or will be remedied.

- (b) In making its assessment under paragraph (a) for an *inertia sub-network*, AEMO must take into account:
 - (1) over what time period and to what extent the *inertia* that is typically provided in the *inertia sub-network* is or is likely to be below the *secure operating level of inertia*;
 - (2) the levels of *inertia* that are typically provided in adjacent *connected inertia sub-networks* and the likelihood of the *inertia sub-network* becoming *islanded*; and
 - (3) any other matters that AEMO reasonably considers to be relevant in making its assessment.
- (c) If AEMO assesses that there is or is likely to be an *inertia shortfall* in any *inertia sub-network*, AEMO must *publish* and give to the *Inertia Service Provider* for the *inertia sub-network* a notice of that assessment that includes AEMO's specification of the date by which the *Inertia Service Provider* must ensure the availability of *inertia network services* in accordance with clause 5.20B.4(b), which must not be earlier than 12 months after the notice is *published* unless an earlier date is agreed with the *Inertia Service Provider*.
- (d) If AEMO assesses that an *inertia shortfall* in an *inertia sub-network* has been or will be remedied, AEMO must *publish* and give to the *Inertia Service Provider* for the *inertia sub-network* a notice of that assessment that includes AEMO's specification of the date from which the obligation of the *Inertia Service Provider* under clause 5.20B.4(b) ceases, which must not be earlier than 12 months after the notice is *published* unless an earlier date is agreed with the *Inertia Service Provider*.

5.20B.4 Inertia Service Provider to make available inertia services

- (a) The *Inertia Service Provider* for an *inertia sub-network* is:
 - (1) the *Transmission Network Service Provider* for the *inertia sub-network*; or
 - (2) if there is more than one *Transmission Network Service Provider* for the *inertia sub-network*, the *jurisdictional planning body* for the *participating jurisdiction* in which the *inertia sub-network* is located.
- (b) If AEMO gives a notice under clause 5.20B.3(c) that AEMO has assessed that there is or is likely to be an *inertia shortfall* in an *inertia sub-network*, the *Inertia Service Provider* for the *inertia sub-network* must make *inertia network services* available in accordance with paragraph (c) that when *enabled* will provide *inertia* to:
 - (1) the *secure operating level of inertia*; or

- (2) the *secure operating level of inertia* as adjusted for *inertia support activities*, but not less than the *minimum threshold level of inertia* as adjusted for *inertia support activities*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) For the purposes of paragraph (b), an *Inertia Service Provider* for an *inertia sub-network* must:
 - (1) use reasonable endeavours to make the *inertia network services* available by the date specified by AEMO in the notice under clause 5.20B.3(c);
 - (2) make a range and level of *inertia network services* available such that it is reasonably likely that *inertia network services* that provide the required level of *inertia* when *enabled* are continuously available, taking into account planned *outages* and the risk of unplanned *outages*;
 - (3) ensure that the *inertia network services* that when *enabled* provide *inertia* up to the *minimum threshold level of inertia* (as adjusted for *inertia support activities* if applicable) are qualifying *inertia network services* as specified in paragraph (d);
 - (4) ensure that the *inertia network services* that when *enabled* provide *inertia* beyond the *minimum threshold level of inertia* up to the *secure operating level of inertia* (as adjusted for *inertia support activities* if applicable), are qualifying *inertia network services* as specified in paragraph (e); and
 - (5) maintain the availability of those *inertia network services* until the date the *Inertia Service Provider's* obligation ceases, as specified by AEMO under clause 5.20B.3(d).
- (d) The *inertia network services* that qualify to provide *inertia* up to the *minimum threshold level of inertia* are:
 - (1) *inertia network services* made available by the *Inertia Service Provider* investing in its *network* through the installation, commissioning and operation of a *synchronous condensor*; and
 - (2) *inertia network services* made available to the *Inertia Service Provider* by a *Registered Participant* and provided by means of a *synchronous generating unit* or a *synchronous condensor* under an *inertia services agreement*.
- (e) The *inertia network services* that qualify to provide *inertia* beyond the *minimum threshold level of inertia* up to the *secure operating level of inertia* are:

- (1) the *inertia network services* referred to in paragraph (d);
 - (2) *inertia network services* made available by the *Inertia Service Provider* investing in its *network* other than those referred to in paragraph (d); and
 - (3) *inertia network services* made available to the *Inertia Service Provider* by a *Registered Participant* under an *inertia services agreement* other than those referred to in paragraph (d).
- (f) An *Inertia Service Provider* required to make *inertia network services* available under paragraph (b) must make available the least cost option or combination of options that will satisfy its obligation within the time referred to in subparagraph (c)(1) and for so long as the obligation to make the *inertia network services* available continues.
- (g) An *Inertia Service Provider* required to make *inertia network services* available under paragraph (b) must prepare and *publish* information to enable potential providers of *inertia network services* to develop *non-network options* for consideration by the *Inertia Service Provider* including:
 - (1) a description of the requirement for *inertia network services* including timing;
 - (2) the technical characteristics that a *non-network option* would be required to deliver, such as the level of *inertia*, location, availability, response time and operating profile;
 - (3) a summary of potential options to make the *inertia network services* available identified by the *Inertia Service Provider*, including *network options* and *non-network options*; and
 - (4) information to assist providers of *non-network options* wishing to present proposals to the *Inertia Service Provider* including details of how to submit a proposal for consideration.
- (h) An *Inertia Service Provider* must provide information in its *Transmission Annual Planning Report* about:
 - (1) the activities undertaken to satisfy its obligation to make *inertia network services* available under paragraph (b); and
 - (2) *inertia support activities* undertaken to reduce the *minimum threshold level of inertia* or the *secure operating level of inertia*.
- (i) If the *Inertia Service Provider* proposes *network* investment for either of the purposes specified in paragraph (h), the *Inertia Service Provider* must provide the following information in its next *Transmission Annual Planning Report*:

- (1) the date when the proposed relevant *network* investment became or will become operational;
 - (2) the purpose of the proposed relevant *network* investment;
 - (3) the total cost of the proposed relevant *network* investment; and
 - (4) the indicative total cost of any *non-network options* considered.
- (j) An *Inertia Service Provider* may include the cost of *inertia service payments* in the calculation of *network support payments* in accordance with Chapter 6A.

5.20B.5 Inertia support activities

- (a) AEMO may at the request of an *Inertia Service Provider* approve activities (*inertia support activities*) under this clause and agree corresponding adjustments to the *minimum threshold level of inertia* or the *secure operating level of inertia* for the purposes of clause 5.20B.4(b) where the activities:
- (1) are to be undertaken by the *Inertia Service Provider* or provided as a service to the *Inertia Service Provider*;
 - (2) are not *inertia network services*; and
 - (3) AEMO is satisfied the activities will contribute to the operation of the *inertia sub-network* in a *satisfactory operating state* or *secure operating state* in the circumstances described in clause 4.4.4(a) or (b) as applicable.

Note

If approved by AEMO under paragraph (a), inertia support activities may include installing or contracting for the provision of *frequency* control services, installing emergency protection schemes or contracting with *Generators* in relation to the operation of their *generating units* in specified conditions.

- (b) An adjustment to the *minimum threshold level of inertia* or the *secure operating level of inertia* for *inertia support activities* will apply to the level determined by AEMO and only where and to the extent that the approved activity is *enabled* and performing in accordance with the conditions of any approval determined by AEMO.
- (c) An *Inertia Service Provider* making a request under paragraph (a) must give AEMO:
- (1) details of the proposed *inertia support activity* and the other information about the *inertia support activity* consistent with the requirements of clause 5.20B.6(c);

- (2) the proposed technical specification and performance standards and the information about arrangements to *enable* the *inertia support activity* consistent with the requirements of clause 5.20B.6(d);
 - (3) information about how the *inertia support activity* will contribute to operation of the *inertia sub-network* in a *satisfactory operating state* or *secure operating state* in the circumstances described in clause 4.4.4(a) or (b) as applicable;
 - (4) the *Inertia Service Provider's* proposal for calculating adjustments to be made and the times they will apply; and
 - (5) any other information requested by *AEMO* in connection with the request.
- (d) *AEMO* may give or withhold its approval under this clause in its discretion and subject to any conditions determined by *AEMO*.
 - (e) The technical specification, performance standards and information referred to in paragraph (c)(2) and any change to them must be approved by *AEMO*.
 - (f) An *Inertia Service Provider* must obtain *AEMO's* approval under paragraph (e) before any change to the technical specification, performance standards or arrangements to give instructions that apply to an *inertia support activity* comes into effect.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

5.20B.6 Inertia network services information and approvals

- (a) An *Inertia Service Provider* required to make *inertia network services* available under clause 5.20B.4(b) must prepare and give to *AEMO* and keep up to date, a schedule setting out:
 - (1) the *inertia network services* made available by the *Inertia Service Provider* for the *inertia sub-network*; and
 - (2) the *Inertia Service Provider's* proposed order of priority for the *inertia network services* to be *enabled*.
- (b) Where the *Inertia Service Provider* procures *inertia network services* from a *Generator* provided by means of a *synchronous generating unit* under an *inertia services agreement*, the *Inertia Service Provider* must register the *generating unit* with *AEMO* as an *inertia generating unit* and specify that the *generating unit* may be periodically used to provide *inertia network services* and will not be eligible to set *spot prices* when *constrained on* to provide *inertia* in accordance with clause 3.9.7(c).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) An *Inertia Service Provider* required to make *inertia network services* available under clause 5.20B.4(b) must give to AEMO and keep up to date the following details for each *inertia network service*:
- (1) a description of the *inertia network service*, including:
 - (i) the nature of the *inertia network service*;
 - (ii) the *generating unit* or other *facilities* used to provide the *inertia network service*;
 - (iii) the purpose for which the *inertia network service* is being provided;
 - (iv) the location in the *transmission network* or *distribution network* of the *facilities* used to provide the *inertia network service*;
 - (v) the quantity of *inertia* to be provided when the *inertia network service* is *enabled* and;
 - (vi) any other information requested by AEMO in connection with the *inertia network service*;
 - (2) information about the availability of the *inertia network service*, including:
 - (i) the times when, and the period over which, the *inertia network service* will be available to provide *inertia*; and
 - (ii) any possible restrictions on the availability of the *inertia network service*
- (d) An *Inertia Service Provider* required to make *inertia network services* available under clause 5.20B.4(b) must prepare and submit to AEMO for approval under paragraph (e) the following details for each *inertia network service*:
- (1) the technical specification and performance standards for the *inertia network service*; and
 - (2) the arrangements necessary for AEMO to give instructions to *enable* or cease the provision of the *inertia network service* including:
 - (i) the period of any notice that has to be given to the provider of the *inertia network service* for it to be *enabled*;

- (ii) the response time to any instruction for the *inertia network service* to be *enabled* or to cease being provided; and
 - (iii) communication protocols between it, *AEMO* and the *Registered Participants* that provide *inertia network services*.
- (e) The technical specification, performance standards and arrangements necessary for *AEMO* to give the instructions referred to in paragraph (d) and any change to them must be consistent with the *Rules* and approved by *AEMO*.
- (f) An *Inertia Service Provider* must ensure that *AEMO*'s approval is obtained under paragraph (e) before the *inertia network service* is first made available and in the case of a change, before the change comes into effect.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (g) *AEMO* must use reasonable endeavours to respond to the *Inertia Service Provider* within 20 *business days* following the receipt of a request for approval under paragraph (e) stating whether it gives its approval.
- (h) If *AEMO* does not approve the matters in a request for approval under paragraph (e):
 - (1) *AEMO* must tell the *Inertia Service Provider* its reasons for withholding approval and may advise the *Inertia Service Provider* of the changes *AEMO* requires to be made; and
 - (2) the *Inertia Service Provider* must amend its request to address the matters identified by *AEMO* and submit to *AEMO* a new request for approval.

5.20C System strength requirements

5.20C.1 System strength requirements

- (a) *AEMO* must from time to time determine the *system strength requirements* for each *region* applying the *system strength requirements methodology*. *AEMO* must make a determination under this paragraph:
 - (1) subject to subparagraph (2) and any other requirements under the *Rules*, for any *region*, no more than once in every 12 month period; and
 - (2) for each affected *region*, as soon as reasonably practical after becoming aware of a material change to the *power system* likely to affect the *system strength requirements* for the *region* where the timing, occurrence or impact of the change was unforeseen.

- (b) The *system strength requirements* to be determined for each *region* are:
 - (1) the *fault level nodes* in the *region*, being the location on the *transmission network* for which the *three phase fault level* must be maintained at or above a minimum *three phase fault level* determined by AEMO; and
 - (2) for each *fault level node*, the minimum *three phase fault level*.
- (c) AEMO must publish the *system strength requirements* determined for each *region* together with the results of its assessment under clause 5.20C.2 in the NTNDP.

5.20C.2 Fault level shortfalls

- (a) AEMO must as soon as practicable following its determination of the *system strength requirements* for a *region* under clause 5.20C.1 assess:
 - (1) the *three phase fault level* typically provided at each *fault level node* in the *region* having regard to typical patterns of *dispatched generation* in *central dispatch*;
 - (2) whether in AEMO's reasonable opinion, there is or is likely to be a *fault level shortfall* in the *region* and AEMO's forecast of the period over which the *fault level shortfall* will exist; and
 - (3) where AEMO has previously assessed that there was or was likely to be a *fault level shortfall*, whether in AEMO's reasonable opinion that *fault level shortfall* has been or will be remedied.
- (b) In making its assessment under paragraph (a) for a *region*, AEMO must take into account:
 - (1) over what time period and to what extent the *three phase fault levels* at *fault level nodes* that are typically observed in the *region* are likely to be insufficient to maintain the *power system* in a *secure operating state*; and
 - (2) any other matters that AEMO reasonably considers to be relevant in making its assessment.
- (c) If AEMO assesses that there is or is likely to be a *fault level shortfall* in a *region*, AEMO must *publish* and give to the *System Strength Service Provider* for the *region* a notice of that assessment that includes AEMO's specification of:
 - (1) the extent of the *fault level shortfall*; and
 - (2) the date by which the *System Strength Service Provider* must ensure the availability of *system strength services* in accordance with clause 5.20C.3(b), which must not be earlier than 12 months after the notice

is *published* unless an earlier date is agreed with the *System Strength Service Provider*.

- (d) If *AEMO* assesses that a *fault level shortfall* in a *region* has been or will be remedied, *AEMO* must *publish* and give to the *System Strength Service Provider* for the *region* a notice of that assessment that includes *AEMO's* specification of the date from which the obligation of the *System Strength Service Provider* under clause 5.20C.3(b) ceases, which must not be earlier than 12 months after the notice is *published* unless an earlier date is agreed with the *System Strength Service Provider*.

5.20C.3 System Strength Service Provider to make available system strength services

- (a) The *System Strength Service Provider* for a *region* is:
 - (1) the *Transmission Network Service Provider* for the *region*; or
 - (2) if there is more than one *Transmission Network Service Provider* for a *region*, the *jurisdictional planning body* for the *participating jurisdiction* in which the *region* is located.
- (b) If *AEMO* gives a notice under clause 5.20C.2(c) that *AEMO* has assessed that there is or is likely to be a *fault level shortfall* at a *fault level node* in a *region*, the *System Strength Service Provider* for the *region* must make *system strength services* available in accordance with paragraph (c) that when *enabled* will address the *fault level shortfall* at the relevant *fault level node*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) For the purposes of paragraph (b), a *System Strength Service Provider* for a *region* must:
 - (1) use reasonable endeavours to make the *system strength services* available by the date specified by *AEMO* in the notice under clause 5.20C.2(c);
 - (2) make a range and level of *system strength services* available such that it is reasonably likely that *system strength services* that address the *fault level shortfall* when *enabled* are continuously available, taking into account planned *outages*, the risk of unplanned *outages* and the potential for the *system strength services* to impact typical patterns of *dispatched generation in central dispatch*; and
 - (3) maintain the availability of those *system strength services* until the date the *System Strength Service Provider's* obligation ceases, as specified by *AEMO* under clause 5.20C.2(d).

- (d) A *System Strength Service Provider* required to make *system strength services* available under paragraph (b) must make available the least cost option or combination of options that will satisfy its obligation within the time referred to in subparagraph (c)(1) and for so long as the obligation to make the *system strength services* available continues.
- (e) A *System Strength Service Provider* required to make *system strength services* available under paragraph (b) must prepare and *publish* information to enable potential providers of *system strength services* to develop *non-network options* for consideration by the *System Strength Service Provider* including:
 - (1) a description of the requirement for *system strength services* including timing;
 - (2) the technical characteristics that a non-network option would be required to deliver, such as the contribution to the *three phase fault level*, location, availability, response time and operating profile;
 - (3) a summary of potential options to make the *system strength services* available identified by the *System Strength Service Provider*, including *network options* and *non-network options*; and
 - (4) information to assist providers of *non-network options* wishing to present proposals to the *System Strength Service Provider* including details of how to submit a proposal for consideration.
- (f) A *System Strength Service Provider* must provide information in its *Transmission Annual Planning Report* about the activities undertaken to satisfy its obligation to make *system strength services* available under paragraph (b).
- (g) If the *System Strength Service Provider* proposes *network* investment for the purpose specified in paragraph (f), the *System Strength Service Provider* must provide the following information in its next *Transmission Annual Planning Report*:
 - (1) the date when the proposed relevant *network* investment became or will become operational;
 - (2) the purpose of the proposed relevant *network* investment;
 - (3) the total cost of the proposed relevant *network* investment;
 - (4) the indicative total costs of any *non-network options* considered.
- (h) A *System Strength Service Provider* may include the cost of *system strength service payments* in the calculation of *network support payments* in accordance with Chapter 6A.

5.20C.4 System strength services information and approvals

- (a) A *System Strength Service Provider* required to make *system strength services* available under clause 5.20C.3(b) must prepare and give to AEMO and keep up to date, a schedule setting out:
 - (1) the *system strength services* available to contribute to the *three phase fault level* at each *fault level node* in the *region* for which there is a *fault level shortfall*; and
 - (2) the *System Strength Service Provider's* proposed order of priority for the *system strength services* to be *enabled*.
- (b) Where the *System Strength Service Provider* procures *system strength services* from a *Generator* provided by means of a *generating unit* under a *system strength services agreement*, the *System Strength Service Provider* must register the *generating unit* with AEMO as a *system strength generating unit* and specify that the *generating unit* may be periodically used to provide *system strength services* and will not be eligible to set *spot prices* when *constrained on* to provide *system strength services* in accordance with clause 3.9.7(c).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) A *System Strength Service Provider* required to make *system strength services* available under clause 5.20C.3(b) must give to AEMO and keep up to date the following details for each *system strength service*:
 - (1) a description of the *system strength service*, including:
 - (i) the nature of the *system strength service*;
 - (ii) the *generating unit* or other *facilities* used to provide the *system strength service*;
 - (iii) the purpose for which the *system strength service* is being provided;
 - (iv) the location in the *transmission network* or *distribution network* of the *facilities* used to provide the *system strength service*;
 - (v) the contribution to the *three phase fault level* at each relevant *fault level node* and the *facility's connection point* when the *system strength service* is *enabled*; and
 - (vi) any other information (including models) requested by AEMO to assess the contribution of the *system strength service* referred to in subparagraph (v).

- (2) information about the availability of the *system strength service*, including:
 - (i) the times when, and the period over which, the *system strength service* will be available to contribute to the *three phase fault level* at each relevant *fault level node*; and
 - (ii) any possible restrictions on the availability of the *system strength service*.
- (d) A *System Strength Service Provider* required to make *system strength services* available under clause 5.20C.3(b) must prepare and submit to AEMO for approval under paragraph (e) the following details for each *system strength service*:
 - (1) the technical specification and performance standards for the *system strength service*; and
 - (2) the arrangements necessary for AEMO to give instructions to *enable* or cease the provision of the *system strength service* including:
 - (i) the period of any notice that has to be given to the provider of the *system strength service* for it to be *enabled*;
 - (ii) the response time to any instruction for the *system strength service* to be *enabled* or to cease being provided; and
 - (iii) communication protocols between it, AEMO and the *Registered Participants* that provide *system strength services*.
- (e) The technical specification, performance standards and arrangements necessary for AEMO to give the instructions referred to in paragraph (d) and any change to them must be consistent with the *Rules* and approved by AEMO.
- (f) A *System Strength Service Provider* must ensure that AEMO's approval is obtained under paragraph (e) before the *system strength service* is first made available and in the case of a change, before the change comes into effect.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (g) AEMO must use reasonable endeavours to respond to the *System Strength Service Provider* within 20 *business days* following the receipt of a request for approval under paragraph (e) stating whether it gives its approval.
- (h) If AEMO does not approve the matters in a request for approval under paragraph (e):

- (1) *AEMO must tell the System Strength Service Provider its reasons for withholding approval and may advise the System Strength Service Provider of the changes AEMO requires to be made; and*
- (2) *the System Strength Service Provider must amend its request to address the matters identified by AEMO and submit to AEMO a new request for approval.*

5.21 AEMO's obligation to publish information and guidelines and provide advice

- (a) In carrying out its *NTP functions*, *AEMO* must:
 - (1) *publish an objective set of criteria for assessing whether a proposed transmission network augmentation is reasonably likely to have a material inter-network impact; and*
 - (2) *prepare and publish augmentation technical reports on proposed transmission network augmentations that are reasonably likely to have a material inter-network impact; and*
 - (3) *publish guidelines to assist Registered Participants to determine when an inter-network test may be required; and*
 - (4) *provide advice to the AEMC as requested about the exercise of the last resort planning power.*
- (b) *AEMO* must develop and *publish*, and may vary from time to time, an objective set of criteria for assessing whether a proposed *transmission network augmentation* is reasonably likely to have a *material inter-network impact*. In developing (or varying) the objective set of criteria, *AEMO* must:
 - (1) *proceed in accordance with the Rules consultation procedures; and*
 - (2) *have regard to:*
 - (i) *the relevant guiding objectives and principles provided by the AEMC; and*
 - (ii) *the advice of jurisdictional planning representatives.*
- (c) The *AEMC* must provide *AEMO* with guiding objectives and principles for the development by *AEMO* of the objective set of criteria for assessing whether or not a proposed *transmission network augmentation* is reasonably likely to have a *material inter-network impact*.
- (d) If *AEMO* receives a written request for an *augmentation technical report* on a proposed *transmission network augmentation* that is reasonably likely to have a *material inter-network impact*, or *AEMO* decides in the course of exercising its functions under Chapter 8, Part H, that a proposed *transmission network augmentation* is reasonably likely to have a *material inter-network impact*, *AEMO* must:

- (1) immediately undertake a review of all matters referred to it by the *Transmission Network Service Provider* in order to assess the proposed *augmentation*; and
- (2) consult with, and take into account the recommendations of, the *jurisdictional planning representatives* in relation to the proposed *augmentation*; and
- (3) make a determination as to:
 - (i) the performance requirements for the equipment to be *connected*; and
 - (ii) the extent and cost of *augmentations* and changes to all affected *transmission networks*; and
 - (iii) the possible material effect of the new *connection* on the *network power transfer capability* including that of other *transmission networks*; and
- (4) within 90 *business days* of the date of the request or decision (or some other period agreed between the *Transmission Network Service Provider* and *AEMO*), *AEMO* must *publish an augmentation technical report* that sets out:
 - (i) *AEMO's* determination; and
 - (ii) the reasons for the determination (including a statement of any information and assumptions on which the determination is based).

A request for an *augmentation technical report* on a proposed *transmission network augmentation* must be accompanied by sufficient information to enable *AEMO* to make a proper assessment of the proposed *augmentation* and *AEMO's* reasonable fees covering the direct costs and expenses of preparing the report.

- (e) *AEMO* may, for the purpose of preparing an *augmentation technical report*, by written notice request a *Transmission Network Service Provider* to provide *AEMO* with additional information reasonably available to it and the *Transmission Network Service Provider* must comply with the request.
- (f) The period for *AEMO* to *publish an augmentation technical report* will be automatically extended by the time taken by the *Transmission Network Service Provider* to provide additional information requested by *AEMO*.
- (g) If the objective set of criteria developed and published under paragraph (b) is changed after a project assessment draft report has been made available to *Registered Participants* and *AEMO*, the relevant *Transmission Network Service Provider* is entitled to choose whether the new criteria, or the criteria that existed when the project assessment draft report was made available to *Registered Participants* and *AEMO*, are to be applied.

5.22 Last resort planning power

- (a) In this rule 5.22:

directed party means one or more *Registered Participants* directed by the *AEMC* in accordance with this rule 5.22 and may include:

- (1) a single *Registered Participant*;
- (2) two or more *Registered Participants* who are directed by the *AEMC* to jointly and co-operatively comply with a direction under paragraph (c).

direction notice is a notice issued under paragraph (i).

Purpose

- (b) The purpose of a *last resort planning power* is to ensure timely and efficient *inter-regional transmission* investment for the long term interests of consumers of electricity.

AEMC last resort planning power

- (c) The *AEMC* may, in accordance with this rule 5.22, direct one or more *Registered Participants*:
- (1) to identify a potential transmission project and apply the *regulatory investment test for transmission* to that project; or
 - (2) to apply the *regulatory investment test for transmission* to a potential transmission project identified by the *AEMC*.
- (d) The *AEMC* must exercise a *last resort planning power*:
- (1) consistently with the purpose referred to in paragraph (b); and
 - (2) in accordance with the *last resort planning power guidelines*.

Advice from AEMO

- (e) The *AEMC* may request advice from *AEMO* in relation to the exercise of the *last resort planning power*, in accordance with the *last resort planning power guidelines*.

Relevant considerations

- (f) In deciding whether or not to exercise a *last resort planning power* the *AEMC* must take into account:
- (1) advice provided by *AEMO*;
 - (2) the *NTNDP* for the current and the previous year;

- (3) *Transmission Annual Planning Reports published by Transmission Network Service Providers* under clause 5.12.2; and
 - (4) other matters that are relevant in all the circumstances.
- (g) In deciding whether or not to exercise the *last resort planning power* the *AEMC* must:
 - (1) identify a problem relating to *constraints* in respect of *national transmission flow paths* between *regional reference nodes* or a potential transmission project (**the problem** or **the project**);
 - (2) make reasonable inquiries to satisfy itself that there are no current processes underway for the application of the *regulatory investment test for transmission* in relation to the problem or the project;
 - (3) consider whether there are other options, strategies or solutions to address the problem or the project, and must be satisfied that all such other options are unlikely to address the problem or the project in a timely manner;
 - (4) be satisfied that the problem or the project may have a significant impact on the efficient operation of the *market*; and
 - (5) be satisfied that but for the *AEMC* exercising the *last resort planning power*, the problem or the project is unlikely to be addressed.

Direction notice

- (h) The *AEMC* must exercise a *last resort planning power* by giving a direction notice in writing to a directed party that states:
 - (1) the relevant action under paragraph (c) that the directed party is required to undertake; and
 - (2) the *AEMC*'s reasons for exercising the *last resort planning power*.
- (i) A direction notice given by the *AEMC* under paragraph (h) may specify one or more of the following:
 - (1) one or more alternative projects which a directed party must consider when applying the *regulatory investment test for transmission* to potential transmission projects;
 - (2) the time period within which the application of the *regulatory investment test for transmission* must be carried out by a directed party; or
 - (3) consultation and publication requirements that are in addition to those required by the *regulatory investment test for transmission*.

- (j) The *AEMC* must *publish* the direction notice referred to in paragraph (h) on its website.
- (k) A directed party must comply with:
 - (1) a direction notice;
 - (2) the requirements of the *last resort planning power guidelines*; and
 - (3) the requirements for the application of the *regulatory investment test for transmission*.
- (l) If a directed party (an earlier directed party) fails to comply with a direction notice, the *AEMC* may:
 - (1) in accordance with this rule 5.22, give a direction notice to a *Registered Participant* other than the earlier directed party; and
 - (2) inform the *AER* of the earlier directed party's failure to comply with the direction notice.

Annual reporting for last resort planning power

- (m) The *AEMC* must report annually on the matters which the *AEMC* has considered during that year in deciding whether or not to exercise the *last resort planning power*, and may include the information in its Annual Report published under s.27 of the *Australian Energy Market Commission Establishment Act 2004* (SA).

Last resort planning power guidelines

- (n) The *AEMC* must develop and *publish* guidelines (the *last resort planning power guidelines*) for or with respect to:
 - (1) the processes to be followed by the *AEMC* in exercising the *last resort planning power*;
 - (2) the advice to be provided to the *AEMC* by *AEMO*, including the terms of reference for any such advice;
 - (3) the matters that *AEMO* and the *AEMC* may consider in recommending or nominating a person as an appropriate directed party; and
 - (4) the provision of information to the *AEMC* in relation to the exercise of the *last resort planning power*.
- (o) The *AEMC* must develop and *publish* the *last resort planning power guidelines* in accordance with the *transmission consultation procedures*.
- (p) The *AEMC* must develop and *publish* the first *last resort planning power guidelines* by 1 January 2008 and there must be such guidelines available at all times after that date.

- (q) The AEMC may from time to time and in accordance with the *transmission consultation procedures*, amend or replace the *last resort planning power guidelines*.

Schedule 5.1a System standards

S5.1a.1 Purpose

The purpose of this schedule is to establish *system standards* that:

- (a) are necessary or desirable for the safe and reliable operation of the *facilities of Registered Participants*;
- (b) are necessary or desirable for the safe and reliable operation of equipment;
- (c) could be reasonably considered *good electricity industry practice*; and
- (d) seek to avoid the imposition of undue costs on the industry or *Registered Participants*.

A *Registered Participant* should not, by virtue of this schedule, rely on *system standards* being fully complied with at a *connection point* under all circumstances. However, a *Registered Participant* should expect to be reasonably informed of circumstances where the standard of *supply* at its *connection points* will not conform to the *system standards*.

Except for standards of *frequency* and system stability, a *Registered Participant* should have the opportunity to negotiate or renegotiate relevant terms of a *connection agreement* (including relevant charges), to improve the standard of *supply* to the level of the *system standard*.

The *system standards* are set out below.

S5.1a.2 Frequency

The *frequency operating standards* are *system standards* and are as determined by the *Reliability Panel* and published by the AEMC.

S5.1a.3 System stability

The *power system* should remain in synchronism and be stable:

- (a) **Transient stability:** following any *credible contingency event* or *protected event*; and
- (b) **Oscillatory stability:** in the absence of any *contingency event*, for any level of *inter-regional* or *intra-regional* power transfer up to the applicable operational limit; and
- (c) **Voltage stability:** stable *voltage* control must be maintained following the most severe *credible contingency event* or any *protected event*.

For the purposes of clause S5.1a.3 a *credible contingency event* includes the application of a fault (other than a three-phase fault) to any part of the *power system* and de-energisation of the faulted element within the allowable clearance time applicable to that element according to clause S5.1a.8.

The halving time of any *inter-regional* or *intra-regional* oscillation, being the time for the amplitude of an oscillation to reduce by half, should be less than 10 seconds. To allow for planning and operational uncertainties, the *power system* should be planned and operated to achieve a halving time of 5 seconds.

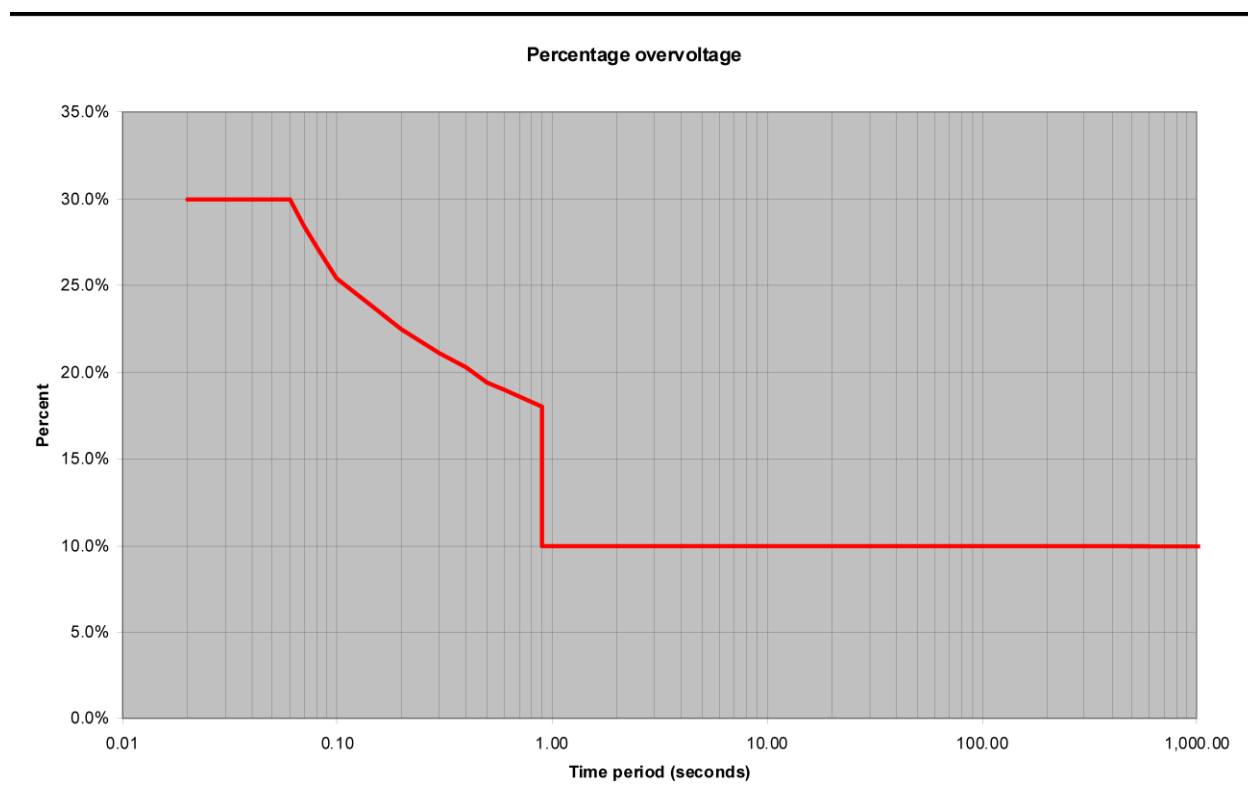
S5.1a.4 Power frequency voltage

Except as a consequence of a *contingency event*, the *voltage of supply* at a *connection point* should not vary by more than 10 percent above or below its *normal voltage*, provided that the *reactive power flow* and the *power factor* at the *connection point* is within the corresponding limits set out in the *connection agreement*.

As a consequence of a *credible contingency event*, the *voltage of supply* at a *connection point* should not rise above its *normal voltage* by more than a given percentage of *normal voltage* for longer than the corresponding period shown in Figure S5.1a.1 for that percentage.

As a consequence of a *contingency event*, the *voltage of supply* at a *connection point* could fall to zero for any period.

Figure S5.1a.1



S5.1a.5 Voltage fluctuations

The *voltage* fluctuation level of *supply* should be less than the “compatibility levels” set out in Table 1 of *Australian Standard AS/NZS 61000.3.7:2001*. To facilitate the application of this standard *Network Service Providers* must establish “planning levels” for their *networks* as provided for in the *Australian Standard*.

The following principles apply to the use of the shared network:

- (a) the sharing between *Network Users* of the capability of *connection assets* to withstand *voltage* fluctuations is to be managed by *Network Service Providers* in accordance with the provisions of clause S5.1.5 of schedule 5.1; and
- (b) to the extent practicable, the costs of managing or abating the impact of *voltage* fluctuations in excess of the costs which would result from the application of an *automatic access standard* are to be borne by those *Network Users* whose *facilities* cause the *voltage* fluctuations.

S5.1a.6 Voltage waveform distortion

Harmonic *voltage* distortion level of *supply* should be less than the “compatibility levels” defined in Table 1 of *Australian Standard AS/NZS 61000.3.6:2001*. To facilitate the application of this standard *Network Service Providers* must establish “planning levels” for their *networks* as provided for in the *Australian Standard*.

The following principles apply to the use of the shared network:

- (a) the sharing between *Network Users* of the capability of *connection assets* to absorb or mitigate harmonic *voltage* distortion is to be managed by *Network Service Providers* in accordance with the provisions of clause S5.1.6 of schedule 5.1; and
- (b) to the extent practicable, the costs of managing or abating the impact of harmonic distortion in excess of the costs which would result from the application of an *automatic access standard* are to be borne by those *Network Users* whose *facilities* cause the harmonic *voltage* distortion.

S5.1a.7 Voltage unbalance

Except as a consequence of a *contingency event*, the average *voltage* unbalance, measured at a *connection point*, should not vary by more than the amount set out in column 2 of Table S5.1a.1, when determined over a 30 minute averaging period.

As a consequence of a *credible contingency event* or *protected event*, the average *voltage* unbalance, measured at a *connection point*, should not vary by more than the amount set out in column 3 of Table S5.1a.1, when determined over a 30 minute averaging period.

The average *voltage* unbalance, measured at a *connection point*, should not vary by more than the amount set out in column 4 of Table S5.1a.1 for the relevant nominal *supply voltage*, when determined over a 10 minute averaging period.

The average *voltage* unbalance, measured at a *connection point*, should not vary more often than once per hour by more than the amount set out in column 5 of Table S5.1a.1 for the relevant nominal *supply voltage*, when determined over a 1 minute averaging period.

For the purpose of this clause, *voltage* unbalance is measured as negative sequence voltage.

Table S5.1a.1

Nominal supply voltage (kV)	Maximum negative sequence voltage (% of nominal voltage)			
	Column 2	Column 3	Column 4	Column 5
	no contingency event	credible contingency event or protected event	general	once per hour
Column 1	30 minute average	30 minute average	10 minute average	1 minute average
more than 100	0.5	0.7	1.0	2.0
more than 10 but not more than 100	1.3	1.3	2.0	2.5
10 or less	2.0	2.0	2.5	3.0

S5.1a.8 Fault clearance times

- (a) Faults anywhere within the *power system* should be cleared sufficiently rapidly that:
 - (1) the *power system* does not become unstable as a result of faults that are *credible contingency events*;
 - (2) *inter-regional* or *intra-regional power transfers* are not unduly constrained; and
 - (3) consequential equipment damage is minimised.
- (b) The *fault clearance time* of a primary protection system for a *short circuit fault* of any *fault type* anywhere:

- (1) within a *substation*;
 - (2) within *connected plant*; or
 - (3) on at least the half of a power line nearer to the *protection system*,
- should not exceed the relevant time in column 2 of Table S5.1a.2 for the *nominal voltage* that applies at the fault location.
- (c) The *fault clearance time* of a primary *protection system* for a *short circuit fault* of any *fault type* anywhere on the remote portion of a power line for which the near portion is protected by a primary *protection system* under clause S5.1a8(b) should not exceed the relevant time in column 3 of Table S5.1a.2 for the *nominal voltage* that applies at the fault location.
 - (d) The *fault clearance time* of a *breaker fail protection system* or similar back-up *protection system* for a *short circuit fault* of any *fault type* should not exceed the relevant time in column 4 of Table S5.1a.2 for the *nominal voltage* that applies at the fault location.
 - (e) The owner of the faulted element may require shorter *fault clearance times* to minimise *plant* damage.
 - (f) The allowable *fault clearance times* specified in Table S5.1a.2 apply in accordance with the provisions of clause S5.1.9 to *facilities* constructed or modified on or after the *performance standards commencement date*.
 - (g) For *facilities* other than those referred to in clause S5.1a.8(f), the applicable allowable *fault clearance times* must be derived by the relevant *Network Service Provider* from the existing capability of each *facility* on the *performance standards commencement date*.

Table S5.1a.2

Nominal voltage at fault location(kV)	Time(milliseconds)		
Column 1	Column 2	Column 3	Column 4
400kV and above	80	100	175
at least 250kV but less than 400kV	100	120	250
more than 100kV but less than 250kV	120	220	430
less than or equal 100 kV	As necessary to prevent <i>plant</i> damage and meet stability requirements		

Schedule 5.1 Network Performance Requirements to be Provided or Co-ordinated by Network Service Providers

S5.1.1 Introduction

This schedule describes the planning, design and operating criteria that must be applied by *Network Service Providers* to the *transmission networks* and *distribution networks* which they own, operate or control. It also describes the requirements on *Network Service Providers* to institute consistent processes to determine the appropriate technical requirements to apply for each *connection* enquiry or *application to connect* processed by the *Network Service Provider* with the objective that all *connections* satisfy the requirements of this schedule.

The criteria and the obligations of *Registered Participants* to implement them, fall into two categories, namely:

- (a) those required to achieve adequate levels of *network power transfer capability* or quality of *supply* for the common good of all, or a significant number of, *Registered Participants*; and
- (b) those required to achieve a specific level of *network service* at an individual *connection point*.

A *Network Service Provider* must:

- (1) fully describe the quantity and quality of *network services* which it agrees to provide to a person under a *connection agreement* in terms that apply to the *connection point* as well as to the *transmission or distribution system* as a whole;
- (2) ensure that the quantity and quality of those *network services* are not less than could be provided to the relevant person if the *national grid* were planned, designed and operated in accordance with the criteria set out in this clause S5.1.1 and recognising that levels of service will vary depending on location of the *connection point* in the *network*; and
- (3) observe and apply the relevant provisions of the *system standards* in accordance with this schedule 5.1.

To the extent that this schedule 5.1 does not contain criteria which are relevant to the description of a particular *network service*, the *Network Service Provider* must describe the *network service* in terms which are fair and reasonable.

This schedule includes provisions for *Network Service Providers* and *Registered Participants* to negotiate the criteria to apply to a *connection* within defined ranges between a lower bound (*minimum access standard*) and an upper bound (*automatic access standard*). All criteria which are intended to apply to a *connection* must be recorded in a *connection agreement*. Where it is intended to apply a *negotiated access standard* in accordance with clause 5.3.4A of the *Rules*,

the *Network Service Provider* must first be satisfied that the application of the *negotiated access standard* will not adversely affect other *Registered Participants*.

S5.1.2 Network reliability

S5.1.2.1 Credible contingency events

Network Service Providers must plan, design, maintain and operate their *transmission networks* and *distribution networks* to allow the transfer of power from *generating units* to *Customers* with all *facilities* or equipment associated with the *power system* in service and may be required by a *Registered Participant* under a *connection agreement* to continue to allow the transfer of power with certain facilities or *plant* associated with the *power system* out of service, whether or not accompanied by the occurrence of certain faults (called **credible contingency events**).

The following *credible contingency events* and practices must be used by *Network Service Providers* for planning and operation of *transmission networks* and *distribution networks* unless otherwise agreed by each *Registered Participant* who would be affected by the selection of *credible contingency events*:

- (a) The *credible contingency events* must include the *disconnection* of any single *generating unit* or *transmission line*, with or without the application of a single circuit two-phase-to-ground solid fault on lines operating at or above 220 kV, and a single circuit three-phase solid fault on lines operating below 220 kV. The *Network Service Provider* must assume that the fault will be cleared in primary protection time by the faster of the duplicate protections with installed intertrips available. For existing *transmission lines* operating below 220 kV but above 66 kV a two-phase to earth fault criterion may be used if the modes of operation are such as to minimise the probability of three-phase faults occurring and operational experience shows this to be adequate, and provided that the *Network Service Provider* upgrades performance when the opportunity arises.
- (b) For lines at any *voltage* above 66 kV which are not protected by an overhead earth wire and/or lines with tower footing resistances in excess of 10 ohms, the *Network Service Provider* may extend the criterion to include a single circuit three-phase solid fault to cover the increased risk of such a fault occurring. Such lines must be examined individually on their merits by the relevant *Network Service Provider*.
- (c) For lines at any *voltage* above 66 kV a *Network Service Provider* must adopt operational practices to minimise the risk of slow fault clearance in case of inadvertent closing on to earths applied to equipment for maintenance purposes. These practices must include but not be limited to:
 - (1) Not leaving lines equipped with intertrips alive from one end during maintenance; and

- (2) *Off-loading* a three terminal (tee connected) line prior to restoration, to ensure switch on to fault *facilities* are operative.
- (d) The *Network Service Provider* must ensure that all *protection systems* for lines at a *voltage* above 66 kV, including associated intertripping, are well maintained so as to be available at all times other than for short periods (not greater than eight hours) while the maintenance of a *protection system* is being carried out.

S5.1.2.2 Network service within a region

The following paragraphs of this section set out minimum standards for certain *network services* to be provided to *Registered Participants* by *Network Service Providers* within a *region*. The amount of *network* redundancy provided must be determined by the process set out in rules 5.12 and 5.13 of the *Rules* and is expected to reflect the grouping of *generating units*, their expected capacity factors and availability and the size and importance of *Customer* groups.

The standard of service to be provided at each *connection point* must be included in the relevant *connection agreement*, and must include a *power transfer capability* such as that which follows:

- (a) In the *satisfactory operating state*, the *power system* must be capable of providing the highest reasonably expected requirement for *power transfer* (with appropriate recognition of diversity between individual peak requirements and the necessity to withstand *credible contingency events*) at any time.
- (b) During the most critical single element *outage* the *power transfer* available through the *power system* may be:
 - (1) zero (single element *supply*);
 - (2) the defined capacity of a backup *supply*, which, in some cases, may be provided by another *Network Service Provider*;
 - (3) a nominated proportion of the normal *power transfer capability* (eg 70 percent); or
 - (4) the normal *power transfer capability* of the *power system* (when required by a *Registered Participant*).

In the case of clauses S5.1.2.2(b)(2) and (3) the available capacity would be exceeded sufficiently infrequently to allow maintenance to be carried out on each *network element* by the *Network Service Provider*. A *connection agreement* may state the expected proportion of time that the normal capability will not be available, and the capability at those times, taking account of specific design, locational and seasonal influences which may affect performance, and the random nature of element *outages*.

A *connection agreement* may also state a conditional *power transfer capability* that allows for both circuits of a double circuit line or two closely parallel circuits to be out of service.

S5.1.2.3 Network service between regions

The *power transfer capability* between *regions* must be determined by the process set out in Part B of Chapter 5.

The following paragraphs of this section set out a framework within which *Network Service Providers* must describe to *AEMO* the levels of *network service* that apply for *power transfer* between *regions*. In cases where *power transfer capability* is determined by stability considerations on the *power system* (refer to clause S5.1.8 of this schedule) it is expected that line *outages* within *transmission networks* within a *region* will weaken the *network* so as to result in reduced *power transfer capability* even in the absence of *outages* of the lines between *regions*.

- (a) In the *satisfactory operating state* the *power transfer capability* between *regions* is defined by a multi-term equation for each *connection* between *regions* which takes account of all *power system* operating conditions which can significantly impact on performance. The majority of these operating conditions are the result of *market* operation and are outside the control of the *Network Service Provider*. In the *satisfactory operating state* the *network* must be planned by the *Network Service Provider* and operated by *AEMO* to withstand the impact of any *single contingency* with severity less than the *credible contingency events* stated in clause S5.1.2.1.
- (b) During critical single element *outages* reduced *power transfer capabilities* will apply. In those cases where *outage* of the remaining element will result in breaking of the *connection* between the *regions* *AEMO* must provide for the effect on *power system frequency* in the separate *transmission systems* following this event when determining the maximum *power transfer*.

S5.1.3 Frequency variations

A *Network Service Provider* must ensure that within the *extreme frequency excursion tolerance limits* all of its *power system* equipment will remain in service unless that equipment is required to be switched to give effect to manual *load shedding* in accordance with clause S5.1.10, or is required by *AEMO* to be switched for operational purposes or is required to be switched or *disconnected* for operation of an *emergency frequency control scheme*.

Sustained operation outside the *extreme frequency excursion tolerance limits* need not be taken into account by *Network Service Providers* in the design of *plant* which may be *disconnected* if this is necessary for the protection of that *plant*.

S5.1.4 Magnitude of power frequency voltage

A *Transmission Network Service Provider* must plan and design its *transmission system* and equipment for control of *voltage* such that the minimum steady state *voltage* magnitude, the maximum steady state *voltage* magnitude and variations in

voltage magnitude are consistent with the levels stipulated in clause S5.1a.4 of the *system standards*.

- (a) The *Network Service Provider* must determine the *automatic access standard* for the *voltage of supply* at the *connection point* such that the *voltage* may vary in accordance with clause S5.1a.4 of the *system standards*.
- (b) The *Network Service Provider* must determine the *minimum access standard* for the *voltage of supply* at the *connection point* such that the *voltage* may vary:
 - (1) as a consequence of a *credible contingency event* or *protected event* in accordance with clause S5.1a.4; and
 - (2) otherwise, between 95 percent and 105 percent of the target *voltage*.
- (c) For the purposes of clause S5.1.4(b) the target *voltage* must be determined as follows:
 - (1) if the *connection point* is connected to a *transmission line* (but not through a *transformer*), the *Network Service Provider* must determine the target *voltage* in consultation with AEMO taking into account the capability of existing *facilities* that are subject to that *supply voltage*; and
 - (2) otherwise, *Network Users* that share the same *supply voltage* must jointly determine the target *voltage* which may be specified to vary with aggregate *loading level*;

provided that at all times the *supply voltage* remains between 90 percent and 110 percent of the *normal voltage* determined in accordance with clause S5.1a.4 except as a consequence of a *contingency event*.

- (d) For the purposes of this clause, the *voltage of supply* is measured as the *RMS phase voltage*.

Where the independent control of *voltage* at the *connection point* is possible without adverse impact on *voltage* control at another *connection point*, the *Network Service Provider* must make reasonable endeavours to meet the request. The target *voltage* and any agreement to a target range of *voltage* magnitude must be specified in the relevant *connection agreement*. The agreement may include a different target range in the *satisfactory operating state* and after a *credible contingency event* or *protected event* (and how these target ranges may be required to vary with *loading level*).

A *Network Service Provider* must ensure that each *facility* that is part of its *transmission network* or *distribution network* is capable of continuous uninterrupted operation in the event that variations in *voltage* magnitude occur due to faults external to the *facility*. The design of a *facility* should anticipate the likely time duration and magnitude of variations in the power-frequency phase *voltages* which may arise dependent on the nature and location of the fault.

S5.1.5 Voltage fluctuations

A *Network Service Provider* must use reasonable endeavours to design and operate its *transmission system* or *distribution system* and include conditions in *connection agreements* in relation to the permissible variation with time of the power generated or load taken by a *Network User* to ensure that other *Network Users* are supplied with a power-frequency voltage which fluctuates to an extent that is less than the levels stipulated in accordance with the provisions of clause S5.1a.5 of the *system standards* and this clause S5.1.5.

In accordance with AS/NZS 61000.3.7:2001 and guidelines published by *Standards Australia* and applying the assumption that *Customers* will comply with their obligations under schedule 5.3, a *Network Service Provider* must determine “Planning Levels” for *connection points* on their *network* in order to maintain *voltage* fluctuation levels for all supply points to customers supplied from their *network* below the “Compatibility Levels” defined in Table 1 of AS/NZS 61000.3.7:2001.

The *Network Service Provider* must allocate emission limits in response to a *connection* enquiry or an *application to connect* and evaluate the acceptability for *connection* of fluctuating sources as follows:

- (a) *Automatic access standard*: the *Network Service Provider* must allocate emission limits no more onerous than the lesser of the acceptance levels determined in accordance with either of the stage 1 or the stage 2 evaluation procedures defined in AS/NZS 61000.3.7:2001.
- (b) *Minimum access standard*: subject to clause S5.1.5(c), the determination by the *Network Service Provider* of acceptable emission limits must be undertaken in consultation with the party seeking *connection* using the stage 3 evaluation procedure defined in AS/NZS 61000.3.7:2001.
- (c) In respect of each new *connection* at a level of performance below the *automatic access standard* the *Network Service Provider* must include provisions in the relevant *connection agreement* requiring the *Network User* if necessary to meet the *system standards* or allow connection of other *Network Users* to either upgrade to the *automatic access standard* or fund the reasonable cost of the works necessary to mitigate their effect of connecting at a standard below the *automatic access standard*.
- (d) If for existing customer *connections* the level of *voltage* fluctuation is, or may be, exceeded as a result of a proposed new *connection*, the *Network Service Provider* must, if the cause of that excessive level cannot be remedied by enforcing the provisions of existing *connection agreements*, undertake all reasonable works necessary to meet the technical standards in this schedule or to permit the proposed new *connection* within the requirements stated in this clause.

For other than a new *connection* in accordance with the preceding paragraph, the responsibility of a *Network Service Provider* for excursions in *voltage* fluctuations above the levels defined above is limited to *voltage* fluctuations caused by

network plant and the pursuit of all reasonable measures available under the *Rules* and its *connection agreements*.

S5.1.6 Voltage harmonic or voltage notching distortion

A *Network Service Provider* must use reasonable endeavours to design and operate its *network* and include conditions in *connection agreements* to ensure that the effective harmonic *voltage* distortion at any point in the *network* will be limited to less than the levels stipulated in accordance with the provisions of clause S5.1a.6 of the *system standards* and this clause S5.1.6.

In accordance with AS/NZS 61000.3.6:2001 and guidelines published by *Standards Australia* and applying the assumption that *Customers* will comply with their obligations under schedule 5.3 *Network Service Providers* must determine “Planning Levels” for *connection points* on their *network* in order to maintain harmonic *voltage* distortion for all supply points to customers supplied from their *network* below the “Compatibility Levels” defined in Table 1 of AS/NZS 61000.3.6:2001.

The *Network Service Provider* must allocate emission limits to a *connection* enquiry or an *application to connect* and must evaluate the acceptability for *connection* of distorting sources as follows:

- (a) *Automatic access standard*: the *Network Service Provider* must allocate emission limits no more onerous than the lesser of the acceptance levels determined in accordance with either of the stage 1 or the stage 2 evaluation procedures defined in AS/NZS 61000.3.6:2001.
- (b) *Minimum access standard*: subject to clause S5.1.6(c), the determination by the *Network Service Provider* of acceptable emission limits must be undertaken in consultation with the party seeking *connection* using the Stage 3 evaluation procedure defined in AS/NZS 61000.3.6:2001.
- (c) In respect of each new *connection* at a level of performance below the *automatic access standard* the *Network Service Provider* must include provisions in the relevant *connection agreement* requiring the *Network User* if necessary to meet the *system standards* or allow connection of other *Network Users* to either upgrade to the *automatic access standard* or fund the reasonable cost of the works necessary to mitigate their effect of connecting at a standard below the *automatic access standard*.
- (d) If for existing customer *connections* the level of harmonic *voltage* distortion is, or may be, exceeded as a result of a proposed new *connection*, the *Network Service Provider* must, if the cause of that excessive level cannot be remedied by enforcing the provisions of existing *connection agreements*, undertake all works necessary to meet the technical standards in this schedule or to permit a proposed new *connection* within the *automatic access standard* defined in clause S5.3.8 and the requirements stated in this clause.

For other than a new *connection* in accordance with the preceding paragraph, the responsibility of a *Network Service Provider* for harmonic *voltage* distortion outside the range defined above is limited to harmonic *voltage* distortion caused by *network plant* and the pursuit of all measures available under the *Rules* and its *connection agreements*.

S5.1.7 Voltage unbalance

- (a) A *Transmission Network Service Provider* must balance the effective impedance of the phases of its *network*, and a *Distribution Network Service Provider* must balance the current drawn in each phase at each of its *connection points*, so as to achieve average levels of negative sequence *voltage* at all *connection points* that are equal to or less than the values set out in Table S5.1a.1 as determined in accordance with the accompanying provisions of clause S5.1a.7 of the *system standards*.
- (b) A *Network Service Provider* must include conditions in *connection agreements* to ensure that a *Connection Applicant* will balance the current drawn in each phase at each of its *connection points* so as to achieve:
 - (1) for those *Network Users* listed in clause S5.3(a): the levels permitted in accordance with clause S5.3.6 of schedule 5.3;
 - (2) for *Market Network Service Providers*: the levels permitted in accordance with clause S5.3a.9 of schedule 5.3a;
 - (3) otherwise: the average levels of negative sequence *voltage* at each of its *connection points* that are equal to or less than the values set out in Table S5.1a.1 and the accompanying provisions of clause S5.1a.7 of the *system standards*.

The responsibility of the *Network Service Provider* for *voltage* unbalance outside the ranges defined above is limited to *voltage* unbalance caused by the *network* and the pursuit of all measures available under the *Rules* and its *connection agreements*.

- (c) A *Network Service Provider* must include conditions in *connection agreements* to ensure that each *Generator* will balance:
 - (1) the *voltage generated* in each phase of its *generating system*; and
 - (2) when not generating, the current drawn in each phase,
 in order to achieve average levels of negative sequence *voltage* at each of the *generating system connection points* due to phase imbalances within the *generating plant* that are not more than the values determined by the *Network Service Provider* to achieve average levels of negative sequence *voltage* at the *connection points* of other *Network Users* in accordance with clause S5.1a.7.

- (d) When including conditions under paragraph (c), the *Network Service Provider* must have regard to the capabilities of the relevant *generating plant* technology.

S5.1.8 Stability

In conforming with the requirements of the *system standards*, the following criteria must be used by *Network Service Providers* for both planning and operation:

For stable operation of the *national grid*, both in a *satisfactory operating state* and following any *credible contingency events* or any *protected event* described in clause S5.1.2.1:

- (a) the *power system* will remain in synchronism;
- (b) damping of *power system* oscillations will be adequate; and
- (c) *voltage* stability criteria will be satisfied.

Damping of *power system* oscillations must be assessed for planning purposes according to the design criteria which states that *power system damping* is considered adequate if after the most critical *credible contingency event* or any *protected event*, simulations calibrated against past performance indicate that the halving time of the least damped electromechanical mode of oscillation is not more than five seconds.

To assess the damping of *power system* oscillations during operation, or when analysing results of tests such as those carried out under clause 5.7.7 of the *Rules*, the *Network Service Provider* must take into account statistical effects. Therefore, the *power system damping* operational performance criterion is that at a given operating point, real-time monitoring or available test results show that there is less than a 10 percent probability that the halving time of the least damped mode of oscillation will exceed ten seconds, and that the average halving time of the least damped mode of oscillation is not more than five seconds.

The *voltage* control criterion is that stable *voltage* control must be maintained following the most severe *credible contingency event* or any *protected event*. This requires that an adequate *reactive power* margin must be maintained at every *connection point* in a *network* with respect to the *voltage* stability limit as determined from the *voltage/reactive load* characteristic at that *connection point*. Selection of the appropriate margin at each *connection point* is at the discretion of the relevant *Network Service Provider*, subject only to the requirement that the margin (expressed as a capacitive *reactive power* (in MVar)) must not be less than one percent of the maximum fault level (in MVA) at the *connection point*.

In planning a *network* a *Network Service Provider* must consider *non-credible contingency events* such as *busbar* faults which result in tripping of several circuits, uncleared faults, double circuit faults and multiple contingencies which could potentially endanger the stability of the *power system*. In those cases where the consequences to any *network* or to any *Registered Participant* of such events

are likely to be severe disruption a *Network Service Provider* and/or a *Registered Participant* must in consultation with AEMO, install, maintain and upgrade emergency controls within the *Network Service Provider's* or *Registered Participant's* system or in both, as necessary, to minimise disruption to any *transmission or distribution network* and to significantly reduce the probability of cascading failure.

A *Registered Participant* must co-operate with a *Network Service Provider* to achieve stable operation of the *national grid* and must use all reasonable endeavours to negotiate with the *Network Service Provider* regarding the installation of emergency controls as described in the previous paragraph. The cost of installation, maintenance and operation of the emergency controls must be borne by the *Network Service Provider* who is entitled to include this cost when calculating the *Transmission Customer use of system price*.

S5.1.9 Protection systems and fault clearance times

Network Users

- (a) A *Network Service Provider* must determine the *automatic access standard* and *minimum access standard* that applies to the protection zone of each *protection system* in relation to the *connection point* and the *plant* to be *connected*, as follows:
 - (1) The *automatic access standard* for *fault clearance time* for any *fault type* is the lesser of the *system standard* set out in clause S5.1a.8 that applies to the highest *nominal voltage* within the *protection system's* protection zone and the corresponding *minimum access standard* determined under clause S5.1.9(a)(2) or clause S5.1.9(a)(3) as applicable.
 - (2) The *minimum access standard* for *fault clearance time* of a primary *protection system* is:
 - (i) for a *fault type* that constitutes a *credible contingency event* in the relevant protection zone, the longest time such that a *short circuit fault* of that *fault type* that is cleared in that time would not cause the *power system* to become unstable when operating at any level of *inter-regional* or *intra-regional power transfer* that would be permissible (taking into account all other limiting criteria) if the *fault clearance time* for such a fault at the *connection point* were the *system standard* set out in clause S5.1a.8 that applies to the *nominal voltage* at the *connection point*; and
 - (ii) for a *fault type* that does not constitute a *credible contingency event* in the relevant protection zone:
 - (A) if a two phase to ground fault in that protection zone constitutes a *credible contingency event*, the corresponding *fault clearance time* for a two phase to

ground *short circuit fault* in that protection zone as determined under clause S5.1.9(a)(2)(i); and

- (B) otherwise, the shortest of the *fault clearance times* for a two phase to ground *short circuit fault* in each adjoining protection zone (excluding *transformer* protection zones and dead zones) as determined under clause S5.1.9(a)(2)(i) or clause S5.1.9(e).
- (3) The *minimum access standard* for *fault clearance time* of a *breaker fail protection system* or similar back-up *protection system* is the longest time such that a *short circuit fault* of any *fault type* that is cleared in that time would not damage any part of the *power system* (other than the faulted element) while the fault current is flowing or being interrupted.
- (b) The negotiation of *access standards* in relation to paragraph (a) must involve AEMO under clause 5.3.4A(c) of the *Rules*.

Transmission systems and distribution systems

- (c) Subject to clauses S5.1.9(k) and S5.1.9(l), a *Network Service Provider* must provide sufficient primary *protection systems* and back-up *protection systems* (including *breaker fail protection systems*) to ensure that a fault of any *fault type* anywhere on its *transmission system* or *distribution system* is automatically *disconnected* in accordance with clause S5.1.9(e) or clause S5.1.9(f).
- (d) If the *fault clearance time* determined under clause S5.1.9(e) of a primary *protection system* for a two phase to ground *short circuit fault* is less than 10 seconds, the primary *protection system* must have sufficient redundancy to ensure that it can clear *short circuit faults* of any *fault type* within the relevant *fault clearance time* with any single protection element (including any communications facility upon which the *protection system* depends) out of service.
- (e) The *fault clearance time* of a primary *protection system* of a *Network Service Provider* must not exceed:
 - (1) for any *fault type* that constitutes a *credible contingency event* in the relevant protection zone, the longest time such that a *short circuit fault* of that *fault type* that is cleared in that time would not cause the *power system* to become unstable when operating at any level of *inter-regional* or *intra-regional power transfer* that would be permissible (taking into account all other limiting criteria) if the *fault clearance time* for such a fault in that protection zone were the relevant *system standard* set out in clause S5.1a.8; and
 - (2) for any *fault type* that does not constitute a *credible contingency event* in the relevant protection zone:

- (i) if a two phase to ground fault in that protection zone is a *credible contingency event*, the corresponding *fault clearance time* for a two phase to ground fault in that protection zone as determined under clause S5.1.9(e)(1); and
 - (ii) otherwise, the shortest of the *fault clearance times* for a two phase to ground fault in each adjoining protection zone (excluding *transformer* protection zones and dead zones) as determined under clauses S5.1.9(a)(2)(i), S5.1.9(e)(1) or S5.1.9(e)(2)(i).
- (f) The *fault clearance time* of each *breaker fail protection system* or similar back-up protection system of a *Network Service Provider* must be such that a *short circuit fault* of any *fault type* that is cleared in that time would not damage any part of the *power system* (other than the faulted element) while the fault current is flowing or being interrupted.
- (g) A *Network Service Provider* must demonstrate to AEMO that each *fault clearance time* for a primary protection system that is longer than the relevant *system standard* set out in clause S5.1a.8 and is less than 10 seconds would not cause or require an *inter-regional* or *intra-regional power transfer capability* to be reduced.
- (h) A *Network Service Provider* must include in each *connection agreement* entered into after the *performance standards commencement date*:
 - (1) the *fault clearance times* for each *fault type* of each of its *protection systems* that could reasonably be expected to interrupt *supply* to or from the relevant *connection point*; and
 - (2) an agreement to not increase those *fault clearance times* without the prior written agreement of the other party.
- (i) *Network Service Providers* must coordinate and cooperate with *Network Users* to implement *breaker fail* protection for circuit breakers provided to isolate the *Network User's facility* from the *Network Service Provider's facilities*.
- (j) Where practicable and economic to achieve, investments should meet the *system standard* for *fault clearance times* as specified in clause S5.1a.8 for two phase to ground *short circuit faults*.
- (k) A primary protection system may clear faults other than *short circuit faults* slower than the relevant *fault clearance time*, provided that such faults would be cleared sufficiently promptly to not adversely impact on *power system security* compared with its operation for the corresponding *short circuit fault*. In the case of a fault within equipment at a station, the corresponding *short circuit fault* is to be taken as a two phase to ground *short circuit fault* at the external connections of the equipment.
- (l) Protection systems may rely on *breaker fail protection systems* or other back-up protection systems to completely clear faults of any *fault type* that:

- (1) occur within a *substation* between a protection zone and a circuit breaker adjacent to that protection zone that is required to open to clear the fault (a **dead zone**); and
- (2) remain connected through a power line or *transformer* after operation of a primary *protection system*,

provided that the relevant *Network Service Provider* assesses that the likelihood of a fault occurring within the dead zone is not greater than the likelihood of a fault occurring on *busbars*.

- (m) For the purposes of this clause S5.1.9, a *credible contingency event* includes any event that clause S5.1.2.1 requires a *Network Service Provider* to consider as a *credible contingency event*.
- (n) The provisions of clause S5.1.9(d) apply to *facilities* constructed or modified on or after the *performance standards commencement date*.
- (o) For *facilities* other than those referred to in clause S5.1.9(n), the requirement for primary *protection system* redundancy must be derived by the *Network Service Provider* from the existing capability of each *facility* on the *performance standards commencement date*.

S5.1.10 Load, generation and network control facilities

S5.1.10.1 General

Each *Network Service Provider* in consultation with *AEMO* must ensure that:

- (a) sufficient *load* is under the control of underfrequency relays or other *facilities* where required to minimise or reduce the risk that in the event of the sudden, unplanned simultaneous occurrence of multiple *contingency events*, the *power system frequency* moves outside the *extreme frequency excursion tolerance limits*;
- (b) where determined to be necessary, sufficient *load* is under the control of undervoltage relays to minimize or reduce the risk of voltage collapse on the occurrence of multiple *contingency events*; and
- (c) there is sufficient *load* under manual control either locally or from remotely located *control centres* to allow the *load shedding procedures* to be implemented on instruction from *AEMO* to enable *AEMO* to maintain *power system security*.

A *Network Service Provider* may require *load shedding* arrangements to be installed to cater for abnormal operating conditions including abnormal operating conditions in which *emergency frequency control schemes* are intended to operate.

Transmission Network Service Providers and *connected Distribution Network Service Providers* must cooperate to agree arrangements to implement *load shedding*. The arrangements may include the opening of circuits in either a *transmission* or *distribution network*.

The *Transmission Network Service Provider* must specify, in the *connection agreement*, control and monitoring requirements to be provided by a *Distribution Network Service Provider* for *load shedding facilities* including *emergency frequency control schemes*.

S5.1.10.1a Emergency frequency control schemes

- (a) A *Network Service Provider* must:
 - (1) cooperate with *AEMO* in the conduct of *power system frequency risk reviews* and provide to *AEMO* all information and assistance reasonably requested by *AEMO* in connection with *power system frequency risk reviews*; and
 - (2) provide to *AEMO* all information and assistance reasonably requested by *AEMO* for the development and review of *EFCS settings schedules*.
- (b) Where a *protected event EFCS standard* has been determined for an *emergency frequency control scheme* applicable in respect of a *Network Service Provider's transmission or distribution system*, the *Network Service Provider* must:
 - (1) design, procure, commission, maintain, monitor, test, modify and report to *AEMO* in respect of, the *emergency frequency control scheme*;
 - (2) perform its obligations under subparagraph (1) so as to achieve the availability and operation of the scheme in accordance with the *protected event EFCS standard*; and
 - (3) coordinate with *AEMO* in relation to the monitoring and testing of the scheme once it is in operation.
- (c) A *Network Service Provider* must use reasonable endeavours to achieve commissioning of a new or upgraded *emergency frequency control scheme* within the time contemplated by the relevant *power system frequency risk review* or, where applicable, *AEMO's* request to the *Reliability Panel* for declaration of a *non-credible contingency event* as a *protected event* and the decision of the *Reliability Panel* with respect to that request.
- (d) For an *over frequency scheme*:
 - (1) a *Network Service Provider* must identify which elements of the scheme (if any) can be implemented by *facilities* provided by a *Generator* for the *Generator's generating unit* or by modification to the *facilities* of the *Generator* or by changes to the settings of *protection systems* or *control systems* for the *Generator's generating units*.
 - (2) Where those opportunities are identified, the *Network Service Provider* must notify the *Generator* concerned of the opportunity and

must request the *Generator* to negotiate with the *Network Service Provider* to reach agreement on the modifications to be made and the other arrangements required by the *Network Service Provider* to comply with its obligations with respect to the scheme (including commissioning, testing, monitoring and future modification).

- (3) If the *Generator* declines the request, or if the *Generator* agrees to the request but good faith negotiations do not result in agreement being reached in a reasonable time (having regard to the implementation timetable for the scheme), the *Network Service Provider* may make other arrangements to implement the relevant elements of the scheme.
- (4) If the *Generator* accepts the request, the *Generator* and the *Network Service Provider* must each negotiate in good faith with respect to the matters referred to above.
- (e) Nothing in paragraph (d) is intended to prevent the exercise of rights under a *connection agreement*.
- (f) Nothing in paragraph (d) is intended to constitute or require an *application to connect* for the purposes of rule 5.3 or rule 5.3A. If clause 5.3.9 applies in respect of alterations for an *over frequency scheme* the subject of negotiations under paragraph (d), the *Network Service Provider* cannot charge a fee under clause 5.3.9(e) for assessment of a submission in respect of those alterations.

S5.1.10.2 Distribution Network Service Providers

A Distribution Network Service Provider must:

- (a) provide, install, operate and maintain *facilities* for *load shedding* in respect of any *connection point* at which the maximum *load* exceeds 10MW in accordance with clause 4.3.5 of the *Rules*;
- (b) in accordance with the provisions of the relevant *connection agreement*, co-operate with the *Transmission Network Service Providers* in conducting periodic functional testing of the *facilities* and *emergency frequency control schemes*, which must not require *load* to be *disconnected*;
- (c) apply *frequency* settings to relays or other *facilities* as determined by AEMO in consultation with the *Network Service Provider*; and
- (d) apply undervoltage settings to relays as notified by the *Transmission Network Service Provider* in accordance with clause S5.1.10.3(b).

S5.1.10.3 Transmission Network Service Providers

Transmission Network Service Providers must:

- (a) conduct periodic functional tests of the *load shedding facilities* and *emergency frequency control schemes*; and

- (b) notify *Distribution Network Service Providers* regarding the settings of undervoltage load shed relays as determined by *AEMO* in consultation with the *Transmission Network Service Provider*.

S5.1.11 Automatic reclosure of transmission or distribution lines

Where *automatic reclose equipment* is provided on *transmission lines* or *distribution lines*, check or blocking *facilities* must be applied to the *automatic reclose equipment* in those circumstances where there is any possibility of the two ends of the *transmission line* or *distribution line* being *energised* from sources that are not in synchronism.

S5.1.12 Rating of transmission lines and equipment

For operational purposes each *Network Service Provider* must, on reasonable request, advise *AEMO* of the maximum current that may be permitted to flow (under conditions nominated by *AEMO*) through each *transmission line*, *distribution line* or other item of equipment that forms part of its *transmission system* or *distribution system*.

This maximum current is called a *current rating* of the *transmission line*, *distribution line* or item of equipment notwithstanding that it may be determined by equipment associated with its *connection* to the *power system* (including switchgear, droppers, current transformers and *protection systems*).

AEMO may request for a *transmission line*, *distribution line* or other item of equipment:

- (a) a continuous *current rating*, being the level of current that is permitted to flow in that item of equipment for an indefinite period; and
- (b) one or more short term *current ratings* for a period of time nominated by *AEMO* after consultation with the *Network Service Provider*, being the level of current that is permitted to flow in that item of equipment for that period of time if the current had been less than the corresponding continuous *current rating* for a reasonable prior period taking into account the thermal properties of the item of equipment.

The *Network Service Provider* may be required by *AEMO* to advise different *current ratings* to be applied under nominated conditions including, without limitation:

- (a) ambient weather conditions;
- (b) seasons and/or times of *day*;
- (c) ratios of the current during an emergency to the current prior to the emergency (taking into account pre-contingent loading history where applicable); and
- (d) period of loading at the nominated level.

A *Transmission Network Service Provider* is entitled to advise *AEMO* of short term *current ratings* which may apply for nominated periods of time to the relevant *transmission line* or item of equipment provided that these ratings do not materially affect the safety of the *transmission line* or item of equipment, or the safety of persons. Short-term ratings for *transmission lines* or items of equipment may be implemented by a methodology or algorithm in a format agreed with *AEMO*.

S5.1.13 Information to be provided

A *Network Service Provider* must, in response to a *connection* enquiry or an *application to connect* made in accordance with clause 5.3.2 of the *Rules*, provide the *connection applicant* electrical design information relevant to the nominal point of *connection* in accordance with a relevant requirement of schedules 5.2, 5.3 or 5.3a.

Schedule 5.2 Conditions for Connection of Generators

S5.2.1 Outline of requirements

- (a) This schedule sets out details of additional requirements and conditions that *Generators* must satisfy as a condition of *connection* of a *generating system* to the *power system*.
- (b) This schedule does not apply to any *generating system* that is:
 - (1) subject to an exemption from registration under clause 2.2.1(c); or
 - (2) eligible for exemption under any guidelines issued under clause 2.2.1(c),and which is *connected* or intended for use in a manner the *Network Service Provider* considers is unlikely to cause a material degradation in the quality of *supply* to other *Network Users*.
- (c) This schedule also sets out the requirements and conditions which subject to clause 5.2.5 of the *Rules*, are obligations on *Generators*:
 - (1) to co-operate with the relevant *Network Service Provider* on technical matters when making a new *connection*; and
 - (2) to provide information to the *Network Service Provider* or *AEMO*.
- (d) The equipment associated with each *generating system* must be designed to withstand without damage the range of operating conditions which may arise consistent with the *system standards*.
- (e) *Generators* must comply with the *performance standards* and any attached terms or conditions of agreement agreed with the *Network Service Provider* or *AEMO* in accordance with a relevant provision of schedules 5.1a or 5.1.

- (f) This schedule does not set out arrangements by which a *Generator* may enter into an agreement or contract with *AEMO* to:
 - (1) provide additional services that are necessary to maintain *power system security*; or
 - (2) provide additional services to facilitate management of the *market*.
- (g) This schedule provides for *automatic access standards* and the determination of *negotiated access standards* derived from *minimum access standards* which once determined, must be recorded together with the *automatic access standards* in a *connection agreement* and registered with *AEMO* as *performance standards*.

S5.2.2 Application of Settings

A *Generator* must only apply settings to a *control system* or a *protection system* that are necessary to comply with performance requirements of this schedule 5.2 if the settings have been approved in writing by the relevant *Network Service Provider* and, if the requirement is one that would involve *AEMO* under clause 5.3.4A(c) of the *Rules*, also by *AEMO*. A *Generator* must not allow its *generating unit* to supply electricity to the *power system* without such prior approval.

If a *Generator* seeks approval from the *Network Service Provider* to apply or change a setting, then (except in the case of settings to be applied or changed by the *Generator* in connection with an *emergency frequency control scheme*) approval must not be withheld unless the *Network Service Provider* or, if the requirement is one that would involve *AEMO* under clause 5.3.4A(c) of the *Rules*, *AEMO*, reasonably determines that the changed setting would cause the *generating unit* to not comply with the relevant *performance standard* or cause an *inter-regional* or *intra-regional power transfer capability* to be reduced.

If the *Network Service Provider* or, if the requirement is one that would involve *AEMO* under clause 5.3.4A(c) of the *Rules*, *AEMO*, reasonably determines that a setting of a *generating unit's control system* or *protection system* needs to change to comply with the relevant *performance standard* or to maintain or restore an *inter-regional* or *intra-regional power transfer capability*, the *Network Service Provider* or *AEMO* (as applicable) must consult with the relevant *Generator*, and the *Network Service Provider* may request in writing that a setting be applied in accordance with the determination.

The *Network Service Provider* may also request a test to verify the performance of the relevant *plant* with the new setting. The *Network Service Provider* must provide *AEMO* with a copy of its request to a *Generator* to apply a setting or to conduct a test.

A *Generator* who receives such a request must arrange for the notified setting to be applied as requested and for a test to be conducted as requested. After the test, the *Generator* must, on request, provide both *AEMO* and the *Network Service*

Provider with a report of a requested test, including evidence of its success or failure. Such a report of a test is *confidential information*.

A *Generator* must not change a setting requested by the *Network Service Provider* without its prior written agreement. If the *Network Service Provider* requires a *Generator* to change a setting within 18 months of a previous request, the *Network Service Provider* must pay the *Generator* its reasonable costs of changing the setting and conducting the tests as requested.

S5.2.3 Technical matters to be coordinated

- (a) A *Generator* and the relevant *Network Service Provider* must use all reasonable endeavours to agree upon relevant technical matters in respect of each new or altered *connection* of a *generating system* to a *network* including:
 - (1) design at the *connection point*;
 - (2) physical layout adjacent to the *connection point*;
 - (3) primary protection and backup protection (clause S5.2.5);
 - (4) control characteristics (clause S5.2.5);
 - (5) communications *facilities* (clause S5.2.6);
 - (6) insulation co-ordination and lightning protection (paragraph (b));
 - (7) fault levels and fault clearance (clause S5.2.8);
 - (8) switching and *isolation* facilities (clause S5.2.8);
 - (9) interlocking and *synchronising* arrangements; and
 - (10) *metering installations*.
- (b) A *Generator* must ensure that in designing a *generating system's* electrical *plant*, including any *substation* for the *connection* of the *generating system* to the *network*, to operate at the same *nominal voltage* as at the *connection point*:
 - (1) the *plant* complies with the relevant *Australian Standards* unless a provision of these *Rules* allows or requires otherwise;
 - (2) the earthing of the *plant* complies with the ENA EG1-2006: Substation Earthing Guide to reduce step and touch potentials to safe levels;
 - (3) the *plant* is capable of withstanding, without damage the *voltage* impulse levels specified in the *connection agreement*;

- (4) the insulation levels of the *plant* are co-ordinated with the insulation levels of the *network* to which the *generating system* is *connected* as specified in the *connection agreement*; and
 - (5) safety provisions in respect of the *plant* comply with requirements applicable to the *participating jurisdiction* in which the *generating system* is located, as notified by the *Network Service Provider*.
- (c) If no relevant *Australian Standard* exists for the purposes of paragraph (b)(1), the *Generator* must agree with the *Network Service Provider* for the *Generator* to comply with another relevant standard.

S5.2.4 Provision of information

- (a) A *Generator* or person who is negotiating a *connection agreement* with a *Network Service Provider* must promptly on request by *AEMO* or the *Network Service Provider* provide all data in relation to that *generating system* specified in schedule 5.5.
- (b) A *Generator*, or person required under the *Rules* to register as the *Generator* in respect of a *generating system* comprised of *generating units* with a combined *nameplate rating* of 30 MW or more, by the earlier of:
 - (1) the day on which an *application to connect* is made under clause 5.3.4(a);
 - (2) the day on which amendments to *performance standards* are submitted under rule 4.14(p) or clause 5.3.9(b);
 - (3) three months before commissioning of a *generating system* or planned alteration to a *generating system*; or
 - (4) 5 *business days* before commissioning of a *generating system* alteration that is repairing *plant* after a *plant* failure, if *plant* performance after the alteration will differ from performance prior to the *plant* failure,

must provide:

- (5) to *AEMO* and the relevant *Network Service Provider(s)* (including the relevant *Transmission Network Service Provider* in respect of an *embedded generating unit*):
 - (i) information about the *protections systems* of the *generating system*;
 - (ii) information about the *control systems* of the *generating system* including:
 - (A) a set of functional block diagrams, including all functions between feedback signals and generating system output;

- (B) the parameters of each functional block, including all settings, gains, time constants, delays, deadbands and limits;
 - (C) the characteristics of non-linear elements;
 - (D) encrypted models in a form suitable for the software simulation products nominated by AEMO in the *Power System Model Guidelines*;
- (6) to AEMO, the model source code (in the circumstances required by the *Power System Model Guidelines*) associated with the *power system* simulation model in subparagraph (ii)(D) in an unencrypted form suitable for at least one of the software simulation products nominated by AEMO in the *Power System Model Guidelines*, and in a form that would allow conversion for use with other software products nominated by AEMO in the *Power System Model Guidelines*;
- (7) **[Deleted]**
- (7A) to AEMO and the relevant *Network Service Provider(s)*, any other information specified in the *Power System Model Guidelines*, *Power System Design Data Sheet* and *Power System Setting Data Sheet*; and
- (8) to AEMO and the relevant *Network Service Providers* (including the relevant *Transmission Network Service Provider* in respect of an *embedded generating unit*) a *releasable user guide*.
- (b1) The information provided under paragraph (b) must contain sufficient detail for AEMO and the relevant *Network Service Provider(s)* to perform *power system* simulation studies in accordance with the requirements and circumstances specified in the *Power System Model Guidelines*.
- (c) The information provided under paragraph (b) must:
 - (1) encompass all *control systems* that respond to *voltage* or *frequency* disturbances on the *power system*, and which are either integral to the *generating units* or otherwise part of the *generating system*, including those applying to *reactive power* equipment that forms part of the *generating system*; and
 - (2) conform with the applicable models developed in accordance with the *Power System Model Guidelines*, or an alternative model agreed with AEMO to be necessary to adequately represent the *generating plant* to carry out load flow and dynamic simulations and (where applicable) specialised *power system* studies.
- (d) The *Generator* must provide to AEMO information that updates the information provided under clause S5.2.4(b) and must provide to the relevant *Network Service Providers* information that updates the information provided under clause S5.2.4(b)(5):

- (1) within 3 months after commissioning tests or other tests undertaken in accordance with clause 5.7.3 are completed;
 - (2) when the *Generator* becomes aware that the information is incomplete, inaccurate or out of date; or
 - (3) on request by *AEMO* or the relevant *Network Service Provider*, where *AEMO* or the relevant *Network Service Provider* considers that the information is incomplete, inaccurate or out of date.
- (d1) A *Generator* is only required to provide new information under clause S5.2.4(d) to the extent that it is different to the information previously provided under clause S5.2.4(b).
- (e) For the purposes of clause S5.2.4(e1), a *Connection Applicant* must be registered as an *Intending Participant* in accordance with rule 2.7.
- (e1) For the purposes of clause 5.3.2(f), the technical information that a *Network Service Provider* must, if requested, provide to a *Connection Applicant* in respect of a proposed *connection* for a *generating system* includes:
- (1) the highest expected single phase and three phase fault levels at the *connection point* with the *generating system* not connected;
 - (2) the clearing times of the existing *protection systems* that would clear a fault at the location at which the new *connection* would be connected into the existing *transmission system* or *distribution system*;
 - (3) the expected limits of *voltage* fluctuation, harmonic *voltage* distortion and *voltage* unbalance at the *connection point* with the *generating system* not connected;
 - (4) technical information relevant to the *connection point* with the *generating system* not synchronised including equivalent source impedance information, sufficient to estimate fault levels, *voltage* fluctuations, harmonic *voltage* distortion (for harmonics relevant to the *generating system*) and *voltage* unbalance;
 - (5) information relating to the performance of the *national grid* that is reasonably necessary for the *Connection Applicant* to prepare an *application to connect*, including:
 - (i) a model of the *power system*, including relevant *considered projects* and the range of expected operating conditions, sufficient to carry out load flow and dynamic simulations; and
 - (ii) information on *inter-regional* and *intra-regional* power transfer capabilities and relevant *plant* ratings; and
 - (6) the *Network Service Provider's* expected *three phase* fault level at the *connection point* for the *generating system* following the *connection* of the *generating system*.

- (f) All information provided under this clause S5.2.4 must be treated as *confidential information*.

S5.2.5 Technical requirements

S5.2.5.1 Reactive power capability

Automatic access standard

- (a) The *automatic access standard* is a *generating system* operating at:
- (1) any level of *active power* output; and
 - (2) any *voltage* at the *connection point* within the limits established under clause S5.1a.4 without a *contingency event*,
- must be capable of supplying and absorbing continuously at its *connection point* an amount of *reactive power* of at least the amount equal to the product of the *rated active power* of the *generating system* and 0.395.

Minimum access standard

- (b) The *minimum access standard* is no capability is required to supply or absorb *reactive power* at the *connection point*.

Negotiated access standard

- (c) When negotiating a *negotiated access standard*, the *Generator* and the *Network Service Provider*:
- (1) must subject to any agreement under paragraph (d)(4), ensure that the *reactive power capability* of the *generating system* is sufficient to ensure that all relevant *system standards* are met before and after *credible contingency events* under normal and planned *outage* operating conditions of the *power system*, taking into account at least existing projects and *considered projects*;
 - (2) may negotiate either a range of *reactive power* absorption and supply, or a range of *power factor*, at the *connection point*, within which the *plant* must be operated; and
 - (3) may negotiate a limit that describes how the *reactive power capability* varies as a function of *active power* output due to a design characteristic of the *plant*.
- (d) If the *generating system* is not capable of the level of performance established under paragraph (c)(1) the *Generator*, depending on what is reasonable in the circumstances, must:
- (1) pay compensation to the *Network Service Provider* for the provision of the deficit of *reactive power* (supply and absorption) from within the *network*;

- (2) install additional equipment *connecting* at the *generating system's connection point* or another location, to provide the deficit of *reactive power* (supply and absorption), and such equipment is deemed to be part of the *generating system*;
 - (3) reach a commercial arrangement with a *Registered Participant* to provide the deficit of *reactive power* (supply and absorption); or
 - (4) if the inability to meet the performance level only occurs for particular operating conditions, agree to and document as part of the proposed *negotiated access standard*, operational arrangements by which the *plant* can achieve an agreed level of performance for those operating conditions.
- (e) The *Generator* may select one or more options referred to in paragraph (d).

General requirements

- (f) An *access standard* must record the agreed value for *rated active power* and where relevant the method of determining the value.
- (g) An *access standard* for consumption of *energy* by a *generating system* when not supplying or absorbing *reactive power* under an *ancillary services agreement* is to be established under clause S5.3.5 as if the *Generator* were a *Market Customer*.

S5.2.5.2 Quality of electricity generated

- (a) For the purpose of this clause S5.2.5.2 in respect of a *synchronous generating unit*, AS 1359.101 and IEC 60034-1 are *plant standards* for harmonic *voltage* distortion.

Automatic access standard

- (b) The *automatic access standard* is a *generating system* when generating and when not generating must not produce at any of its *connection points* for *generation*:
 - (1) *voltage* fluctuation greater than the limits allocated by the *Network Service Provider* under clause S5.1.5(a);
 - (2) harmonic *voltage* distortion greater than the emission limits specified by a *plant standard* under paragraph (a) or allocated by the *Network Service Provider* under clause S5.1.6(a); and
 - (3) *voltage* unbalance greater than the limits allocated by the *Network Service Provider* in accordance with clause S5.1.7(c).

Minimum access standard

- (c) The *minimum access standard* is a *generating system* when generating and when not generating must not produce at any of its *connection points* for *generation*:
- (1) *voltage* fluctuations greater than limits determined under clause S5.1.5(b);
 - (2) *harmonic voltage* distortion more than the lesser of the emission limits determined by the relevant *Network Service Provider* under clause S5.1.6(b) and specified by a *plant standard* under paragraph (a); and
 - (3) *voltage* unbalance more than limits determined under clause S5.1.7(c).

Negotiated access standard

- (d) A *negotiated access standard* negotiated under this clause S5.2.5.2 must not prevent the *Network Service Provider* meeting the *system standards* or contractual obligations to existing *Network Users*.

S5.2.5.3 Generating unit response to frequency disturbances

- (a) For the purposes of this clause S5.2.5.3:

normal operating frequency band, operational frequency tolerance band, or extreme frequency excursion tolerance limits are references to the widest range specified for those terms for any condition (including an “island” condition) in the *frequency operating standards* that apply to the *region* in which the *generating unit* is located.

stabilisation time and **recovery time** mean the longest times allowable for system *frequency* to remain outside the operational frequency tolerance band and the normal operating frequency band, respectively, for any condition (including an “island” condition) in the *frequency operating standards* that apply to the *region* in which the *generating unit* is located.

transient frequency limit and **transient frequency time** mean the values of 47.5 Hz and 9 seconds respectively, or such other values determined by the *Reliability Panel*.

Automatic access standard

- (b) The *automatic access standard* is a *generating system* and each of its *generating units* must be capable of *continuous uninterrupted operation* for *frequencies* in the following ranges:
- (1) the lower bound of the extreme frequency excursion tolerance limits to the lower bound of the operational frequency tolerance band for at least the stabilisation time;

- (2)

the lower bound of the operational frequency tolerance band to the lower bound of the normal operating frequency band, for at least the recovery time including any time spent in the range under subparagraph (1);
- (3)

the normal operating frequency band for an indefinite period;
- (4)

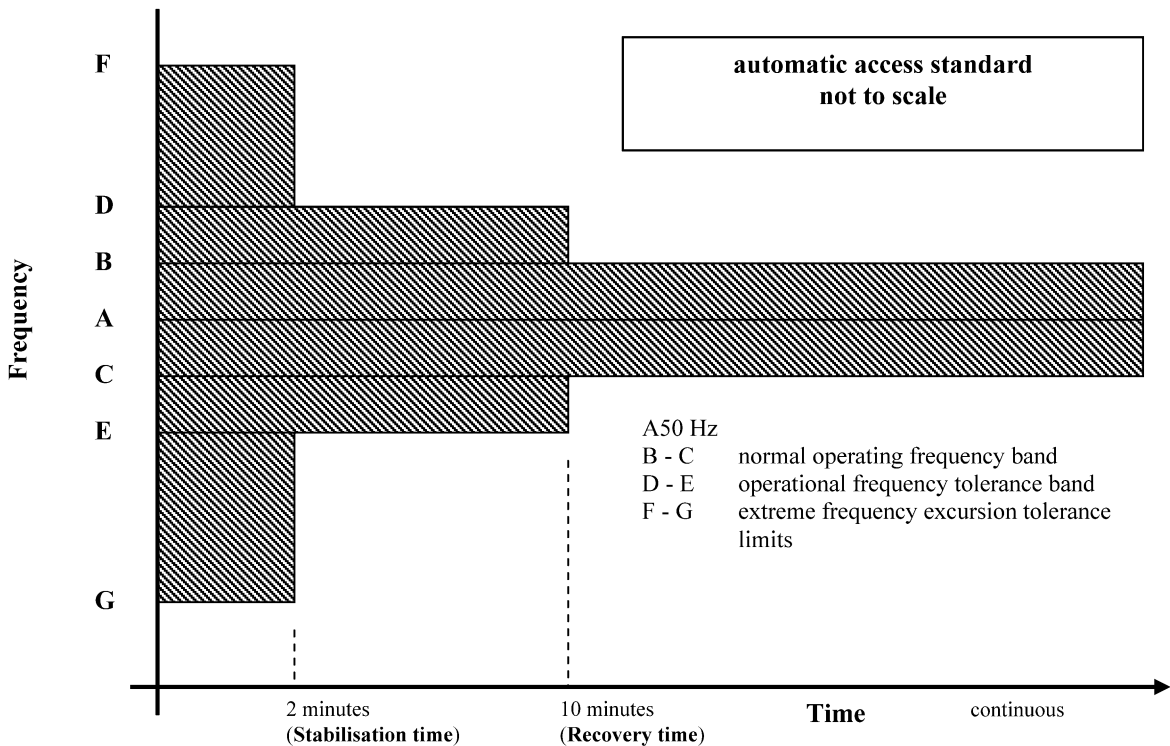
the upper bound of the normal operating frequency band to the upper bound of the operational frequency tolerance band, for at least the recovery time including any time spent in the range under subparagraph (5); and
- (5)

the upper bound of the operational frequency tolerance band to the upper bound of the extreme frequency excursion tolerance limits for at least the stabilisation time,

unless the rate of change of *frequency* is outside the range of -4 Hz to 4 Hz per second for more than 0.25 seconds or such other range as determined by the *Reliability Panel* from time to time.

Note:

The automatic access standard is illustrated in the following diagram. To the extent of any inconsistency between the diagram and paragraph (b), paragraph (b) prevails.



Minimum access standard

- (c)

The *minimum access standard* is a *generating system* and each of its *generating units* must be capable of *continuous uninterrupted operation* for *frequencies* in the following ranges:

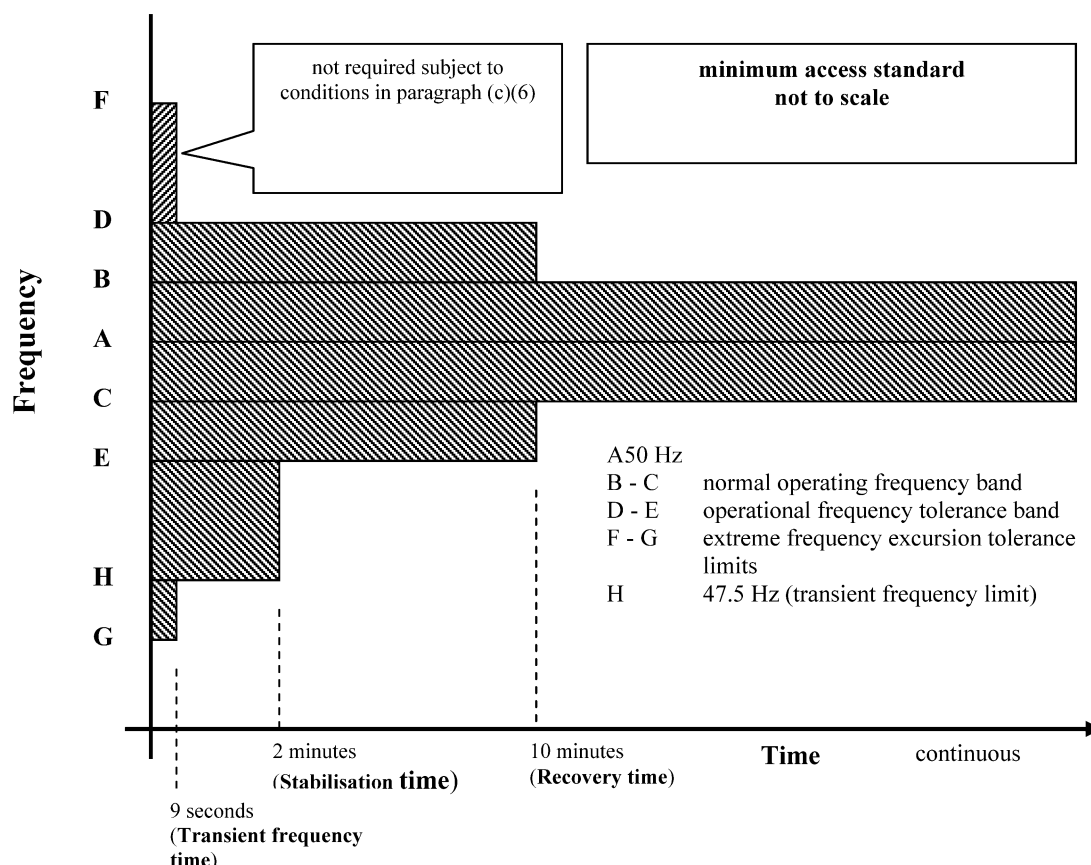
- (1) the lower bound of the extreme frequency excursion tolerance limits to the transient frequency limit for at least the transient frequency time;
- (2) the transient frequency limit to the lower bound of the operational frequency tolerance band for at least the stabilisation time;
- (3) the lower bound of the operational frequency tolerance band to the lower bound of the normal operating frequency band for at least the recovery time including any time spent in the ranges under subparagraphs (1) and (2);
- (4) the normal operating frequency band for an indefinite period;
- (5) the upper bound of the normal operating frequency band to the upper bound of the operational frequency tolerance band for at least the recovery time including any time spent in the ranges under subparagraph (6) unless the *generating system* has a *protection system* to trip a *generating unit* if the *frequency* exceeds a level agreed with AEMO; and
- (6) in respect of a *generating system*:
 - (i) of 30 MW or more; and
 - (ii) that does not have a *protection system* to trip the *generating unit* if the *frequency* exceeds a level agreed with AEMO,

the upper bound of the operational frequency tolerance band to the upper bound of the extreme frequency excursion tolerance limits (including an “island” condition) for at least the transient frequency time,

unless the rate of change of *frequency* is outside the range of -1 Hz to 1 Hz per second for more than one second or such other range as determined by the *Reliability Panel* from time to time.

Note:

The minimum access standard is illustrated in the following diagram. To the extent of any inconsistency between the diagram and paragraph (c), paragraph (c) prevails.



Negotiated access standard

- (d) A *negotiated access standard* can be accepted by the *Network Service Provider* provided that AEMO and the *Network Service Provider* agree that:
- (1) the *negotiated access standard* is as close as practicable to the *automatic access standard* while respecting the need to protect the *plant* from damage;
 - (2) the *frequency* would be unlikely to fall below the lower bound of the operational frequency tolerance band as a result of over-frequency tripping of *generating units*; and
 - (3) there would be no material adverse impact on quality of *supply* to other *Network Users* or *power system security*.
- (e) AEMO must advise on matters relating to *negotiated access standards* under this clause S5.2.5.3.

S5.2.5.4 Generating system response to voltage disturbances

Automatic access standard

- (a) The *automatic access standard* is a *generating system* and each of its *generating units* must be capable of *continuous uninterrupted operation*

where a *power system* disturbance causes the *voltage* at the *connection point* to vary within the following ranges:

- (1) *voltages* over 110% for the durations permitted under clause S5.1a.4;
- (2) 90% to 110% of *normal voltage* continuously;
- (3) 80% to 90% of *normal voltage* for a period of at least 10 seconds; and
- (4) 70% to 80% of *normal voltage* for a period of at least 2 seconds.

Minimum access standard

- (b) The *minimum access standard* is a *generating system* including all operating *generating units* must be capable of *continuous uninterrupted operation* where a *power system* disturbance causes the *voltage* at the *connection point* to vary in the range of 90% to 110% of *normal voltage*, provided that the ratio of *voltage* to *frequency* (as measured at the *connection point* and expressed as percentage of *normal voltage* and a percentage of 50 Hz) does not exceed:
 - (1) a value of 1.15 for more than two minutes; or
 - (2) a value of 1.10 for more than 10 minutes.

Negotiated access standard

- (c) In negotiating a *negotiated access standard*, a *generating system* and each of its operating *generating units* must be capable of *continuous uninterrupted operation* for the range of *voltages* specified in the *automatic access standard* except where AEMO and the *Network Service Provider* agree that:
 - (1) the *negotiated access standard* is as close as practicable to the *automatic access standard* while respecting the need to protect the *plant* from damage;
 - (2) the *generating plant* that would be tripped as a result of any *voltage* excursion within levels specified by the *automatic access standard*, is not more than 100 MW or a greater limit based on what AEMO and the *Network Service Provider* both consider to be reasonable in the circumstances; and
 - (3) there would be no material adverse impact on the quality of *supply* to other *Network Users* or *power system security*.
- (d) In carrying out assessments of proposed *negotiated access standards* under this clause S5.2.5.4, AEMO and the *Network Service Provider* must at a minimum, take into account:
 - (1) the expected performance of existing *networks* and *considered projects*;

- (2) the expected performance of existing *generating plant* and other relevant projects; and
 - (3) any corresponding *performance standard* (or where no *performance standard* has been registered, the *access standard*) that allows *generating plant* to trip for *voltage* excursions in ranges specified under the *automatic access standards*.
- (e) AEMO must advise on matters relating to *negotiated access standards* under this clause S5.2.5.4.

General requirement

- (f) The *access standard* must include any operational arrangements necessary to ensure the *generating system* and each of its *generating units* will meet its agreed performance levels under abnormal *network* or *generating system* conditions.

S5.2.5.5 Generating system response to disturbances following contingency events

- (a) In this clause S5.2.5.5 a fault includes:
- (1) a fault of the relevant type having a metallic conducting path; and
 - (2) a fault of the relevant type resulting from reclosure onto a fault by the operation of *automatic reclose equipment*.

Automatic access standard

- (b) The *automatic access standard* is:
- (1) a *generating system* and each of its *generating units* must remain in *continuous uninterrupted operation* for a disturbance caused by an event that is:
 - (i) a *credible contingency event* other than a fault referred to in subparagraph (iv);
 - (ii) a three phase fault in a *transmission system* cleared by all relevant primary *protection systems*;
 - (iii) a two phase to ground, phase to phase or phase to ground fault in a *transmission system* cleared in:
 - (A) the longest time expected to be taken for a relevant *breaker fail protection system* to clear the fault; or
 - (B) if a *protection system* referred to in subparagraph (A) is not installed, the greater of the time specified in column 4 of Table S5.1a.2 (or if none is specified, 430 milliseconds)

and the longest time expected to be taken for all relevant primary *protection systems* to clear the fault; and

- (iv) a three phase, two phase to ground, phase to phase or phase to ground fault in a *distribution network* cleared in:
 - (A) the longest time expected to be taken for the *breaker fail protection system* to clear the fault; or
 - (B) if a *protection system* referred to in subparagraph (A) is not installed, the greater of 430 milliseconds and the longest time expected to be taken for all relevant primary *protection systems* to clear the fault,

provided that the event is not one that would *disconnect* the *generating unit* from the *power system* by removing *network elements* from service; and

- (2) subject to any changed *power system* conditions or energy source availability beyond the *Generator's* reasonable control, a *generating system* and each of its *generating units*, in respect of the types of fault described in subparagraphs (1)(ii) to (iv), must supply to or absorb from the *network*:
 - (i) to assist the maintenance of *power system voltages* during the application of the fault, capacitive reactive current of at least the greater of its pre-disturbance reactive current and 4% of the maximum continuous current of the *generating system* including all operating *generating units* (in the absence of a disturbance) for each 1% reduction (from its pre-fault level) of *connection point voltage* during the fault;
 - (ii) after *disconnection* of the faulted element, *reactive power* sufficient to ensure that the *connection point voltage* is within the range for *continuous uninterrupted operation* under clause S5.2.5.4; and
 - (iii) from 100 milliseconds after *disconnection* of the faulted element, *active power* of at least 95% of the level existing just prior to the fault.

Minimum access standard

- (c) The *minimum access standard* is:
 - (1) a *generating system* and each of its *generating units* must remain in *continuous uninterrupted operation* for the disturbance caused by an event that is:
 - (i) a *credible contingency event* other than a fault referred to in subparagraph (iii);

- (ii) a single phase to ground, phase to phase or two phase to ground fault in a *transmission system* cleared in the longest time expected to be taken for all relevant primary *protection systems* to clear the fault unless *AEMO* and the *Network Service Provider* agree that:
 - (A) the total reduction of *generation* in the *power system* due to that fault would not exceed 100 MW;
 - (B) there is unlikely to be an adverse impact on quality of *supply* to other *Network Users*; and
 - (C) there is unlikely to be a material adverse impact on *power system security*; and
- (iii) a single phase to ground, phase to phase or two phase to ground fault in a *distribution network*, cleared in the longest time expected to be taken for all relevant primary *protection systems* to clear the fault, unless *AEMO* and the *Network Service Provider* agree that:
 - (A) the total reduction of *generation* in the *power system* due to that fault would not exceed 100 MW;
 - (B) there is unlikely to be a material adverse impact on quality of *supply* to other *Network Users*; and
 - (C) there is unlikely to be a material adverse impact on *power system security*,

provided that the event is not one that would *disconnect* the *generating unit* from the *power system* by removing *network elements* from service; and

- (2) subject to any changed *power system* conditions or energy source availability beyond the *Generator's* reasonable control after *disconnection* of the faulted element, each *generating system* must, in respect of the types of fault described in subparagraphs (1)(ii) and (iii), deliver to the *network*, *active power* and supply or absorb leading or lagging *reactive power*, sufficient to ensure that the *connection point voltage* is within the range for *continuous uninterrupted operation* agreed under clause S5.2.5.4.

Negotiated access standard

- (d) In carrying out assessments of proposed *negotiated access standards* under this clause S5.2.5.5, the *Network Service Provider* and *AEMO* must take into account, without limitation:
 - (1) the expected performance of:
 - (i) existing *networks* and *considered projects*;

- (ii) existing *generating plant* and other relevant projects; and
 - (iii) *control systems* and *protection systems*, including auxiliary systems and *automatic reclose equipment*; and
- (2) the expected range of *power system* operating conditions.
- (e) A proposed *negotiated access standard* may be accepted if the *connection* of the *plant* at the proposed access level would not cause other generating *plant* or *loads* to trip as a result of an event, when they would otherwise not have tripped for the same event.
- (f) *AEMO* must advise on matters relating to *negotiated access standards* under this clause S5.2.5.5.

General requirement

- (g) The *access standard* must include any operational arrangements to ensure the *generating system* including all operating *generating units* will meet its agreed performance levels under abnormal *network* or *generating system* conditions.

S5.2.5.6 Quality of electricity generated and continuous uninterrupted operation

Minimum access standard

The *minimum access standard* is a *generating system* including each of its operating *generating units* and *reactive plant*, must not *disconnect* from the *power system* as a result of *voltage* fluctuation, harmonic *voltage* distortion and *voltage* unbalance conditions at the *connection point* within the levels specified in clauses S5.1a.5, S5.1a.6 and S5.1a.7.

S5.2.5.7 Partial load rejection

- (a) For the purposes of this clause S5.2.5.7 **minimum load** means minimum *sent out generation* for continuous stable operation.
- (b) This clause S5.2.5.7 does not apply to an *asynchronous generating unit*.

Automatic access standard

- (c) The *automatic access standard* is a *generating unit* must be capable of *continuous uninterrupted operation* during and following a *power system load* reduction of 30% from its predisturbance level or equivalent impact from separation of part of the *power system* in less than 10 seconds, provided that the *loading level* remains above minimum load.

Minimum access standard

- (d) The *minimum access standard* is a *generating unit* must be capable of *continuous uninterrupted operation* during and following a *power system load* reduction of 5% or equivalent impact from separation of part of the

power system in less than 10 seconds provided that the *loading level* remains above minimum load.

Negotiated access standard

- (e) If in accordance with clause 5.3.4A the *Generator* and the *Network Service Provider* determine a *negotiated access standard* is to apply, the *Network Service Provider* must consult *AEMO* to ensure that the *negotiated access standard* does not materially adversely affect *power system security*.
- (f) *AEMO* must advise on matters relating to *negotiated access standards* under this clause S5.2.5.7.

General requirements

- (g) The actual partial load rejection performance must be recorded in the *access standards*.

S5.2.5.8 Protection of generating systems from power system disturbances

Minimum access standard

- (a) The *minimum access standard* is:
 - (1) subject to subparagraph (2) and paragraph (e), for a *generating system* or any of its *generating units* that is required by a *Generator* or *Network Service Provider* to be automatically *disconnected* from the *power system* in response to abnormal conditions arising from the *power system*, the relevant *protection system* or *control system* must not *disconnect* the *generating system* for:
 - (i) conditions for which it must remain in *continuous uninterrupted operation*; or
 - (ii) conditions it must withstand under the *Rules*; and
 - (2) a *generating system* with a *nameplate rating* of 30MW or more, or *generating system* comprised of *generating units* with a combined *nameplate rating* of 30 MW or more, *connected* to a *transmission system* must have *facilities* to automatically and rapidly reduce its *generation*:
 - (i) by at least half, if the *frequency* at the *connection point* exceeds a level nominated by *AEMO* (not less than the upper limit of the *operational frequency tolerance band*) and the duration above this *frequency* exceeds a value nominated by *AEMO* where the reduction may be achieved:
 - (A) by reducing the output of the *generating system* within 3 seconds, and holding the output at the reduced level until the *frequency* returns to within the *normal operating frequency band*; or

- (B) by disconnecting the *generating system* from the *power system* within 1 second; or
- (ii) in proportion to the difference between the *frequency* at the *connection point* and a level nominated by AEMO (not less than the upper limit of the *operational frequency tolerance band*), such that the *generation* is reduced by at least half, within 3 seconds of the *frequency* reaching the upper limit of the *extreme frequency excursion tolerance limits*.

Negotiated access standard

- (b) AEMO must advise on matters relating to *negotiated access standards* under this clause S5.2.5.8.

General requirements

- (c) AEMO or the *Network Service Provider* may require that an *access standard* include a requirement for the *generating system* to be automatically *disconnected* by a local or remote control scheme whenever the part of the *network* to which it is *connected* has been *disconnected* from the *national grid*, forming an island that *supplies* a *Customer*.
- (d) The *access standard* must include specification of conditions for which the *generating unit* or *generating system* must trip and must not trip.
- (e) Notwithstanding clauses S5.2.5.3, S5.2.5.4, S5.2.5.5, S5.2.5.6 and S5.2.5.7, a *generating system* may be automatically *disconnected* from the *power system* under any of the following conditions:
 - (1) in accordance with an *ancillary services agreement* between the *Generator* and AEMO;
 - (2) where a *load* that is not part of the *generating system* has the same *connection point* as the *generating system* and AEMO and the *Network Service Provider* agree that the *disconnection* would in effect be under-frequency *load shedding*;
 - (3) where the *generating system* is automatically *disconnected* under paragraph (a), clause S5.2.5.9 or by an *emergency frequency control scheme*;
 - (4) where the *generating system* is automatically *disconnected* under clause S5.2.5.10 due to a failure of the *generating plant*; or
 - (5) in accordance with an agreement between the *Generator* and a *Network Service Provider* (including an agreement in relation to an emergency control scheme under clause S5.1.8) to provide a service that AEMO agrees is necessary to maintain or restore *power system security* in the event of a specified *contingency event*.

- (f) The *Network Service Provider* is not liable for any loss or damage incurred by the *Generator* or any other person as a consequence of a fault on either the *power system*, or within the *Generator's facility*.

S5.2.5.9 Protection systems that impact on power system security

Automatic access standard

- (a) The *automatic access standard* is:
 - (1) subject to clauses S5.1.9(k) and S5.1.9(l), primary *protection systems* must be provided to *disconnect* from the *power system* any faulted element in a *generating system* and in protection zones that include the *connection point* within the applicable *fault clearance time* determined under clause S5.1.9(a)(1);
 - (2) each primary *protection system* must have sufficient redundancy to ensure that a faulted element within its protection zone is *disconnected* from the *power system* within the applicable *fault clearance time* with any single protection element (including any communications *facility* upon which that *protection system* depends) out of service; and
 - (3) *breaker fail protection systems* must be provided to clear faults that are not cleared by the circuit breakers controlled by the primary *protection system* within the applicable *fault clearance time* determined under clause S5.1.9(a)(1).
- (b) In relation to an *automatic access standard* under this clause S5.2.5.9, the *Generator* must provide redundancy in the primary *protection systems* under paragraph (a)(2) and provide *breaker fail protection systems* under paragraph (a)(3) if AEMO or the *Network Service Provider* consider that a lack of these *facilities* could result in:
 - (1) a material adverse impact on *power system security* or quality of supply to other *Network Users*; or
 - (2) a reduction in *inter-regional* or *intra-regional power transfer capability*,
through any mechanism including:
 - (3) consequential tripping of, or damage to, other *network equipment* or *facilities* of other *Network Users*, that would have a *power system security* impact; or
 - (4) instability that would not be detected by other *protection systems* in the *network*.

Minimum access standard

- (c) The *minimum access standard* is:

- (1) subject to clauses S5.1.9(k) and S5.1.9(l), *protection systems* must be provided to *disconnect* from the *power system* any faulted element within a *generating system* and in protection zones that include the *connection point* within the applicable *fault clearance time* determined under clause S5.1.9(a)(2); and
- (2) if a *fault clearance time* determined under clause S5.1.9(a)(2) for a protection zone is less than 10 seconds, a *breaker fail protection system* must be provided to clear from the *power system* any fault within that protection zone that is not cleared by the circuit breakers controlled by the primary *protection system* within the applicable *fault clearance time* determined under clause S5.1.9(a)(3).

Negotiated access standard

- (d) *AEMO* must advise on matters relating to *negotiated access standards* under this clause S5.2.5.9.

General requirements

- (e) The *Network Service Provider* and the *Generator* must cooperate in the design and implementation of *protection systems* to comply with this clause S5.2.5.9, including cooperation on:
 - (1) the use of *current transformer* and *voltage transformer* secondary circuits (or equivalent) of one party by the *protection system* of the other;
 - (2) tripping of one party's circuit breakers by a *protection system* of the other party; and
 - (3) co-ordination of *protection system* settings to ensure inter-operation.
- (f) The *protection system* design referred to in paragraphs (a) and (c) must:
 - (1) be coordinated with other *protection systems*;
 - (2) avoid consequential *disconnection* of other *Network Users' facilities*; and
 - (3) take into account existing obligations of the *Network Service Provider* under *connection agreements* with other *Network Users*.

S5.2.5.10 Protection to trip plant for unstable operation

Automatic access standard

- (a) The *automatic access standard* is:
 - (1) a *synchronous generating unit* must have a *protection system* to *disconnect* it promptly when a condition that would lead to pole slipping is detected in order to prevent pole slipping or other conditions where a *generating unit* causes *active power*, *reactive*

power or voltage at the connection point to become unstable as assessed in accordance with the power system stability guidelines established under clause 4.3.4(h); and

- (2) *an asynchronous generating unit must have a protection system to disconnect it promptly for conditions where the active power, reactive power or voltage at the connection point becomes unstable as assessed in accordance with the guidelines for power system stability established under clause 4.3.4(h).*

Minimum access standard

- (b) *The minimum access standard is a generating unit must not cause a voltage disturbance at the connection point due to sustained unstable behaviour of more than the maximum level specified in Table 7 of Australian Standard AS/NZS 61000.3.7:2001.*

Negotiated access standard

- (c) *If the Network Service Provider and the Generator agree, a protection system may also trip any other part of the generating system in order to cease the instability.*
- (d) *Notwithstanding paragraph (c), a protection system must be provided in the access standard to trip the affected generating unit where:*
 - (1) *the Network Service Provider considers it necessary to prevent consequential tripping of, or damage to, other generating units, network equipment or other Network Users' facilities, or*
 - (2) *AEMO considers it necessary to prevent unstable operation having an adverse impact on power system security.*
- (e) *AEMO must advise on matters relating to negotiated access standards under this clause S5.2.5.10*

S5.2.5.11 Frequency control

- (a) *For the purpose of this clause S5.2.5.11:*

maximum operating level means in relation to:

- (1) *a non-scheduled generating unit, the maximum sent out generation consistent with its nameplate rating;*
- (2) *a scheduled generating unit or semi-scheduled generating unit, the maximum sent out generation;*
- (3) *a non-scheduled generating system, the combined maximum sent out generation consistent with the nameplate ratings of its in-service generating units; and*

- (4) a *scheduled generating system* or *semi-scheduled generating system*, the combined maximum sent out generation of its in-service generating units.

minimum operating level means in relation to:

- (1) a *non-scheduled generating unit*, its minimum sent out generation for continuous stable operation;
- (2) a *scheduled generating unit* or *semi-scheduled generating unit*, its minimum sent out generation for continuous stable operation;
- (3) a *non-scheduled generating system*, the combined minimum operating level of its in-service generating units; and
- (4) a *scheduled generating system* or *semi-scheduled generating system*, the combined minimum sent out generation of its in-service generating units.

pre-disturbance level means in relation to a *generating unit* and a *frequency* disturbance, the *generating unit's* level of output just before the *system frequency* first exceeds the upper or lower limit of the *normal operating frequency band* during the *frequency* disturbance.

system frequency means the *frequency* of the *transmission system* or *distribution system* to which the *generating unit* or *generating system* is connected.

Automatic access standard

(b) The *automatic access standard* is:

- (1) a *generating system's* active power transfer to the *power system* must not:
 - (i) increase in response to a rise in system frequency; or
 - (ii) decrease in response to a fall in system frequency;
- (2) a *generating system* must be capable of automatically reducing its active power transfer to the *power system*:
 - (i) whenever the system frequency exceeds the upper limit of the *normal operating frequency band*;
 - (ii) by an amount that equals or exceeds the least of:
 - (A) 20% of its maximum operating level times the percentage *frequency* difference between system frequency and the upper limit of the *normal operating frequency band*;
 - (B) 10% of its maximum operating level; and

- (C) the difference between the *generating unit's* pre-disturbance level and minimum operating level, but zero if the difference is negative; and
 - (iii) sufficiently rapidly for the *Generator* to be in a position to offer measurable amounts of lower services to the *spot market* for *market ancillary services*; and
- (3) a *generating system* must be capable of automatically increasing its *active power* transfer to the *power system*:
 - (i) whenever the system frequency falls below the lower limit of the *normal operating frequency band*;
 - (ii) by the amount that equals or exceeds the least of:
 - (A) 20% of its maximum operating level times the percentage *frequency* difference between the lower limit of the *normal operating frequency band* and system frequency;
 - (B) 5% of its maximum operating level; and
 - (C) one third of the difference between the *generating unit's* maximum operating level and pre-disturbance level, but zero if the difference is negative; and
 - (iii) sufficiently rapidly for the *Generator* to be in a position to offer measurable amounts of raise services to the *spot market* for *market ancillary services*.

Minimum access standard

- (c) The *minimum access standard* is a *generating system* under relatively stable input energy, *active power* transfer to the *power system* must not:
 - (1) increase in response to a rise in system frequency; and
 - (2) decrease more than 2% per Hz in response to a fall in system frequency.

Negotiated access standard

- (d) A *Generator* proposing a *negotiated access standard* in respect of paragraph (c)(2) must demonstrate to *AEMO* that the proposed increase and decrease in *active power* transfer to the *power system* are as close as practicable to the *automatic access standard* for that *plant*.
- (e) The *negotiated access standard* must record the agreed values for maximum operating level and minimum operating level, and where relevant the method of determining the values and the values for a *generating system* must take into account its in-service *generating units*.

- (f) *AEMO* must advise on matters relating to *negotiated access standards* under this clause S5.2.5.11.

General requirements

- (g) Each *control system* used to satisfy this clause S5.2.5.11 must be *adequately damped*.
- (h) The amount of a relevant *market ancillary service* for which the *plant* may be registered must not exceed the amount that would be consistent with the *performance standard* registered in respect of this requirement.

S5.2.5.12 Impact on network capability

Automatic access standard

- (a) The *automatic access standard* is a *generating system* must have *plant capabilities* and *control systems* that are sufficient so that when *connected* it does not reduce any *inter-regional* or *intra-regional power transfer capability* below the level that would apply if the *generating system* were not *connected*.

Minimum access standard

- (b) The *minimum access standard* is a *generating system* must have *plant capabilities*, *control systems* and operational arrangements sufficient to ensure there is no reduction in:
 - (1) the ability to *supply Customer load* as a result of a reduction in *power transfer capability*; and
 - (2) *power transfer capabilities* into a region by more than the combined *sent out generation* of its *generating units*.

Negotiated access standard

- (c) In carrying out assessments of proposed *negotiated access standards* under this clause S5.2.5.12, the *Network Service Provider* and *AEMO* must take into account:
 - (1) the expected performance of:
 - (i) existing *networks* and *considered projects*;
 - (ii) existing *generating plant* and other relevant projects; and
 - (iii) *control systems* and *protection systems*, including *automatic reclose equipment*; and
 - (2) the expected range of *power system* operating conditions.
- (d) The *negotiated access standard* must include:

- (1) *control systems* to minimise any reduction in *power transfer capabilities*; and
 - (2) operational arrangements, including curtailment of the *generating system's* output if necessary to ensure that the *generating plant* is operated in a way that meets at least the *minimum access standard* under abnormal *network* and *generating system* conditions, so that *power system security* can be maintained.
- (e) A *negotiated access standard* under this clause S5.2.5.12 must detail the *plant capabilities*, *control systems* and operational arrangements that will be maintained by the *Generator*, notwithstanding that change to the *power system*, but not changes to the *generating system*, may reduce the efficacy of the *plant capabilities*, *control systems* and operational arrangements over time.
- (f) *AEMO* must advise on matters relating to *negotiated access standards* under this clause S5.2.5.12.

General requirement

- (g) If a *Network Service Provider* considers that *power transfer capabilities* of its *network* would be increased through provision of additional *control system facilities* to a *generating system* (such as a *power system stabiliser*), the *Network Service Provider* and the *Generator* may negotiate for the provision of such additional *control system facilities* as a commercial arrangement.

S5.2.5.13 Voltage and reactive power control

- (a) For the purpose of this clause S5.2.5.13:

rise time means in relation to a step response test or simulation of a *control system*, the time taken for an output quantity to rise from 10% to 90% of the maximum change induced in that quantity by a step change of an input quantity.

settling time means in relation to a step response test or simulation of a *control system*, the time measured from initiation of a step change in an input quantity to the time when the magnitude of error between the output quantity and its final settling value remains less than 10% of:

- (1) if the sustained change in the quantity is less than half of the maximum change in that output quantity, the maximum change induced in that output quantity; or
- (2) the sustained change induced in that output quantity.

static excitation system means in relation to a *synchronous generating unit*, an *excitation control system* that does not use rotating machinery to produce the field current.

Automatic access standard

(b) The *automatic access standard* is:

- (1) a *generating system* must have *plant capabilities* and *control systems* sufficient to ensure that:
 - (i) *power system* oscillations, for the frequencies of oscillation of the *generating unit* against any other *generating unit*, are *adequately damped*;
 - (ii) operation of the *generating system* does not degrade the damping of any critical mode of oscillation of the *power system*; and
 - (iii) operation of the *generating system* does not cause instability (including hunting of *tap-changing transformer control systems*) that would adversely impact other *Registered Participants*;
- (2) a *control system* must have:
 - (i) for the purposes of disturbance monitoring and testing, permanently installed and operational, monitoring and recording *facilities* for key variables including each input and output; and
 - (ii) *facilities* for testing the *control system* sufficient to establish its dynamic operational characteristics;
- (3) a synchronous *generating system* must have an *excitation control system* that:
 - (i) regulates *voltage* at the *connection point* or another agreed location in the *power system* (including within the *generating system*) to within 0.5% of the setpoint;
 - (ii) is able to operate the stator continuously at 105% of *nominal voltage* with *rated active power* output;
 - (iii) regulates *voltage* in a manner that helps to support *network voltages* during faults and does not prevent the *Network Service Provider* from achieving the requirements of clause S5.1a.3 and S5.1a.4;
 - (iv) allows the *voltage* setpoint to be continuously controllable in the range of at least 95% to 105% of *normal voltage* at the *connection point* or the agreed location, without reliance on a *tap-changing transformer*;
 - (v) has limiting devices to ensure that a *voltage* disturbance does not cause the *generating unit* to trip at the limits of its operating capability;
 - (vi) has an excitation ceiling *voltage* of at least:

- (A) for a static excitation system, 2.3 times; or
 - (B) for other *excitation control systems*, 1.5 times,
- the excitation required to achieve *generation* at the *nameplate rating* for rated *power factor*, rated speed and *nominal voltage*;
- (vii) has settling *times* for a step change of *voltage* setpoint or *voltage* at the location agreed under subparagraph (i) of:
 - (A) generated *voltage* less than 2.5 seconds for a 5% *voltage* disturbance with the *generating unit* not *synchronised*;
 - (B) *active power*, *reactive power* and *voltage* less than 5.0 seconds for a 5% *voltage* disturbance with the *generating unit* *synchronised*, from an operating point where the *voltage* disturbance would not cause any limiting device to operate; and
 - (C) in respect of each limiting device, *active power*, *reactive power* and *voltage* less than 7.5 seconds for a 5% *voltage* disturbance with the *generating unit* *synchronised*, when operating into a limiting device from an operating point where a *voltage* disturbance of 2.5% would just cause the limiting device to operate;
 - (viii) is able to increase field *voltage* from rated field *voltage* to the excitation ceiling *voltage* in less than:
 - (A) 0.05 second for a static excitation system; or
 - (B) 0.5 second for other *excitation control systems*;
 - (ix) has a *power system* stabiliser with sufficient flexibility to enable damping performance to be maximised, with characteristics as described in paragraph (c); and
 - (x) has reactive current compensation settable for boost or droop; and
- (4) a *generating system*, other than one comprised of *synchronous generating units*, must have a *voltage control system* that:
 - (i) regulates *voltage* at the *connection point* or an agreed location in the *power system* (including within the *generating system*) to within 0.5% of its setpoint;
 - (ii) regulates *voltage* in a manner that helps to support *network voltages* during faults and does not prevent the *Network Service Provider* from achieving the requirements of clauses S5.1a.3 and S5.1a.4;

- (iii) allows the *voltage* setpoint to be continuously controllable in the range of at least 95% to 105% of *normal voltage* at the *connection point* or agreed location in the *power system*, without reliance on a *tap changing transformer*;
 - (iv) has limiting devices to ensure that a *voltage* disturbance does not cause the *generating unit* to trip at the limits of its operating capability;
 - (v) with the *generating system connected* to the *power system*, has settling times for *active power*, *reactive power* and *voltage* due to a step change of *voltage* setpoint or *voltage* at the location agreed under clause subparagraph (i), of less than:
 - (A) 5.0 seconds for a 5% *voltage* disturbance with the *generating system connected* to the *power system*, from an operating point where the *voltage* disturbance would not cause any limiting device to operate; and
 - (B) 7.5 seconds for a 5% *voltage* disturbance with the *generating system connected* to the *power system*, when operating into any limiting device from an operating point where a *voltage* disturbance of 2.5% would just cause the limiting device to operate;
 - (vi) has *reactive power* rise time, for a 5% step change in the *voltage* setpoint, of less than 2 seconds;
 - (vii) has a *power system* stabiliser with sufficient flexibility to enable damping performance to be maximised, with characteristics as described in paragraph (c); and
 - (viii) has reactive current compensation.
- (c) A *power system* stabiliser provided under paragraph (b) must have:
- (1) for a *synchronous generating unit*, measurements of rotor speed and *active power* output of the *generating unit* as inputs, and otherwise, measurements of *power system frequency* and *active power* output of the *generating unit* as inputs;
 - (2) two washout filters for each input, with ability to bypass one of them if necessary;
 - (3) sufficient (and not less than two) lead-lag transfer function blocks (or equivalent number of complex poles and zeros) with adjustable gain and time-constants, to compensate fully for the phase lags due to the *generating plant*;
 - (4) an output limiter, which for a *synchronous generating unit* is continually adjustable over the range of -10% to +10% of stator *voltage*;

- (5) monitoring and recording *facilities* for key variables including inputs, output and the inputs to the lead-lag transfer function blocks; and
- (6) *facilities* to permit testing of the *power system* stabiliser in isolation from the *power system* by injection of test signals, sufficient to establish the transfer function of the *power system* stabiliser.

Minimum access standard

(d) The *minimum access standard* is:

- (1) a *generating system* must have *plant* capabilities and *control systems*, including, if appropriate, a *power system* stabiliser, sufficient to ensure that:
 - (i) *power system* oscillations, for the frequencies of oscillation of the *generating unit* against any other *generating unit*, are *adequately damped*;
 - (ii) operation of the *generating unit* does not degrade:
 - (A) any mode of oscillation that is within 0.3 nepers per second of being unstable, by more than 0.01 nepers per second; and
 - (B) any other mode of oscillation to within 0.29 nepers per second of being unstable; and
 - (iii) operation of the *generating unit* does not cause instability (including hunting of *tap-changing transformer control systems*) that would adversely impact other *Registered Participants*;
- (2) a *generating system* comprised of *generating units* with a combined *nameplate rating* of 30 MW or more must have *facilities* for testing its *control systems* sufficient to establish their dynamic operational characteristics;
- (3) a *generating unit* or *generating system* must have *facilities*:
 - (i) where the *connection point nominal voltage* is 100 kV or more, to regulate *voltage* in a manner that does not prevent the *Network Service Provider* from achieving the requirements of clauses S5.1a.3 and S5.1a.4; or
 - (ii) where the *connection point nominal voltage* is less than 100 kV, to regulate *voltage* or *reactive power* or *power factor* in a manner that does not prevent the *Network Service Provider* from achieving the requirements of clauses S5.1a.3 and S5.1a.4,

and sufficient to achieve the performance agreed in respect of clauses S5.2.5.1, S5.2.5.2, S5.2.5.3, S5.2.5.4, S5.2.5.5, S5.2.5.6 and S5.2.5.12;

- (4) a *synchronous generating unit*, that is part of a *generating system* comprised of *generating units* with a combined *nameplate rating* of 30 MW or more, must have an *excitation control system* that:
 - (i) regulates *voltage*, *power factor* or *reactive power* as agreed with the *Network Service Provider* and *AEMO*;
 - (ii) has excitation ceiling *voltage* of at least 1.5 times the excitation required to achieve *generation* at the *nameplate rating* for rated *power factor*, rated speed and *nominal voltage*;
 - (iii) subject to co-ordination under paragraph (i), has a settling *time* of less than 5.0 seconds for a 5% *voltage* disturbance with the *generating unit* synchronised, from an operating point where such a *voltage* disturbance would not cause any limiting device to operate; and
 - (iv) has over and under excitation limiting devices sufficient to ensure that a *voltage* disturbance does not cause the *generating unit* to trip at the limits of its operating capability; and
- (5) a *generating system* comprised of *generating units* with a combined *nameplate rating* of 30 MW or more and which are *asynchronous generating units*, must have a *control system* that:
 - (i) regulates *voltage*, *power factor* or *reactive power* as agreed with the *Network Service Provider* and *AEMO*;
 - (ii) subject to co-ordination under subparagraph (i), has a settling time less than 7.5 seconds for a 5% *voltage* disturbance with the *generating unit* electrically connected to the *power system* from an operating point where such a *voltage* disturbance would not cause any limiting device to operate; and
 - (iii) has limiting devices to ensure that a *voltage* disturbance would not cause the *generating unit* to trip at the limits of its operating capability.

Negotiated access standard

- (e) If a *generating system* cannot meet the *automatic access standard*, the *Generator* must demonstrate to the *Network Service Provider* why that standard could not be reasonably achieved and propose a *negotiated access standard*.
- (f) The *negotiated access standard* proposed by the *Generator* under paragraph (e) must be the highest level that the *generating system* can reasonably achieve, including by installation of additional dynamic *reactive power* equipment, and through optimising its *control systems*.
- (g) *AEMO* must advise on matters relating to *negotiated access standards* under this clause S5.2.5.13.

General requirements

- (h) A limiting device provided under paragraphs (b) and (c) must:
 - (1) not detract from the performance of any *power system* stabiliser; and
 - (2) be co-ordinated with all *protection systems*.
- (i) The *Network Service Provider* may require that the design and operation of the *control systems* of a *generating unit* or *generating system* be coordinated with the existing *voltage control systems* of the *Network Service Provider* and of other *Network Users*, in order to avoid or manage interactions that would adversely impact on the *Network Service Provider* and other *Network Users*.
- (j) Any requirements imposed by the *Network Service Provider* under paragraph (i) must be recorded in the *access standard*.
- (k) The assessment of impact of the *generating units* on *power system* stability and damping of *power system* oscillations shall be in accordance with the guidelines for *power system* stability established under clause 4.3.4(h).

S5.2.5.14 Active power control

- (a) The *automatic access standard* is a *generating system* comprised of *generating units* with a combined *nameplate rating* of 30 MW or more must have an *active power control system* capable of:
 - (1) for a *scheduled generating unit* or a *scheduled generating system*:
 - (i) maintaining and changing its *active power* output in accordance with its *dispatch instructions*; and
 - (ii) ramping its *active power* output linearly from one level of *dispatch* to another;
 - (2) subject to energy source availability, for a *non-scheduled generating unit* or *non-scheduled generating system*:
 - (i) automatically reducing or increasing its *active power* output within 5 minutes, at a constant rate, to or below the level specified in an instruction electronically issued by a *control centre*, subject to subparagraph (iii);
 - (ii) automatically limiting its *active power* output, to below the level specified in subparagraph (i); and
 - (iii) not changing its *active power* output within 5 minutes by more than the raise and lower amounts specified in an instruction electronically issued by a *control centre*; and
 - (3) subject to energy source availability, for a *semi-scheduled generating unit* or a *semi-scheduled generating system*:

- (i) automatically reducing or increasing its *active power* output within 5 minutes at a constant rate, to or below the level specified in an instruction electronically issued by a *control centre*;
- (ii) automatically limiting its *active power* output, to or below the level specified in subparagraph (i);
- (iii) not changing its *active power* output within 5 minutes by more than the raise and lower amounts specified in an instruction electronically issued by a *control centre*; and
- (iv) ramping its *active power* output linearly from one level of *dispatch* to another.

Minimum access standard

- (b) The *minimum access standard* is a *generating system* comprised of *generating units* with a combined *nameplate rating* of 30 MW or more must have an *active power control system* capable of:
 - (1) for a *scheduled generating unit* or a *scheduled generating system*, maintaining and changing its *active power* output in accordance with its *dispatch instructions*;
 - (2) for a *non-scheduled generating system*:
 - (i) reducing its *active power* output, within 5 minutes, to or below the level required to manage *network* flows that is specified in a verbal instruction issued by the *control centre*;
 - (ii) limiting its *active power* output, to or below the level specified in subparagraph (i);
 - (iii) subject to energy source availability, ensuring that the change of *active power* output in a 5 minute period does not exceed a value specified in a verbal instruction issued by the *control centre*; and
 - (iv) being upgraded to receive electronic instructions from the *control centre* and fully implement them within 5 minutes; and
 - (3) for a *semi-scheduled generating unit* or a *semi-scheduled generating system*, maintaining and changing its *active power* output in accordance with its *dispatch instructions*.

Negotiated access standard

- (c) A *negotiated access standard* may provide that if the number or frequency of verbal instructions becomes difficult for a *control centre* to manage, AEMO may require the *Generator* to upgrade its *facilities* to receive electronic instructions and fully implement them within 5 minutes.

- (d) The *negotiated access standard* must document to AEMO's satisfaction any operational arrangements necessary to manage *network* flows that may include a requirement for the *generating system* to be operated in a manner that prevents its output changing within 5 minutes by more than an amount specified by a *control centre*.
- (e) AEMO must advise on matters relating to *negotiated access standards* under this clause S5.2.5.14.

General requirements

- (f) Each *control system* used to satisfy the requirements of paragraphs (a) and (b) must be *adequately damped*.

S5.2.6 Monitoring and control requirements

S5.2.6.1 Remote Monitoring

Automatic access standard

- (a) The *automatic access standard* is a:
 - (1) *scheduled generating unit*;
 - (2) *scheduled generating system*;
 - (3) *non-scheduled generating unit* with a *nameplate rating* of 30 MW or more;
 - (4) *non-scheduled generating system* with a combined *nameplate rating* of 30 MW or more;
 - (5) *semi-scheduled generating unit*; or
 - (6) *semi-scheduled generating system*,

must have *remote monitoring equipment* to transmit to AEMO's *control centres* in real time in accordance with rule 4.11 the quantities that AEMO reasonably requires to discharge its *market* and *power system security* functions set out in Chapters 3 and 4.

- (b) The quantities referred to under paragraph (a) that AEMO may request include:
 - (1) in respect of a *generating unit* with a *nameplate rating* of 30 MW or more:
 - (i) *current, voltage, active power* and *reactive power* in respect of *generating unit* stators or power conversion systems (as applicable);
 - (ii) the status of all switching devices that carry the *generation*; and

- (iii) *tap-changing transformer tap position*;
- (2) in respect of a *generating system* that includes a *generating unit* with a *nameplate rating* of less than 30 MW:
 - (i) its connected status, *tap-changing transformer tap position* and *voltages*;
 - (ii) *active power* and *reactive power* aggregated for groups of identical *generating units*;
 - (iii) either the number of identical *generating units* operating or the operating status of each non-identical *generating unit*; and
 - (iv) *active power* and *reactive power* for the *generating system*;
- (3) in respect of an auxiliary supply system with a capacity of 30 MW or more associated with a *generating unit* or *generating system*, *active power* and *reactive power*;
- (4) in respect of *reactive power* equipment that is part of a *generating system* but not part of a particular *generating unit*, its *reactive power*;
- (5) in respect of a wind farm type of *generating system*:
 - (i) wind speed;
 - (ii) wind direction;
 - (iii) ambient temperature; and
- (6) any other quantity that AEMO reasonably requires to discharge its *market* and *power system security* functions as set out in Chapters 3 and 4.

Minimum access standard

- (c) The *minimum access standard* is a:
 - (1) *scheduled generating unit*;
 - (2) *scheduled generating system*;
 - (3) *non-scheduled generating system* with a combined *nameplate rating* of 30 MW or more;
 - (4) *semi-scheduled generating unit*; or
 - (5) *semi-scheduled generating system*,
 must have *remote monitoring equipment* to transmit to AEMO's *control centres* in real time:

- (6) the *active power* output of the *generating unit* or *generating system* (as applicable);
- (7) if *connected* to a *transmission system*, the *reactive power* output of the *generating unit* or *generating system* (as applicable); and
- (8) if a wind farm type of *generating system*:
 - (i) number of units operating;
 - (ii) wind speed; and
 - (iii) wind direction,

in accordance with rule 4.11.

Negotiated access standard

- (d) *AEMO* may advise on matters relating to *negotiated access standards* under this clause S5.2.6.1.

S5.2.6.2 Communications equipment

Automatic access standard

- (a) The *automatic access standard* is a *Generator* must:
 - (1) provide and maintain two separate telephone *facilities* using independent telecommunications service providers, for the purposes of operational communications between the *Generator's* responsible operator under clause 4.11.3(a) and *AEMO's control centre*; and
 - (2) provide electricity supplies for *remote monitoring equipment* and *remote control equipment* installed in relation to its *generating system* capable of keeping such equipment available for at least 3 hours following total loss of *supply* at the *connection point* for the relevant *generating unit*.

Minimum access standard

- (b) The *minimum access standard* is a *Generator* must:
 - (1) provide and maintain a telephone facility for the purposes of operational communications between the *Generator's* responsible operator under clause 4.11.3(a) and *AEMO's control centre*; and
 - (2) provide electricity supplies for *remote monitoring equipment* and *remote control equipment* installed in relation to its *generating system* capable of keeping such equipment available for at least 1 hour following total loss of *supply* at the *connection point* for the relevant *generating unit*.

Negotiated access standard

- (c) A *negotiated access standard* must include, where the *Network Service Provider* or *AEMO* reasonably require, a back-up telephone facility be independent of commercial telephone service providers, and the *Network Service Provider* must provide and maintain the separate facility on a cost-recovery basis only through the charge for *connection*.
- (d) A *negotiated access standard* must include that a *Generator* must provide communications paths (with appropriate redundancy) from the *remote monitoring equipment* or *remote control equipment* installed for each of its *generating systems* as appropriate, to a interface for communication purposes in a location reasonably acceptable to the *Network Service Provider* at the relevant *generation facility*.
- (e) Communications systems between the interface for communication purposes under paragraph (d) and the *control centre* must be the responsibility of the *Network Service Provider* unless otherwise agreed by the *Generator* and the *Network Service Provider*.
- (f) A *negotiated access standard* must include that the *Generator* provide accommodation and secure power supplies for communications *facilities* provided by the *Network Service Provider* under this clause S5.2.6.2.
- (g) *AEMO* may advise on matters relating to *negotiated access standards* under this clause S5.2.6.2.

S5.2.7 Power station auxiliary supplies

In cases where a *generating system* takes its auxiliary supplies via a *connection point* through which its *generation* is not transferred to the *network*, the *access standards* must be established under clause S5.3.5 as if the *Generator* were a *Market Customer*.

S5.2.8 Fault current

Automatic access standard

- (a) The *automatic access standard* is:
 - (1) the contribution of the *generating system* to the fault current on the *connecting network* through its *connection point* must not exceed the contribution level that will ensure that the total fault current can be safely interrupted by the circuit breakers of the *connecting network* and safely carried by the *connecting network* for the duration of the applicable *breaker fail protection system fault clearance times*, as specified for the relevant *connection point* by the *Network Service Provider*;
 - (2) a *generating system's connected plant* must be capable of withstanding fault current through the *connection point* up to the higher of:

- (i) the level specified in clause S5.2.4(e1)(1) ; and
 - (ii) the highest level of current at the *connection point* that can be safely interrupted by the circuit breakers of the *connecting network* and safely carried by the *connecting network* for the duration of the applicable *breaker fail protection system fault clearance times*, as specified by the *Network Service Provider*; and
- (3) a circuit breaker provided to isolate a *generating unit* or *generating system* from the *network* must be capable of breaking, without damage or restrike, the maximum fault currents that could reasonably be expected to flow through the circuit breaker for any fault in the *network* or in the *generating unit* or *generating system*, as specified in the *connection agreement*.

Minimum access standard

- (b) The *minimum access standard* is:
- (1) the *generating system* does not need to limit fault current contribution;
 - (2) a *generating system's connected plant* must be capable of withstanding fault current through the *connection point* up to the level specified in clause S5.2.4(e1)(1) ; and
 - (3) a circuit breaker provided to isolate a *generating unit* or *generating system* from the *network* must be capable of breaking, without damage or restrike, the maximum fault currents that could reasonably be expected to flow through the circuit breaker for any fault in the *network* or in the *generating unit* or *generating system*, as specified in the *connection agreement*.

Negotiated access standard

- (c) In negotiating a *negotiated access standard*, the *Network Service Provider* must consider alternative *network* configurations in the determination of the applicable fault current level and must prefer those options that maintain an equivalent level of service to other *Network Users* and which, in the opinion of the *Generator*, impose the least obligation on the *Generator*.
- (d) In carrying out assessments of proposed *negotiated access standards* under this clause S5.2.8, the *Network Service Provider* must take into account, without limitation:
- (1) the expected performance of existing *networks* and *considered projects*;
 - (2) the expected performance of existing *generating plant* and other relevant projects; and
 - (3) the expected range of *power system* operating conditions.

Schedule 5.3 Conditions for Connection of Customers

S5.3.1a Introduction to the schedule

- (a) This schedule applies to the following classes of *Network User*:
 - (1) a *First-Tier Customer* in respect of its *first-tier load*;
 - (2) a *Second-Tier Customer* in respect of its *second-tier load*;
 - (3) a *Market Customer* in respect of its *market load*;
 - (4) a *Non-Registered Customer* in respect of *supply* it takes from a *network*; and
 - (5) a *Distribution Network Service Provider* in respect of its *distribution network*.
- (b) For the purposes of this schedule 5.3 the term **Network Service Provider** must be interpreted to mean the *Network Service Provider* with whom the *Connection Applicant* has sought, or is seeking, a *connection* in accordance with clause 5.3.2 of the *Rules*.
- (c) All *Network Users* must comply with the requirements for the establishment of *performance standards* in accordance with provisions contained in schedule 5.1a for *system standards* or schedule 5.1 for *Network Service Providers* and this schedule 5.3 for *Customers*.
- (d) If the *Connection Applicant* is a *Registered Participant* in relation to the proposed *connection*, the *Network Service Provider* may include as terms and conditions of the *connection agreement* any provision of this schedule that is expressed as an obligation on a *Network User*. If the *Connection Applicant* is not a *Registered Participant* in relation to the proposed *connection*, the *Network Service Provider* must include as terms and conditions of the *connection agreement*:
 - (1) each provision of this schedule that is expressed as an obligation on a *Network User*; and
 - (2) each agreed *performance standard* and an obligation to comply with it.
- (e) The purpose of this schedule is to:
 - (1) describe the information that must be exchanged for the *connection enquiry* and *application to connect* processes described in rule 5.3 of the *Rules*;
 - (2) establish the *automatic access standards* and *minimum access standards* that will apply to the process of negotiating access standards under clause 5.3.4A of the *Rules*; and

- (3) establish obligations to apply prudent design standards for the *plant* to be *connected*.

S5.3.1 Information

- (a) Before a *Network User connects* any new or additional equipment to a *network*, the *Network User* must submit the following kinds of information to the *Network Service Provider*:
 - (1) a single line diagram with the protection details;
 - (2) *metering system* design details for any metering equipment being provided by the *Network User*;
 - (3) a general arrangement locating all the equipment on the site;
 - (4) a general arrangement for each new or altered *substation* showing all exits and the position of all electrical equipment;
 - (5) type test certificates for all new switchgear and *transformers*, including measurement *transformers* to be used for *metering* purposes in accordance with Chapter 7 of the *Rules*;
 - (6) earthing details;
 - (7) the proposed methods of earthing cables and other equipment to comply with the regulations of the relevant *participating jurisdiction*;
 - (8) *plant* and earth grid test certificates from approved test authorities;
 - (9) a secondary injection and trip test certificate on all circuit breakers;
 - (10) certification that all new equipment has been inspected before being *connected* to the *supply*; and
 - (11) operational arrangements.
- (a1) Before a *Network User connects* any new or additional equipment to a *network*, the *Network User* must submit:
 - (1) to *AEMO* and the relevant *Network Service Provider(s)*, information about the *protection systems* of the equipment;
 - (2) to *AEMO* and the relevant *Network Service Provider(s)*, information about the *control systems* of the equipment including:
 - (i) a set of functional block diagrams, including all functions between feedback signals and output;
 - (ii) the parameters of each functional block, including all settings, gains, time constants, delays, deadbands and limits;
 - (iii) the characteristics of non-linear elements;

- (iv) encrypted models in a form suitable for the software simulation products nominated by AEMO in the *Power System Model Guidelines*;
 - (3) to AEMO and the relevant *Network Service Provider(s)*, any other information specified in the *Power System Model Guidelines*, *Power System Design Data Sheet* and *Power System Setting Data Sheet*;
 - (4) to AEMO, model source code (in the circumstances required by the *Power System Model Guidelines*) associated with the model in subparagraph (2)(iv) in an unencrypted form suitable for at least one of the software simulation products nominated by AEMO in the *Power System Model Guidelines* and in a form that would allow conversion for use with other software simulation products nominated by AEMO in the *Power System Model Guidelines*.
- (a2) The information provided under paragraph (a1) must contain sufficient detail for AEMO and the relevant *Network Service Provider(s)* to perform *power system* simulation studies in accordance with the requirements and circumstances specified in the *Power System Model Guidelines*.
- (a3) Notwithstanding paragraph (a1), AEMO may exempt a *Network User* or class of *Network Users* from the requirement to provide some or all of the information specified in paragraph (a1), and must do so in accordance with the circumstances set out in the *Power System Model Guidelines*.
- (a4) All information provided to AEMO and the relevant *Network Service Provider(s)* under paragraph (a1) or pursuant to paragraph (a3) must be treated as *confidential information* by those recipients.
- (b) For the purposes of clause 5.3.2(f) of the *Rules*, the technical information that a *Network Service Provider* must, if requested, provide to a *Connection Applicant* in respect of the proposed *connection* includes:
- (1) the highest expected single phase and three phase fault levels at the *connection point* without the proposed *connection*;
 - (2) the clearing times of the existing *protection systems* that would clear a fault at the location at which the new *connection* would be connected into the existing *transmission system* or *distribution system*;
 - (3) the expected limits of *voltage* fluctuation, harmonic *voltage* distortion and *voltage* unbalance at the *connection point* without the proposed *connection*;
 - (4) technical information relevant to the *connection point* without the proposed *connection* including equivalent source impedance information, sufficient to estimate fault levels, *voltage* fluctuations, harmonic *voltage* distortion and *voltage* unbalance; and
 - (5) any other information or data not being *confidential information* relating to the performance of the *Network Service Provider's facilities*

that is reasonably necessary for the *Connection Applicant* to prepare an *application to connect*;

except where the *Connection Applicant* agrees the *Network Service Provider* may provide alternative or less detailed technical information in satisfaction of this clause S5.3.1.(b).

S5.3.2 Design standards

A *Network User* must ensure that:

- (a) the electrical *plant* in its *facility* complies with the relevant *Australian Standards* as applicable at the time of first installation of that electrical *plant* in the *facility*;
- (b) circuit breakers provided to isolate the *Network User's facilities* from the *Network Service Provider's facilities* are capable of breaking, without damage or restrike, fault currents nominated by the *Network Service Provider* in the relevant *connection agreement*; and
- (c) new equipment including circuit breakers provided to isolate the *Network User's facilities* from the *Network Service Provider's facilities* is capable of withstanding, without damage, power *frequency voltages* and impulse levels nominated by the *Network Service Provider* to apply at the *connection point* in accordance with the relevant provisions of the *system standards* and recorded in the relevant *connection agreement*.

S5.3.3 Protection systems and settings

A *Network User* must ensure that all *connections* to the *network* are protected by protection devices which effectively and safely *disconnect* any faulty circuit automatically within a time period specified by the *Network Service Provider* in accordance with the following provisions:

- (a) The *automatic access standard* is:
 - (1) Primary *protection systems* must be provided to *disconnect* any faulted element from the *power system* within the applicable *fault clearance time* determined under clause S5.1.9(a)(1), but subject to clauses S5.1.9(k) and S5.1.9(l).
 - (2) Each primary *protection system* must have sufficient redundancy to ensure that a faulted element within its protection zone is *disconnected* from the *power system* within the applicable *fault clearance time* with any single protection element (including any communications facility upon which that *protection system* depends) out of service.
 - (3) *Breaker fail protection systems* must be provided to clear faults that are not cleared by the circuit breakers controlled by the primary *protection system*, within the applicable *fault clearance time* determined under clause S5.1.9(a)(1).

- (b) The *minimum access standard* is:
- (1) Primary *protection systems* must be provided to *disconnect* from the *power system* any faulted element within their respective protection zones within the applicable *fault clearance time* determined under clause S5.1.9(a)(2), but subject to clauses S5.1.9(k) and S5.1.9(l).
 - (2) If a *fault clearance time* determined under clause S5.1.9(a)(2) for a protection zone is less than 10 seconds, a *breaker fail protection system* must be provided to clear from the *power system* any fault within that protection zone that is not cleared by the circuit breakers controlled by the primary *protection system*, within the applicable *fault clearance time* determined under clause S5.1.9(a)(3).
- (c) The *Network Service Provider* and the *Network User* must cooperate in the design and implementation of *protection systems* to comply with this clause, including cooperation with regard to:
- (1) the use of *current transformer* and *voltage transformer* secondary circuits (or equivalent) of one party by the *protection system* of the other;
 - (2) tripping of one party's circuit breakers by a *protection system* of the other party; and
 - (3) co-ordination of *protection system* settings to ensure inter-operation.

Before the *Network User's* installation is *connected* to the *Network Service Provider's* transmission or distribution system the *Network User's* protection system must be tested and the *Network User* must submit the appropriate test certificate to the *Network Service Provider*.

The application of settings of the protection scheme must be undertaken in accordance with clause S5.3.4.

S5.3.4 Settings of protection and control systems

A *Network User* must only apply settings to a *control system* or a *protection system* that are necessary to comply with performance requirements of this schedule 5.3 if the settings have been approved in writing by the *Network Service Provider* and, if the requirement is one that would involve AEMO under clause 5.3.4A(c) of the *Rules*, also by AEMO. A *Network User* must not allow its *plant* to take *supply* of electricity from the *power system* without such prior approval.

If a *Network User* seeks approval from the *Network Service Provider* to apply or change a setting, approval must not be withheld unless the *Network Service Provider* or, if the requirement is one that would involve AEMO under clause 5.3.4A(c) of the *Rules*, AEMO, reasonably determines that the changed setting would cause the *plant* to not comply with the relevant *performance*

standard or cause an *inter-regional* or *intra-regional* power transfer capability to be reduced.

If the *Network Service Provider* or, if the requirement is one that would involve *AEMO* under clause 5.3.4A(c) of the *Rules*, *AEMO*, reasonably determines that a setting of a *control system* or *protection system* of the *plant* needs to change to comply with the relevant *performance standard* or to maintain or restore an *inter-regional* or *intra-regional* power transfer capability, the *Network Service Provider* or *AEMO* (as applicable) must consult with the *Network User*, and the *Network Service Provider* may request in writing that a setting be applied in accordance with the determination.

The *Network Service Provider* may also request a test to verify the performance of the relevant *plant* with the new setting.

A *Network User* who receives such a request must arrange for the notified setting to be applied as requested and for a test to be conducted as requested. After the test, the *Network User* must, on request, provide both *AEMO* and the *Network Service Provider* with a report of a requested test, including evidence of its success or failure. Such a report of a test is *confidential information*.

A *Network User* must not change a setting requested by the *Network Service Provider* without its prior written agreement. If the *Network Service Provider* requires a *Network User* to change a setting within 18 months of a previous request, the *Network Service Provider* must pay the *Network User* its reasonable costs of changing the setting and conducting the tests as requested.

S5.3.5 Power factor requirements

Automatic access standard: For loads equal to or greater than 30 percent of the *maximum demand* at the *connection point* the *power factors* for *Network Users* and for *distribution networks connected* to another *transmission network* or *distribution network* are shown in Table S5.3.1:

Table S5.3.1

Permissible Range	
Supply Voltage (nominal)	Power Factor Range
> 400 kV	0.98 lagging to unity
250 kV - 400 kV	0.96 lagging to unity
50 kV - 250 kV	0.95 lagging to unity
1 kV < 50 kV	0.90 lagging to 0.90 leading

For *load* less than 30 percent of the *maximum demand* at the *connection point* a *Network Service Provider* may accept a *power factor* outside the range stipulated in Table S5.3.1 provided this does not cause the *system standards* to be violated.

Minimum access standard: A *Network Service Provider* may permit a lower lagging or leading *power factor* where the *Network Service Provider* is advised by AEMO that this will not detrimentally affect *power system security* or reduce *intra-regional* or *inter-regional power transfer capability*.

General:

If the *power factor* falls outside the relevant *performance standard* over any critical loading period nominated by the *Network Service Provider*, the *Network User* must, where required by the *Network Service Provider* in order to maintain satisfactory *voltage* levels at the *connection point* or to restore *intra-regional* or *inter-regional power transfer capability*, take action to ensure that the *power factor* falls within range as soon as reasonably practicable. This may be achieved by installing additional *reactive plant* or reaching a commercial agreement with the *Network Service Provider* to install, operate and maintain equivalent *reactive plant* as part of the *connection assets* or by alternative commercial arrangements with another party.

A *Registered Participant* who installs *shunt capacitors* to comply with *power factor* requirements must comply with the *Network Service Provider's* reasonable requirements to ensure that the design does not severely attenuate audio *frequency* signals used for *load* control or operations, or adversely impact on harmonic *voltage* levels at the *connection point*.

S5.3.6 Balancing of load currents

A *Network Service Provider* may require a *connected Registered Participant's* *load* to be balanced across all phases in order to maintain the negative sequence *voltage* at each *connection point* at less than or equal to the limits set out in Table S5.1a.1 of the *system standards* for the applicable nominal *supply voltage* level.

Automatic access standard: A *Network User* must ensure that:

- (a) for *connections* at 30 kV or higher *voltage*, the current in any phase is not greater than 102 percent or less than 98 percent of the average of the currents in the three phases; and
- (b) for *connections* at *voltages* less than 30 kV, that the current in any phase is not greater than 105 percent or less than 95 percent of the average of the currents in the three phases.

Minimum access standard: Where agreed with the relevant *Network Service Provider* and subject to any specific conditions imposed, a *Network User* may cause current unbalance greater than that specified in the *automatic access standard* provided the *Network User* does not cause the limits specified in clause S5.1a.7 to be exceeded at any point in the *network*.

General:

The limit to *load* current unbalance must be included in the *connection agreement* and is subject to verification of compliance by the *Network Service Provider*.

Where these requirements cannot be met the *Registered Participant* may enter into a commercial arrangement with the *Network Service Provider* for the installation of equipment to correct the phase unbalance. Such equipment must be considered as part of the *connection assets* for the *Registered Participant*.

The limit to *load* current unbalance must be included in the *connection agreement* and is subject to verification of compliance by the *Network Service Provider*.

S5.3.7 Voltage fluctuations

- (a) *Automatic access standard*: The *voltage* fluctuations caused by variations in *loading level* at the *connection point*, including those arising from *energisation*, de-energisation or other operation of *plant*, must not exceed the limits determined under clause S5.1.5(a).
- (b) *Minimum access standard*: The *voltage* fluctuations caused by variations in *loading level* at the *connection point*, including those arising from *energisation*, de-energisation or other operation of *plant*, must not exceed the limits determined under clause S5.1.5(b).

The *voltage* fluctuation emission limits and any specified conditions must be included in the *connection agreement*, and are subject to verification of compliance by the *Network Service Provider*.

S5.3.8 Harmonics and voltage notching

- (a) *Automatic access standard*: The harmonic *voltage* distortion caused by non-linearity, commutation of power electronic equipment, harmonic resonance and other effects within the *plant*, must not exceed the limits determined under clause S5.1.6(a).
- (b) *Minimum access standard*: The harmonic *voltage* distortion caused by non-linearity, commutation of power electronic equipment, harmonic resonance and other effects within the *plant*, must not exceed the limits determined under clause S5.1.6(b).

The harmonic *voltage* distortion emission limits and any special conditions must be included in the *connection agreement*, and is subject to verification of compliance by the *Network Service Provider*.

S5.3.9 Design requirements for Network Users' substations

A *Network User* must comply with the following requirements applicable to the design, station layout and choice of equipment for a *substation*:

- (a) safety provisions must comply with requirements applicable to the *participating jurisdiction* notified by the *Network Service Provider*;

- (b) where required by the *Network Service Provider*, appropriate interfaces and accommodation must be incorporated for communication *facilities*, remote monitoring and control and protection of *plant* which is to be installed in the *substation*;
- (c) a *substation* must be capable of continuous uninterrupted operation with the levels of *voltage*, harmonics, unbalance and *voltage* fluctuation specified in the *system standards* as modified in accordance with the relevant provisions of schedule 5.1;
- (d) earthing of primary *plant* in the *substation* must be in accordance with the Electricity Supply Association of Australia Safe Earthing Guide and must reduce step and touch potentials to safe levels;
- (e) *synchronisation facilities* or reclose blocking must be provided if a *generating unit* is *connected* through the *substation*;
- (f) secure electricity supplies of adequate capacity must be provided for *plant* performing communication, monitoring, control and protection functions;
- (g) *plant* must be tested to ensure that the *substation* complies with the approved design and specifications as included in a *connection agreement*;
- (h) the protection equipment required would normally include protection schemes for individual items of *plant*, back-up arrangements, auxiliary DC supplies and instrumentation *transformers*; and
- (i) insulation levels of *plant* in the *substation* must co-ordinate with the insulation levels of the *network* to which the *substation* is *connected* as nominated in the *connection agreement*.

S5.3.10 Load shedding facilities

Network Users who are *Market Customers* and who have expected peak demands in excess of 10MW must provide automatic *interruptible load* in accordance with clause 4.3.5 of the *Rules*.

Load shedding procedures may be applied by AEMO, or *EFCS settings schedules* may be determined, in accordance with the provisions of clause 4.3.2 of the *Rules* for the shedding of all *loads* including *sensitive loads*.

Schedule 5.3a Conditions for connection of Market Network Services

S5.3a.1a Introduction to the schedule

This schedule sets out obligations of *Market Network Service Providers* who *connect* to either a *transmission network* or a *distribution network*. It represents the requirements to be met for access to a *network*. Particular provisions may be varied by the *Network Service Provider* under the provisions of the *Rules* for the application of *minimum access standards* and *automatic access standards*.

This schedule includes specific provisions for the determination of *automatic access standards* and *negotiated access standards* derived from *minimum access standards* which, once determined, must be recorded together with the *automatic access standards* in a *connection agreement* and registered with AEMO as *performance standards*.

In this schedule, the term **Network Service Provider** applies only to the *Network Service Provider* with whom the *Market Network Service Provider* has lodged, or is considering lodging, an *application to connect*.

- (a) The schedule includes, in respect of each *market network service*, provisions regarding the capability to:
 - (1) automatically control the transfer of real power at the *connection point* for any given set of system conditions within the limits permitted under the *Rules*;
 - (2) respond to control requirements under expected normal and abnormal conditions;
 - (3) comply with general requirements to meet quality of *supply* obligations in accordance with clauses S5.3a.9, S5.3a.10 and S5.3a.11 and to maintain security of *supply* to other *Registered Participants*; and
 - (4) automatically *disconnect* itself when necessary to prevent any damage to the *market network service facilities* or threat to *power system security*.
- (b) This schedule also sets out the requirements and conditions, which (subject to clause 5.2.3 of the *Rules*) are obligations of *Market Network Service Providers* to:
 - (1) co--operate with the relevant *Network Service Provider* on technical matters when making a new *connection*;
 - (2) provide information to the *Network Service Provider* or AEMO; and
 - (3) observe and apply the relevant provisions of the *system standards* contained in schedule 5.1a in relation to the planning, design and operation of its *market network service facilities*.
- (c) This schedule does not set out arrangements by which a *Market Network Service Provider* may enter into an agreement or contract with AEMO to:
 - (1) provide additional services that are necessary to maintain *power system security*; or
 - (2) provide additional service to facilitate management of the *market*.

S5.3a.1 Provision of Information

- (a) Before a *Market Network Service Provider* connects any new or additional equipment to a *network*, the *Market Network Service Provider* must submit the following kinds of information to the *Network Service Provider*:
 - (1) a single line diagram with the protection details;
 - (2) *metering system* design details for any metering equipment being provided by the *Market Network Service Provider*;
 - (3) a general arrangement locating all relevant equipment on the site;
 - (4) a general arrangement for each new or altered *substation* showing all exits and the position of all electrical equipment;
 - (5) type test certificates for all new switchgear and *transformers*, including measurement *transformers* to be used for *metering* purposes in accordance with Chapter 7 of the *Rules*;
 - (6) earthing details;
 - (7) the proposed methods of earthing cables and other equipment to comply with the regulations of the relevant *participating jurisdiction*;
 - (8) *plant* and earth grid test certificates from approved test authorities;
 - (9) a secondary injection and trip test certificate on all circuit breakers;
 - (10) certification that all new equipment has been inspected before being *connected* to the *supply*; and
 - (11) operational arrangements.
- (a1) Before a *Market Network Service Provider* connects any new or additional equipment to a *network*, the *Market Network Service Provider* must submit:
 - (1) to *AEMO* and the relevant *Network Service Provider(s)*, information about the *protection systems* of the equipment;
 - (2) to *AEMO* and the relevant *Network Service Provider(s)*, information about the *control systems* of the equipment including:
 - (i) a set of functional block diagrams, including all functions between feedback signals and output;
 - (ii) the parameters of each functional block, including all settings, gains, time constraints, delays, deadbands and limits;
 - (iii) the characteristics of non-linear elements;

- (iv) encrypted models in a form suitable for the software simulation products nominated by AEMO in the *Power System Model Guidelines*;
 - (3) to AEMO and the relevant *Network Service Provider(s)*, any other information specified in the *Power System Model Guidelines*, *Power System Design Data Sheet* and *Power System Setting Data Sheet*;
 - (4) to AEMO, model source code (in the circumstances required by the *Power System Model Guidelines*) associated with the model in subparagraph (2)(iv) in an unencrypted form suitable for at least one of the software simulation products nominated by AEMO in the *Power System Model Guidelines* and in a form that would allow conversion for use with other software simulation products nominated by AEMO in the *Power System Model Guidelines*.
- (a2) The information provided under paragraph (a1) must contain sufficient detail for AEMO and the relevant *Network Service Provider(s)* to perform *power system* simulation studies in accordance with the requirements and circumstances specified in the *Power System Model Guidelines*.
- (a3) All information provided to AEMO and the relevant *Network Service Provider(s)* under paragraph (a1) must be treated as *confidential information* by those recipients.
- (b) For the purposes of clause 5.3.2(f) of the *Rules*, the technical information that a *Network Service Provider* must, if requested, provide to a *Connection Applicant* in respect of the proposed *connection* of a *market network service facility* includes:
- (1) the highest expected single phase and three phase fault levels at the *connection point* without the proposed *connection*;
 - (2) the clearing times of the existing *protection systems* that would clear a fault at the location at which the new *connection* would be connected into the existing *transmission system* or *distribution system*;
 - (3) the expected limits of *voltage* fluctuation, harmonic *voltage* distortion and *voltage* unbalance at the *connection point* without the proposed *connection*;
 - (4) technical information relevant to the *connection point* without the proposed *connection* including equivalent source impedance information, sufficient to estimate fault levels, *voltage* fluctuations, harmonic *voltage* distortion and *voltage* unbalance; and
 - (5) any other information or data not being *confidential information* relating to the performance of the *Network Service Provider's facilities* that is reasonably necessary for the *Connection Applicant* to prepare an *application to connect*;

except where the *Connection Applicant* agrees the *Network Service Provider* may provide alternative or less detailed technical information in satisfaction of this clause S5.3a.1(b).

S5.3a.2 Application of settings

A *Market Network Service Provider* must only apply settings to a *control system* or a *protection system* that are necessary to comply with performance requirements of this schedule 5.3a if the settings have been approved in writing by the *Network Service Provider* and, if the requirement is one that would involve AEMO under clause 5.3.4A(c) of the *Rules*, also by AEMO. A *Market Network Service Provider* must not allow its *market network service facilities* to take electricity from the *power system* without such prior approval.

If a *Market Network Service Provider* seeks approval from the *Network Service Provider* to apply or change a setting, approval must not be withheld unless the *Network Service Provider* or, if the requirement is one that would involve AEMO under clause 5.3.4A(c) of the *Rules*, AEMO, reasonably determines that the changed setting would cause the *market network service facilities* to not comply with the relevant *performance standard* or cause an *inter-regional* or *intra-regional power transfer capability* to be reduced.

If the *Network Service Provider* or, if the requirement is one that would involve AEMO under clause 5.3.4A(c) of the *Rules*, AEMO, reasonably determines that a setting of a *market network service facility's control system* or *protection system* needs to change to comply with the relevant *performance standard* or to maintain or restore an *inter-regional* or *intra-regional power transfer capability*, the *Network Service Provider* or AEMO (as applicable) must consult with the *Market Network Service Provider*, and may request in writing that a setting be applied in accordance with the determination.

The *Network Service Provider* may also request a test to verify the performance of the relevant *plant* with the new setting. The *Network Service Provider* must provide AEMO with a copy of its request to a *Market Network Service Provider* to apply a setting or to conduct a test.

A *Market Network Service Provider* who receives such a request must arrange for the notified setting to be applied as requested and for a test to be conducted as requested. After the test, the *Market Network Service Provider* must, on request, provide both AEMO and the *Network Service Provider* with a report of a requested test, including evidence of its success or failure. Such a report of a test is *confidential information*.

A *Market Network Service Provider* must not change a setting requested by the *Network Service Provider* without its prior written agreement. If the *Network Service Provider* requires a *Market Network Service Provider* to change a setting within 18 months of a previous request, the *Network Service Provider* must pay the *Market Network Service Provider* its reasonable costs of changing the setting and conducting the tests as requested.

S5.3a.3 Technical matters to be co-ordinated

A *Market Network Service Provider* and the relevant *Network Service Provider* must use all reasonable endeavours to agree upon the following matters in respect of each new or altered *connection* of a *market network service facility* to a *network*:

- (a) design at the *connection point*;
- (b) physical layout adjacent to the *connection point*;
- (c) primary protection and backup protection (clause S5.3a.6);
- (d) control characteristics (clause S5.3a.4);
- (e) communications and alarms (clause S5.3a.4);
- (f) insulation co-ordination and lightning protection;
- (g) fault levels and *fault clearance times*;
- (h) switching and *isolation facilities*;
- (i) interlocking arrangements; and
- (j) *metering installations* as described in Chapter 7 of the *Rules*.

S5.3a.4 Monitoring and control requirements

S5.3a.4.1 Remote Monitoring

- (a) *Automatic access standard*:
 - (1) Each *market network service facility* must have *remote monitoring equipment* to transmit to *AEMO's control centres* in real time, the quantities that *AEMO* reasonably requires to discharge its *market* and *power system security* functions as set out in Chapters 3 and 4 of the *Rules* respectively.
 - (2) The quantities may include such data as current, *voltage*, *active power*, *reactive power*, operational limits and critical temperatures in respect of *connection points* and power conversion systems.
- (b) *Minimum access standard*:
 - (1) Each *market network service facility* must have *remote monitoring equipment* to transmit to *AEMO's control centres* in real time:
 - (A) *connection point active power* flow, *reactive power* flow and *voltage*;

- (B) *active power, reactive power and voltage* for AC power lines, *transformers* and *busbars*, and *power and voltage* (or alternatively current) for DC power lines; and
 - (C) the status of circuit breakers.
- (c) The negotiation of access standards in relation to this clause S5.3a.4.1 must involve *AEMO* under clause 5.3.4A(c) of the *Rules*.

S5.3a.4.2 [Deleted]

S5.3a.4.3 Communications equipment

A *Market Network Service Provider* must provide electricity *supplies* for *remote monitoring equipment* and *remote control equipment* installed in relation to its *market network service facilities* capable of keeping such equipment available for at least three hours following total loss of *supply* at the *connection point* for the relevant *market network service facility*.

A *Market Network Service Provider* must provide communications paths (with appropriate redundancy) from the *remote monitoring equipment* or *remote control equipment* installed at any of its *market network service facilities* to a interface for communication purposes in a location reasonably acceptable to the *Network Service Provider* at the relevant *connection point*. Communications systems between this interface for communication purposes and the *control centre* are the responsibility of the *Network Service Provider* unless otherwise agreed by the *Market Network Service Provider* and the *Network Service Provider*.

Telecommunications between *Network Service Providers* and *Market Network Service Providers* for *operational communications* must be established in accordance with the requirements set down below.

(a) Primary Speech Facility

The relevant *Network Service Provider* must provide and maintain equipment by means of which routine and emergency control telephone calls may be established between the *Market Network Service Provider's* responsible Engineer/Operator and *AEMO*.

The *facilities* to be provided, including the interface requirement between the *Network Service Provider's* equipment and the *Market Network Service Provider's* equipment, must be specified by the *Network Service Provider*.

The costs of the equipment must be recovered by the *Network Service Provider* only through the charge for *connection*.

(b) Back-up Speech Facility

Where the *Network Service Provider* or *AEMO* reasonably determines that a back-up speech *facility* to the primary *facility* is required, the *Network Service Provider* must provide and maintain a separate telephone link or

radio installation on a cost-recovery basis only through the charge for *connection*.

The *Network Service Provider* is responsible for radio system planning and for obtaining all necessary radio licences.

S5.3a.5 Design standards

A *Market Network Service Provider* must ensure that:

- (a) the electrical *plant* in its *facility* complies with the relevant *Australian Standards* as applicable at the time of first installation of that electrical *plant* in the *facility*;
- (b) circuit breakers provided to isolate the *Market Network Service Provider's facilities* from the *Network Service Provider's facilities* are capable of breaking, without damage or restrike, fault currents nominated by the *Network Service Provider* in the relevant *connection agreement*; and
- (c) all new equipment including circuit breakers provided to isolate the *Market Network Service Provider's facilities* from the *Network Service Provider's facilities* is capable of withstanding, without damage, power *frequency voltages* and impulse levels nominated by the *Network Service Provider* in accordance with the relevant provisions of the *system standards* and recorded in the relevant *connection agreement*.

S5.3a.6 Protection systems and settings

A *Market Network Service Provider* must ensure that all *connections* to the *network* are protected by protection devices which effectively and safely *disconnect* any faulty circuit automatically within a time period specified by the *Network Service Provider* in accordance with the following provisions:

- (a) The *automatic access standard* is:
 - (1) Primary *protection systems* must be provided to *disconnect* any faulted element from the *power system* within the applicable *fault clearance time* determined under clause S5.1.9(a)(1), but subject to clauses S5.1.9(k) and S5.1.9(l).
 - (2) Each primary *protection system* must have sufficient redundancy to ensure that a faulted element within its protection zone is *disconnected* from the *power system* within the applicable *fault clearance time* with any single protection element (including any communications facility upon which that *protection system* depends) out of service.
 - (3) *Breaker fail protection systems* must be provided to clear faults that are not cleared by the circuit breakers controlled by the primary *protection system*, within the applicable *fault clearance time* determined under clause S5.1.9(a)(1).
- (b) The *minimum access standard* is:

- (1) *Primary protection systems* must be provided to *disconnect* from the *power system* any faulted element within their respective protection zones within the applicable *fault clearance time* determined under clause S5.1.9(a)(2), but subject to clauses S5.1.9(k) and S5.1.9(l).
 - (2) If a *fault clearance time* determined under clause S5.1.9(a)(2) for a protection zone is less than 10 seconds, a *breaker fail protection system* must be provided to clear from the *power system* any fault within that protection zone that is not cleared by the circuit breakers controlled by the *primary protection system*, within the applicable *fault clearance time* determined under clause S5.1.9(a)(3).
- (c) The *Network Service Provider* and the *Market Network Service Provider* must cooperate in the design and implementation of *protection systems* to comply with this clause, including cooperation with regard to:
- (1) the use of *current transformer* and *voltage transformer* secondary circuits (or equivalent) of one party by the *protection system* of the other;
 - (2) tripping of one party's circuit breakers by a *protection system* of the other party; and
 - (3) co-ordination of *protection system* settings to ensure inter-operation.

The *Market Network Service Provider* must ensure that the protection settings of its protective equipment grade with the *Network Service Provider's transmission system* or *distribution system* protection settings. Similarly the grading requirements of fuses must be co-ordinated with the *Network Service Provider*. The *Market Network Service Provider* must provide details of the protection scheme implemented by the *Market Network Service Provider* to the *Network Service Provider* and must liaise with the *Network Service Provider* when determining gradings and settings.

The application of settings of the protection scheme must be undertaken in accordance with clause S5.3a.2.

Before the *Market Network Service Provider's* installation is *connected* to the *Network Service Provider's transmission or distribution system* the *Market Network Service Provider's protection system* must be tested and the *Market Network Service Provider* must submit the appropriate test certificate to the *Network Service Provider*.

S5.3a.7 [Deleted]

S5.3a.8 Reactive power capability

Subject to the access standards stated in this clause S5.3a.8, if additional *reactive support* is required as a result of the *connection* or operation of the *network elements* which provide a *market network service* then the requisite *reactive support* must be supplied or paid for by the *Market Network Service Provider*.

Additional reactive support is required if, at rated power output as measured at the *connection point* of the *market network service* the *market network service* has a lagging power factor of less than 0.9 or a leading power factor of less than 0.95.

Automatic access standard: For power export, at rated power output and target *network voltage* as determined in accordance with clause S5.1a.4 of the *system standards* when measured at the *connection point* of the *market network service*, the *market network service* must be capable of operation in the range from a lagging power factor of 0.9 to a leading power factor of 0.95. For power import, the power factor must satisfy the requirements of clause S5.3.5 of schedule 5.3.

Minimum access standard: With the agreement of AEMO and the *Network Service Provider*, a power factor capability less than that defined by the *automatic access standard* may be provided if the requirements of the *system standards* are satisfied under all operating conditions of the *market network service*.

S5.3a.9 Balancing of load currents

A *Network Service Provider* may require a *Market Network Service Provider's* *power transfer* to be balanced at a *connection point* in order to maintain the negative sequence *voltage* at each connection point at less than or equal to the limits set out in Table S5.1a.1 of the *system standards* for the applicable nominal *supply voltage* level.

Automatic access standard: A *Market Network Service Provider* must ensure that for *connections* at 11kV or higher *voltage*, the current in any phase drawn by its equipment from the *Network Service Provider's* *network* is not greater than 102 percent or less than 98 percent of the average of the currents in the three phases.

Minimum access standard: Where agreed with the relevant *Network Service Provider* and subject to any specific conditions imposed, a *Market Network Service Provider* may cause current unbalance greater than that specified in the *automatic access standard* provided the *Market Network Service Provider* does not cause the limits specified in clause S5.1a.7 of the *system standards* to be exceeded at any point in the *network*.

Where these requirements cannot be met the *Market Network Service Provider* may enter into a commercial arrangement with the *Network Service Provider* for the installation of equipment to correct the phase unbalance. Such equipment must be considered as part of the *connection assets* for the *Market Network Service Provider*.

The limit to *power transfer* current unbalance must be included in the *connection agreement* and is subject to verification of compliance by the *Network Service Provider*.

S5.3a.10 Voltage fluctuations

- (a) *Automatic access standard:* The *voltage* fluctuations caused by variations in *loading level* at the *connection point*, including those arising from

energisation, de-energisation or other operation of *plant*, must not exceed the limits determined under clause S5.1.5(a).

- (b) *Minimum access standard*: The *voltage* fluctuations caused by variations in *loading level* at the *connection point*, including those arising from *energisation*, de-energisation or other operation of *plant*, must not exceed the limits determined under clause S5.1.5(b).

The *voltage* fluctuation emission limits and any specified conditions must be included in the *connection agreement*, and are subject to verification of compliance by the *Network Service Provider*.

S5.3a.11 Harmonics and voltage notching

- (a) *Automatic access standard*: The harmonic *voltage* distortion caused by non-linearity, commutation of power electronic equipment, harmonic resonance and other effects within the *plant*, must not exceed the limits determined under clause S5.1.6(a).
- (b) *Minimum access standard*: The harmonic *voltage* distortion caused by non-linearity, commutation of power electronic equipment, harmonic resonance and other effects within the *plant*, must not exceed the limits determined under clause S5.1.6(b).

A *Market Network Service Provider* must ensure that all of its *plant connected* to a *transmission network* or *distribution network* is capable of withstanding the effects of harmonic levels produced by that *plant* plus those imposed from the *network*.

The harmonic *voltage* distortion emission limits and any special conditions must be included in the *connection agreement*, and are subject to verification of compliance by the *Network Service Provider*.

S5.3a.12 Design requirements for Market Network Service Providers' substations

A *Market Network Service Provider* must comply with the following requirements applicable to the design, station layout and choice of equipment for a *substation*:

- (a) safety provisions must comply with requirements applicable to the *participating jurisdiction* notified by the *Network Service Provider*;
- (b) where required by the *Network Service Provider*, appropriate interfaces and accommodation must be incorporated for communication *facilities*, remote monitoring and control and protection of *plant* which is to be installed in the *substation*;
- (c) a *substation* must be capable of continuous uninterrupted operation with the levels of *voltage*, harmonics, unbalance and *voltage* fluctuation specified in the *system standards* as modified in accordance with the relevant provisions of schedule 5.1;

- (d) earthing of primary *plant* in the *substation* must be in accordance with the Electricity Supply Association of Australia Safe Earthing Guide and must reduce step and touch potentials to safe levels;
- (e) *synchronisation facilities* or reclose blocking must be provided if necessary;
- (f) secure electricity supplies of adequate capacity must be provided for *plant* performing communication, monitoring, control and protection functions;
- (g) *plant* must be tested to ensure that the *substation* complies with the approved design and specifications as included in a *connection agreement*;
- (h) the protection equipment required would normally include protection schemes for individual items of *plant*, back-up arrangements, auxiliary DC supplies and instrumentation *transformers*; and
- (i) insulation levels of *plant* in the *substation* must co-ordinate with the insulation levels of the *network* to which the *substation* is *connected* as nominated in the *connection agreement*.

S5.3a.13 Market network service response to disturbances in the power system

- (a) Each *market network service* must be capable of continuous uninterrupted operation during the occurrence of:
 - (1) *power system frequency* within the *frequency operating standards*; or
 - (2) the range of *voltage* variation conditions permitted by the *system standards*.
- (b) The equipment associated with each *market network service* must be designed to withstand without damage or reduction in life expectancy the harmonic distortion and *voltage* unbalance conditions determined to apply in accordance with the provisions of schedule 5.1, clauses S5.1.6 and S5.1.7, respectively, at the *connection point*.

S5.3a.14 Protection of market network services from power system disturbances

- (a) *Minimum access standard*: If a *Connection Applicant* requires that its *market network service facility* be automatically *disconnected* from the *power system* in response to abnormal conditions arising from the *power system*, the relevant *protection system* or *control system* must not *disconnect* the *facility* for conditions under which it must continuously operate or must withstand under a provision of the *Rules*.
- (b) There is no *automatic access standard* for this technical requirement.
- (c) For the purposes of this clause S5.3a.14, the abnormal conditions include:
 - (1) *frequency* outside the *extreme frequency excursion tolerance limits*;

- (2) sustained and uncontrollable DC current beyond a short term *current rating* for the period assigned to that rating;
 - (3) DC *voltage* above the *voltage* maximum rating or sustained below any lower limit for stable operation;
 - (4) *voltage* to *frequency* ratio beyond a *transformer* magnetic flux based *voltage* to *frequency* rating;
 - (5) sustained *voltage* fluctuations at the *connection point* beyond the level determined under clause S5.1.5(a);
 - (6) sustained harmonic *voltage* distortion at the *connection point* beyond the level determined under clause S5.1.6(a);
 - (7) sustained negative phase sequence *voltage* at the *connection point* beyond the level determined under clause S5.1.7(a); and
 - (8) any similar condition agreed between the *Market Network Service Provider* and *AEMO* after consultation with each relevant *Network Service Provider*.
- (d) The negotiation of access standards in relation to this clause S5.3a.14 must involve *AEMO* under clause 5.3.4A(c) of the *Rules*.
 - (e) The *Network Service Provider* is not liable for any loss or damage incurred by the *Market Network Service Provider* or any other person as a consequence of a fault on either the *power system*, or within the *Market Network Service Provider's facility*.

Schedule 5.4 Information to be Provided with Preliminary Enquiry

The following items of information are required to be submitted with a preliminary enquiry for *connection* or modification of an existing *connection*:

- (a) Type of *plant* – (eg. gas turbine *generating unit*; rolling mill, etc.).
- (b) Preferred site location – (listing any alternatives in order of preference as well).
- (c) Maximum power *generation* or demand of whole *plant* – (maximum MW and/or MVA, or average over 15 minutes or similar).
- (d) Expected *energy* production or consumption (MWh per month).
- (e) *Plant* type and configuration – (eg. number and type of *generating units* or number of separate production lines).
- (f) Nature of any disturbing *load* (size of disturbing component MW/MVAr, duty cycle, nature of power electronic *plant* which may produce harmonic distortion).

- (g) Technology of proposed *generating unit* (e.g. *synchronous generating unit*, induction generator, photovoltaic array, etc).
- (h) When *plant* is to be in service – (eg. estimated date for each *generating unit*).
- (i) Name and address of enquirer, and, if relevant, of the party for whom the enquirer is acting.
- (j) Other information may be requested by the *Network Service Provider*, such as amount and timing of power required during construction or any auxiliary power requirements.

Schedule 5.4A Preliminary Response

Note

The local definitions in clause 5.10.2 apply to this schedule.

For the purposes of clause 5.3A.7(a), the following information must be included in the preliminary response:

- (a) relevant technical information about the *Distribution Network Service Provider's distribution network*, including guidance on how the *Connection Applicant* may meet the following requirements if it were to proceed to prepare an *application to connect*:
 - (1) primary protection and backup protection;
 - (2) other protection and control requirements applicable to *embedded generating units* and associated *plant*;
 - (3) *remote monitoring equipment* and control communications *facilities*;
 - (4) insulation co-ordination and lightning protection;
 - (5) existing maximum and minimum fault levels and *fault clearance times* of relevant local zone substations;
 - (6) switching and *isolation* facilities;
 - (7) interlocking and *synchronising* arrangements;
 - (8) *metering installations*; and
 - (9) remedy or avoid an *adverse system strength impact* caused by the *connection*;
- (b) if not otherwise provided in accordance with paragraph (a), to the extent the *Distribution Network Service Provider* holds technical information necessary to prepare an *application to connect*, that information;

- (c) information relevant to each technical requirement of the proposed *plant* as relevant to:
 - (1) the *automatic access standards*;
 - (2) any relevant *minimum access standards*;
 - (3) any applicable *plant standards*; and
 - (4) the *normal voltage* level, if it is expected to change from the *nominal voltage* level;
- (d) the identity of other parties that the *Distribution Network Service Provider* considers:
 - (1) will need to be involved in planning to make the *connection* or must be involved under clause 5.3A.10(c); and
 - (2) must be paid for *transmission services* or *distribution services*;
- (e) whether it will be necessary for any of the parties identified in subparagraph (d) to enter into an agreement with the *Connection Applicant* in respect of the provision of *connection services* or other *transmission services* or *distribution services* or both, to the *Connection Applicant*;
- (f) where relevant the *Distribution Network Service Provider* is to identify whether any service required to establish a *connection* is *contestable* in the relevant *participating jurisdiction*;
- (g) worked examples of *connection service* charges relevant to the enquiry and an explanation of the factors on which the charges depend;
- (h) information regarding the *Distribution Network Service Provider* and its *network*, system limitations for sub-transmission lines and zone substations and other information relevant to constraints on the *network* as such information is relevant to the *application to connect*;
- (i) an indication of whether *network augmentation* may be required and if required, what work the *network augmentation* may involve;
- (i1) an indication of whether the new *connection* is expected in the reasonable opinion of a *Network Service Provider* to have an *adverse system strength impact*;
- (j) a hyperlink to the *Distribution Network Service Provider's* information pack;
- (k) the contact details for the relevant point of contact within the *Distribution Network Service Provider* managing the *connection* enquiry;

- (l) the *Distribution Network Service Provider's* response to the objectives of the *connection* sought as included by the *Connection Applicant* in its enquiry under clause 5.3A.5(c)(1);
- (m) a description of the process for the provision of the detailed response, including the further information to be provided by the *Connection Applicant* and analysis to be undertaken by the *Distribution Network Service Provider* as part of the preparation of the detailed response;
- (n) an overview of any available options for *connection* to the *Distribution Network Service Provider's network*, as relevant to an enquiry lodged, at more than one *connection point* in a *network*, including:
 - (1) example single line diagram and relevant *protection systems* and *control systems* used by existing *connection* arrangements;
 - (2) a description of the characteristics of supply; and
 - (3) an indication of the likely impact on terms and conditions of *connection*,as relevant to each optional differing *connection point*;
- (o) a statement of further information required from the *Connection Applicant* for the preparation of the detailed response, including:
 - (1) details of the *Connection Applicant's connection* requirements, and the *Connection Applicant's* specifications of the *facility* to be *connected*, consistent with the requirements advised in accordance with paragraphs (a) to (c); and
 - (2) details of the *Connection Applicant's* reasonable expectations of the level and standard of service of *power transfer capability* that the *network* should provide;
 - (3) the *Connection Applicant's* proposal for any *system strength remediation scheme*;
- (p) an estimate of the enquiry fee payable by the *Connection Applicant* for the detailed response, including details of how components of the fee were calculated;
- (q) the component of the estimate of the enquiry fee payable by the *Connection Applicant* to request the detailed response;
- (r) an estimate of the application fee which is payable on submitting an *application to connect*; and
- (s) any additional information relevant to the enquiry.

Schedule 5.4B Detailed Response to Enquiry

For the purposes of clause 5.3A.8(g), the following information must be included in the detailed response:

- (a) the contact details for the relevant point of contact within the *Distribution Network Service Provider* who will manage the *application to connect*;
- (b) written details of each technical requirement relevant to the proposed *plant* as relevant to the:
 - (1) *automatic access standards*;
 - (2) *minimum access standards*;
 - (3) any applicable *plant standards*; and
 - (4) *normal voltage* level, if that is to change from the *nominal voltage* level;
- (c) details of the *connection* requirements based on the *Connection Applicant's* specifications of the *facility* to be *connected*;
- (d) details of the level and standard of service of *power transfer capability* that the *Distribution Network Service Provider*, with reasonable endeavours, considers the *network* provides at the location of the *connection point* or *connection points*, if options have been made available under clause S5.4A(n);
- (e) *negotiated access standards* that will require *AEMO's* involvement in accordance with clause 5.3.4A(c);
- (e1) written details of:
 - (1) the minimum *three phase fault level* at the *connection point*; and
 - (2) the results of the *Network Service Provider's* preliminary assessment of the impact of the new *connection* undertaken in accordance with the *system strength impact assessment guidelines* and clause 5.3.4B;
- (f) a list of the technical data to be included with the *application to connect*, which may vary depending on the *connection* requirements and the type, rating and location of the *facility* to be *connected*. The list provided under this paragraph (f) will generally be in the nature of the information set out in schedule 5.5 but may be varied by the *Distribution Network Service Provider* as appropriate to suit the size and complexity of the proposed *facility* to be *connected*;
- (g) commercial information to be supplied by the *Connection Applicant* to allow a *Network Service Provider* (as is relevant) to make an assessment of the ability of the *Connection Applicant* to satisfy the prudential requirements set out in rules 6.21 and 6A.28;

- (h) so far as is relevant, and in relation to services that the *Distribution Network Service Provider* intends to provide, an itemised estimate of *connection* costs including:
 - (1) *connection services* charges;
 - (2) costs associated with the proposed *metering* requirements for the *connection*;
 - (3) costs of any *network extension*;
 - (4) details of *augmentation* required to provide the *connection* and associated costs;
 - (5) details of the interface equipment required to provide the *connection* and associated costs;
 - (6) details of any ongoing operation and maintenance costs and charges to be undertaken by the *Distribution Network Service Provider*; and
 - (7) other incidental costs and their basis of calculation;
- (i) an explanation of the factors affecting each component of the itemised estimate of *connection* costs and the further information that will be taken into account by the *Distribution Network Service Provider* in preparing the final itemised statement of *connection* costs to be provided under clause 5.3.6(b2)(1);
- (j) using reasonable endeavours, all risks and obligations in respect of the proposed *connection* associated with planning and environmental laws not contained in the *Rules*;
- (k) a draft *connection agreement* that contains the proposed terms and conditions for *connection* to the *network* including those of the kind set out in schedule 5.6 and:
 - (1) an explanation of the terms and conditions in the *connection agreement* that need to be finalised; and
 - (2) if relevant, further information necessary from the *Connection Applicant* to finalise the *connection agreement*;
- (l) a description of the process for lodging the *application to connect*, including:
 - (1) the options open to the *Connection Applicant* in submitting an *application to connect* in accordance with clause 5.3A.9;
 - (2) the further analysis to be undertaken by the *Distribution Network Service Provider* as part of the *Distribution Network Service Provider's* assessment of the *application to connect*;

- (3) further information required from the *Connection Applicant* for the *Distribution Network Service Provider* to assess the *application to connect*; and
- (4) an outline of proposed milestones (and their timeframes) for *connection* and access activities which may be modified from time to time by agreement of the parties, where such agreement must not be unreasonably withheld;
- (m) the application fee payable when submitting an *application to connect*;
- (n) whether the *Distribution Network Service Provider* agrees to the detailed response remaining valid for a specified period of time to allow the *Connection Applicant* to lodge an *application to connect* within that time; and
- (o) any additional information relevant to the *application to connect*.

Schedule 5.5 Technical Details to Support Application for Connection and Connection Agreement

S5.5.1 Introduction to the schedule

Various sections of the *Rules* require that *Registered Participants* submit technical data to the *Network Service Provider*. This schedule lists the range of data which may be required. The actual data required will be advised by the *Network Service Provider*, and will form part of the technical specification in the *connection agreement*. These data will also be made available to AEMO and to other *Network Service Providers* by the *Network Service Provider* at the appropriate time.

S5.5.2 Categories of data

Data is coded in categories, according to the stage at which it is available in the build-up of data during the process of forming a *connection* or obtaining access to a *network*, with data acquired at each stage being carried forward, or enhanced in subsequent stages, eg. by testing.

The *Power System Model Guidelines*, *Power System Design Data Sheet* and *Power System Setting Data Sheet* identify for each type of data, its category in terms of clause S5.5.2.

Codes:

S = Standard Planning Data;

D = Detailed Planning Data;

R = Registered Data (R1 pre-connection, R2 post-connection)

Preliminary system planning data

Preliminary system planning data is required for submission with the *application to connect*, to allow the *Network Service Provider* to prepare an offer of terms and conditions for a *connection agreement* and to assess the requirement for, and effect of, *network augmentation* or *extension* options. Such data is normally limited to the items denoted as Standard Planning Data (S) in the *Power System Model Guidelines*, *Power System Design Data Sheet*, *Power System Setting Data Sheet* and in schedules 5.5.3 to 5.5.5.

The *Network Service Provider* may, in cases where there is reasonable doubt as to the viability of a proposal, require the submission of other data before making an offer to *connect* or to amend a *connection agreement*.

Registered system planning data

Registered system planning data is the class of data which will be included in the *connection agreement* signed by both parties. It consists of the preliminary system planning data plus those items denoted in the attached schedules as Detailed Planning Data (D). The latter must be submitted by the *Registered Participant* in time for inclusion in the *connection agreement*.

Registered data

Registered Data consists of data validated and agreed between the *Network Service Provider* and the *Registered Participant*, such data being:

- (a) prior to actual *connection* and provision of access, data derived from manufacturers' data, detailed design calculations, works or site tests etc. (R1); and
- (b) after connection, data derived from on-system testing (R2).

All of the data will, from this stage, be categorised and referred to as Registered Data; but for convenience the schedules omit placing a higher ranked code next to items which are expected to already be valid at an earlier stage.

S5.5.3 Review, change and supply of data

Data will be subject to review at reasonable intervals to ensure its continued accuracy and relevance. The *Network Service Provider* must initiate this review. A *Registered Participant* may *change* any data item at a time other than when that item would normally be reviewed or updated by submission to the *Network Service Provider* of the revised data, together with authentication documents, eg. test reports.

The *Network Service Provider* must supply data relating to its system to other *Network Service Providers* for planning purposes and to other *Registered Participants* and AEMO as specified in the various sections of the *Rules*, including through the *statement of opportunities*.

S5.5.4 Data Requirements

Schedules 5.5.3 to 5.5.5 cover the following data areas:

- (a) schedule 5.5.3 - Network Plant Technical Data. This comprises fixed electrical parameters.
- (b) schedule 5.5.4 - Plant and Apparatus Setting Data. This comprises settings which can be varied by agreement or by direction of the *Network Service Provider* or *AEMO*.
- (c) schedule 5.5.5 - *Load* Characteristics. This comprises the estimated design parameters of *loads*.

The documents and schedules applicable to each class of *Registered Participant* are as follows:

- (a) *Generators*: the *Power System Model Guidelines*, *Power System Design Data Sheet* and *Power System Setting Data Sheet*;
- (b) *Customers* and *Network Service Providers*: schedules 5.5.3, 5.5.4 and the *Power System Model Guidelines*, *Power System Design Data Sheet* and *Power System Setting Data Sheet*;
- (c) *Customers*: schedule 5.5.5 and the *Power System Model Guidelines*, *Power System Design Data Sheet* and *Power System Setting Data Sheet*; and
- (d) *Market Network Service Providers*: schedules 5.5.3 and 5.5.4 and the *Power System Model Guidelines*, *Power System Design Data Sheet* and *Power System Setting Data Sheet*.

S5.5.5 Asynchronous generating unit data

A *Generator* that connects a generating system, that is an *asynchronous generating unit*, must be given exemption from complying with those parts of the *Power System Model Guidelines*, *Power System Design Data Sheet* and *Power System Design Data Sheet* that are determined by the *Network Service Provider* to be not relevant to such *generating systems*, but must comply with those parts of schedules 5.5.3, 5.5.4, and 5.5.5 that are relevant to such *generating systems*, as determined by the *Network Service Provider*.

S5.5.6 Generating units smaller than 30MW data

A *Generator* that connects a generating unit smaller than 30 MW or generating units totalling less than 30 MW to a connection point to a distribution network must submit registered system planning data and registered data to *AEMO* and the relevant *Network Service Provider* in accordance with the requirements specified in the *Power System Model Guidelines*, *Power System Design Data Sheet* and *Power System Setting Data Sheet*.

Codes:

S = Standard Planning Data

D = Detailed Planning Data

R = Registered Data (R1 pre-connection, R2 post-connection)

S5.5.7 Power System Design Data Sheet, Power System Setting Data Sheet and Power System Model Guidelines

- (a) *AEMO* must, subject to paragraphs (b) and (c), develop, *publish* and maintain, in accordance with the *Rules consultation procedures*:
- (1) a *Power System Design Data Sheet* describing, for relevant *plant technologies*, *plant* design parameters including *plant* configurations, impedances, time constants, non-linearities, ratings and capabilities to be provided under clauses 3.11.5(b)(5), 3.11.9(g), 4.3.4(o), 5.2.3(j), 5.2.3(k), 5.2.3A(a), 5.2.4(c), 5.2.4(d), 5.2.5(d), 5.2.5(e), 5.3.9(b)(2), S5.2.4, S5.3.1, S5.3a.1 and this schedule 5.5;
 - (2) a *Power System Setting Data Sheet* describing, for relevant *power systems* and *control system* technologies, the *protection system* and *control system* functions and their settings, including configurations, gains, time constants, delays, deadbands, non-linearities and limits to be provided under clauses 3.11.5(b)(5), 3.11.9(g), 4.3.4(o), 5.2.3(j), 5.2.3(k), 5.2.3A(a), 5.2.3A(b), 5.2.4(c), 5.2.4(d), 5.2.5(d), 5.2.5(e), 5.3.9(b)(2), S5.2.4, S5.3.1, S5.3a.1 and this schedule 5.5; and
 - (3) *Power System Model Guidelines* describing, for relevant *power system* technologies at the *transmission system* and *distribution system* level, *AEMO*'s requirements when developing mathematical models for *plant*, including the impact of their *control systems* and *protection systems* on *power system security* to be provided under clauses 3.11.5(b)(5), 3.11.9(g), 4.3.4(o), 5.2.3(j), 5.2.3(k), 5.2.3A(a), 5.2.3A(b), 5.2.4(c), 5.2.4(d), 5.2.5(d), 5.2.5(e), 5.3.9(b)(2), S5.2.4, S5.3.1, S5.3a.1 and this schedule 5.5.
- (b) When developing, *publishing* and maintaining the *Power System Model Guidelines*, the *Power System Design Data Sheet* and the *Power System Setting Data Sheet* under paragraph (a), *AEMO* must have regard to the purpose of the *Power System Model Guidelines*, the *Power System Design Data Sheet* and the *Power System Setting Data Sheet*, which is to:
- (1) allow *plant* and equipment to be mathematically modelled by *AEMO* with sufficient accuracy to permit:
 - (i) the *power system* operating limits for ensuring *power system security* to be quantified with the lowest practical safety margins;
 - (ii) the assessment of proposed *negotiated access standards*;

- (iii) settings of *control systems* and *protection systems* of *plant* and *networks* to be assessed and quantified for maximum practical performance of the *power system*; and
 - (iv) the efficient procurement of *system restart ancillary services* and *network support and control ancillary services*; and
 - (2) identify for each type of data its category in terms of clause S5.5.2.
- (b1) The *Power System Model Guidelines* must specify:
 - (1) the information, including the types of models, that:
 - (i) *Generators* must provide under clause 5.2.5(d), clause 5.2.5(e), clause 5.3.9(b)(2), clause S5.2.4 and clause S5.5.6;
 - (ii) *Network Service Providers* must provide under clause 4.3.4(o), clause 5.2.3(j) and clause 5.2.3(k);
 - (iii) *Network Users* must provide under clause 5.2.4(c), clause 5.2.4(d) and clause S5.3.1(a1);
 - (iv) *Market Network Service Providers* must provide under clause 5.2.3A(a), clause 5.2.3A(b) and clause S5.3a.1(a1);
 - (v) prospective *NSCAS* tenderers must provide under clause 3.11.5(b)(5); and
 - (vi) prospective *SRAS Providers* must provide under clause 3.11.9(g);
 - (2) the model accuracy requirements that are applicable to each type of model provided, as well as the types of *generating systems* and *plant* and equipment that the model accuracy requirements apply to;
 - (3) when information to which the *Power System Model Guidelines* relates must be provided;
 - (4) a process to be followed in circumstances where a person is unable to provide information required to be provided under clauses 3.11.5(b)(5), 3.11.9(g), 4.3.4(o), 5.2.3(j), 5.2.3(k), 5.2.3A(a), 5.2.3A(b), 5.2.4(c), 5.2.4(d), 5.2.5(d), 5.2.4(e), 5.3.9(b)(2), S5.2.4, S5.3.1, S5.3a.1, S5.5.6, schedule 5.5 or as otherwise required by the *Power System Model Guidelines*, *Power System Design Data Sheet* or *Power System Setting Data Sheet*;
 - (5) guidance on the factors that *AEMO* will take into account when determining the circumstances under which *AEMO* will request information to be provided, including the *power system* conditions that necessitate the usage of a certain type of model in order to achieve the desired level of accuracy;

- (6) the format in which information must be provided and any material *AEMO* requires to assess the accuracy of information provided to it; and
 - (7) the circumstances in which model source code is required to be provided.
- (c) In developing and amending the *Power System Model Guidelines*, the *Power System Design Data Sheet* and the *Power System Setting Data Sheet*, *AEMO* must:
 - (1) have regard to the reasonable costs of efficient compliance by *Registered Participants* with those guidelines and data sheets compared to the likely benefits from the use of the information provided under the guidelines and data sheets;
 - (2) have regard to any requirements to protect the intellectual property and confidential information of third parties, including where those third parties are not *Registered Participants*; and
 - (3) have regard to *Distribution Network Service Providers*' and *Transmission Network Service Providers*' requirements for data and modelling information that is reasonably necessary for the relevant provider to fulfil its obligations under the *Rules* or *jurisdictional electricity legislation*.
- (d) *AEMO* may amend the *Power System Model Guidelines*, the *Power System Design Data Sheet* or the *Power System Setting Data Sheet* from time to time.
- (e) Any person may submit a written request (with reasons) for *AEMO* to amend the *Power System Model Guidelines*, the *Power System Design Data Sheet* or the *Power System Setting Data Sheet* from time to time.
- (f) In developing and amending the *Power System Model Guidelines*, the *Power System Design Data Sheet* or the *Power System Setting Data Sheet*, *AEMO* must, subject to paragraph (g), consult with *Registered Participants* and such other persons who, in *AEMO*'s reasonable opinion have, or have identified themselves as having, an interest in the *Power System Model Guidelines*, in accordance with the *Rules consultation procedures*.
- (g) *AEMO* is not required to comply with the *Rules consultation procedures* when making minor or administrative amendments to the *Power System Model Guidelines*, the *Power System Design Data Sheet* or the *Power System Setting Data Sheet*.
- (h) *AEMO* may at the conclusion of the *Rules consultation procedures* under paragraph (f) or otherwise under paragraph (g), amend the relevant data sheet or guidelines (if necessary).

Schedule 5.5.1 [Deleted]

Schedule 5.5.2 [Deleted]

Schedule 5.5.3 Network and plant technical data of equipment at or near connection point

Data Description	Units	Data Category
Voltage Rating		
<i>Nominal voltage</i>	kV	S, D
<i>Highest voltage</i>	kV	D
Insulation Co-ordination		
Rated lightning impulse withstand <i>voltage</i>	kVp	D
Rated short duration power <i>frequency</i> withstand <i>voltage</i>	kV	D
Rated Currents		
Circuit maximum current	kA	S, D
Rated Short Time Withstand Current	kA for seconds	D
Ambient conditions under which above current applies	Text	S,D
Earthing		
System Earthing Method	Text	S, D
Earth grid rated current	kA for seconds	D
Insulation Pollution Performance		
Minimum total creepage	mm	D
Pollution level	Level of IEC 815	D

Data Description	Units	Data Category
Controls		
Remote control and data transmission arrangements	Text	D
Metering Provided by Customer		
Measurement <i>transformer</i> ratios:		D
<i>Current transformers</i>	A/A	D
<i>Voltage transformers</i>	V/kV	D
Measurement <i>Transformer</i> Test Certification details	Text	R1
Network Configuration		
Operation Diagrams showing the electrical circuits of the existing and proposed main <i>facilities</i> within the <i>Registered Participant's</i> ownership including <i>busbar</i> arrangements, phasing arrangements, earthing arrangements, switching <i>facilities</i> and operating <i>voltages</i> .	Single line Diagrams	S, D, R1
Network Impedance		
For each item of <i>plant</i> : details of the positive, negative and zero sequence series and shunt impedance, including mutual coupling between physically adjacent elements.	% on 100 MVA base	S, D, R1
Short Circuit Infeed to the Network		
Maximum generator 3-phase short circuit infeed including infeeds from <i>generating units connected</i> to the <i>Registered Participant's</i> system, calculated by method of AS 3851 (1991).	kA symmetrical	S, D, R1

Data Description	Units	Data Category
The total infeed at the instant of fault (including contribution of induction motors).	kA	D, R1
Minimum zero sequence impedance of <i>Registered Participant's network at connection point.</i>	% on 100 MVA base	D, R1
Minimum negative sequence impedance of <i>Registered Participant's network at connection point.</i>	% on 100 MVA base	D, R1

Load Transfer Capability:

Where a *load*, or group of *loads*, may be fed from alternative *connection points*:

<i>Load</i> normally taken from <i>connection point X</i>	MW	D, R1
<i>Load</i> normally taken from <i>connection point Y</i>	MW	D, R1
Arrangements for transfer under planned or fault <i>outage</i> conditions	Text	D

Circuits Connecting Embedded Generating Units to the Network:

For all *generating units*, all connecting lines/cables, *transformers* etc.

Series Resistance	% on 100 MVA base	D, R
Series Reactance	% on 100 MVA base	D, R
Shunt Susceptance	% on 100 MVA base	D, R
Normal and short-time emergency ratings	MVA	D,R
Technical Details of <i>generating units</i> and <i>generating systems</i> as per the <i>Power System Design Data Sheet</i> , <i>Power System Setting Data Sheet</i> and the <i>Power System Model Guidelines</i> where such details are not <i>confidential information</i>		

Data Description	Units	Data Category
Transformers at connection points:		
Saturation curve	Diagram	R
Equipment associated with DC Links		
Number of poles	MVA	D,R
Converters per station	Quantity	D,R
Reactive Power consumption of converters	MCAr	D,R
Location and Rating of A.C. Filters	MVAr	D,R
Location and Rating of Shunt Capacitors	MVAr	D,R
Location and Rating of Smoothing <i>Reactor</i>	MVAr	D,R
Location and Rating of DC Filter	MVAr	D,R

Schedule 5.5.4 Network Plant and Apparatus Setting Data

Data Description	Units	Data Category
Protection Data for Protection relevant to Connection Point:		
Reach of all protections on <i>transmission lines</i> , or cables	ohms or % on 100 MVA base	S, D
Number of protections on each item	Text	S, D
Total fault clearing times for near and remote faults	ms	S, D, R1
Line reclosure sequence details	Text	S, D, R1
Tap Change Control Data:		
Time delay settings of all <i>transformer</i> tap changers.	Seconds	D, R1
Reactive Compensation:		
Location and Rating of individual <i>shunt reactors</i>	MVAr	D, R1

Data Description	Units	Data Category
Location and Rating of individual <i>shunt capacitor</i> banks	MVAr	D, R1
<i>Capacitor bank</i> capacitance	microfarads	D
Inductance of switching <i>reactor</i> (if fitted)	millihenries	D
Resistance of capacitor plus <i>reactor</i>	Ohms	D
Details of special controls (e.g. Point-on-wave switching)	Text	D

For each shunt reactor or capacitor bank:

Method of switching	Text	S
Details of automatic control logic such that operating characteristics can be determined	Text	D, R1

FACTS Installation:

Data sufficient to enable static and dynamic performance of the installation to be modelled	Text, diagrams control settings	S, D, R1
Transmission line flow control device	Text,	D
Details of the operation of the control device under normal operation conditions (including startup and shutdown of the line) and during a fault (close up and remote)	diagrams	
Models for the control device and transmission line appropriate for load flow, small signal stability and transient stability analysis	Text, diagrams	D
Capability of the line flow control device	KA, MVA, MW	D
Details of the rate of change of flow capability of the control device	Text	D
Details of the capability of the control device to provide frequency and voltage control	Text	D

Data Description	Units	Data Category
Description of possible failure modes of control device	Text	D
Details of performance of the control device under disturbance conditions including changes in AC frequency, variations in AC system voltages and AC system waveform distortion.	Text	D
For DC control devices, contribution to the AC system short circuit level	KA, MVA	D

Schedule 5.5.5 Load Characteristics at Connection Point

Data Description	Units	Data Category
For all Types of Load		
Type of <i>Load</i>	Text	S
eg controlled rectifiers or large motor drives		
For Fluctuating Loads		
Cyclic variation of <i>active power</i> over period	Graph	S
	MW/time	
Cyclic variation of <i>reactive power</i> over period	Graph	S
	MVAr/time	
Maximum rate of change of <i>active power</i>	MW/s	S
Maximum rate of change of <i>reactive power</i>	MVAr/s	S
Shortest Repetitive time interval between fluctuations in active and <i>reactive power</i> reviewed annually	s	S
Largest Step Change:		
In <i>active power</i>	MW	S
In <i>reactive power</i>	MVAr	S

Schedule 5.6 Terms and Conditions of Connection agreements and network operating agreements

Part A Connection agreements

The *connection agreements* must contain the specific conditions that have been agreed to for *connection* and access to the *transmission* or *distribution network*, including but not limited to:

- (a) details of the *connection point* including the *distribution network* coupling points where appropriate;
- (b) *metering* arrangements and adjustments for losses where the point of *metering* is significantly different to the *connection point*;
- (c) authorised demand which may be taken or supplied at the *connection point* (under specified conditions);
- (c1) details of each *access standard* agreed between the *Network Service Provider* and the *Registered Participant* and all related conditions of agreement resulting from the application of any access provisions contained in schedule 5.1 for *Network Service Providers*, or schedule 5.2 for *Generators*, or schedule 5.3 for *Customers*, or schedule 5.3a for *Market Network Service Providers*;
- (c2) details of any *system strength remediation scheme* agreed, determined or modified in accordance with clause 5.3.4B and associated terms and conditions;
- (c3) details of any *system strength connection works*;
- (d) *connection service* charges;
- (e) payment conditions;
- (f) duration and termination conditions of the *connection agreement*;
- (g) terms, conditions and *constraints* that have been agreed to for *connection* to the *network* to protect the legitimate interest of the *Network Service Providers* including rights to *disconnect* the *Registered Participant* for breach of commercial undertakings;
- (h) details of any agreed standards of *reliability* of *transmission service* or *distribution service* at the *connection points* or within the *network*;
- (i) testing intervals for *protection systems* associated with the *connection point*;
- (j) agreed protocols for maintenance co-ordination;

- (k) where an expected *load*, to be connected to a *network*, has a *peak load* requirement in excess 10 MW, the provision, installation, operation and maintenance of automatic *load* shedding facilities for 60 percent of the *load* at anytime;
- (l) terms and conditions of access to the *metering installation* for the *Metering Provider* and access to *metering installations* type 4A, 5 and 6 for the *Metering Data Provider*;
- (m) the arrangements for the provision of services relating to *non-contestable IUSA components* (if applicable);
- (n) the functional specifications for the *contestable IUSA components*; and
- (o) if the *Connection Applicant* has obtained services related to a *contestable IUSA components* other than from the *Primary Transmission Network Service Provider* and intends to transfer ownership of some or all of those components to the *Primary Transmission Network Service Provider*, arrangements for the transfer of ownership of those components upon energisation of the *identified user shared asset* to the *Primary Transmission Network Service Provider* (if applicable) and how any defects liabilities will be managed.

The *connection agreements* may include other technical, commercial and legal conditions governing works required for the *connection* or *extension* to the *network* which the parties have negotiated and agreed to. The circumstances under which the terms of the *connection agreement* would require renegotiation may also be included.

Part B Network Operating Agreements

A *network operating agreement* between the *Primary Transmission Network Service Provider* and the owner of *contestable IUSA components* must include provisions relating to:

- (a) agreed boundaries and physical connection obligations and interface between the *identified user shared asset* and the *transmission network*;
- (b) conditions to transfer operational control of the asset to the *Primary Transmission Network Service Provider*;
- (c) the standard of care to apply to the *Primary Transmission Network Service Provider* in providing operation and maintenance services;
- (d) insurance obligations;
- (e) termination, events of default and force majeure regime;
- (f) liability and indemnity; and
- (g) defect warranties.

Schedule 5.7 Annual Forecast Information for Planning Purposes

This schedule sets out the information in respect of each *connection point* that must be provided to the relevant *Network Service Provider* by each *Registered Participant* that has a *connection point* to a *transmission network* of that *Network Service Provider*.

Data Description	Units	Time Scale	Data Category
At each <i>connection point</i> to a <i>transmission network</i> , a forecast of:			
Annual Maximum Active power- Winter	MW	years 1-10	Annual
Coincident Reactive Power - Winter	MVAr	years 1-10	Annual
Annual Maximum Active power- Summer	MW	years 1-10	Annual
Coincident Reactive Power- Summer	MVAr	years 1-10	Annual
Forecast load diversity between each <i>connection point</i> to the <i>network</i> (winter and summer)	%	years 1-5	Annual

Load Profiles:

The following forecast daily *profiles* of *connection point* half-hourly average active and reactive loads are required, net of all *generating plant*:

Day of the peak summer and winter MW peak load at <i>connection point</i>	MW and MVAr	years 1-5	Annual

Data Description	Units	Time Scale	Data Category

<i>Day of network peak summer and winter MW load (as specified)</i>	MW and MVar	years 1-5	Annual

Data Description	Units	Time Scale	Data Category

Each July, October, January, April under average conditions representing:

(a) weekdays	MW and MVar	years 1-5	Annual

(b) Saturdays	MW and MVar	years 1-5	Annual

(c) Sundays/holidays	MW and MVar	years 1-5	Annual

<i>Day of the network minimum demand (as specified)</i>	MW and MVar	years 1-5	Annual

Undispatched *generation*:

For each *connection point* to the *network* the following information is required:

No. of <i>generating units</i>	No.	years 1-5	Annual

Capacity of each <i>generating unit</i>	MW (sent out)	years 1-5	Annual

Data Description	Units	Time Scale	Data Category
Daily/Seasonal Operating characteristics	Text	years 1-5	Annual
Expected output at time of peak <i>network Winter load</i> (as specified)	MW	years 1-5	Annual
Expected output at time of peak <i>network Summer load</i> (as specified)	MW	years 1-5	Annual

Schedule 5.8 Distribution Annual Planning Report

Note

The local definitions in clause 5.10.2 apply to this schedule.

For the purposes of clause 5.13.2(c), the following information must be included in a *Distribution Annual Planning Report*:

- (a) information regarding the *Distribution Network Service Provider* and its *network*, including:
 - (1) a description of its *network*;
 - (2) a description of its operating environment;
 - (3) the number and types of its distribution assets;
 - (4) methodologies used in preparing the *Distribution Annual Planning Report*, including methodologies used to identify system limitations and any assumptions applied; and
 - (5) analysis and explanation of any aspects of forecasts and information provided in the *Distribution Annual Planning Report* that have changed significantly from previous forecasts and information provided in the preceding year;
- (b) forecasts for the forward planning period, including at least:
 - (1) a description of the forecasting methodology used, sources of input information, and the assumptions applied;
 - (2) *load* forecasts:
 - (i) at the transmission-distribution connection points;
 - (ii) for sub-transmission lines; and

- (iii) for zone substations,
including, where applicable, for each item specified above:
- (iv) total capacity;
- (v) firm delivery capacity for summer periods and winter periods;
- (vi) *peak load* (summer or winter and an estimate of the number of hours per year that 95% of *peak load* is expected to be reached);
- (vii) *power factor* at time of *peak load*;
- (viii) load transfer capacities; and
- (ix) generation capacity of known *embedded generating units*;
- (3) forecasts of future transmission-distribution connection points (and any associated *connection assets*), sub-transmission lines and zone substations, including for each future transmission-distribution connection point and zone substation:
 - (i) location;
 - (ii) future *loading level*; and
 - (iii) proposed commissioning time (estimate of month and year);
- (4) forecasts of the *Distribution Network Service Provider's* performance against any reliability targets in a *service target performance incentive scheme*; and
- (5) a description of any factors that may have a material impact on its *network*, including factors affecting:
 - (i) fault levels;
 - (ii) *voltage* levels;
 - (iii) other *power system security* requirements;
 - (iv) the quality of *supply* to other *Network Users* (where relevant); and
 - (v) ageing and potentially unreliable assets;
- (b1) for all *network* asset retirements, and for all *network* asset de-ratings that would result in a system limitation, that are planned over the forward planning period, the following information in sufficient detail relative to the size or significance of the asset:
 - (1) a description of the *network* asset, including location;

- (2) the reasons, including methodologies and assumptions used by the *Distribution Network Service Provider*, for deciding that it is necessary or prudent for the *network* asset to be retired or de-rated, taking into account factors such as the condition of the *network* asset;
 - (3) the date from which the *Distribution Network Service Provider* proposes that the *network* asset will be retired or de-rated; and
 - (4) if the date to retire or de-rate the *network* asset has changed since the previous *Distribution Annual Planning Report*, an explanation of why this has occurred;
 - (b2) for the purposes of subparagraph (b1), where two or more *network* assets are:
 - (1) of the same type;
 - (2) to be retired or de-rated across more than one location;
 - (3) to be retired or de-rated in the same calendar year; and
 - (4) each expected to have a replacement cost less than \$200,000 (as varied by a cost threshold determination),those assets can be reported together by setting out in the *Distribution Annual Planning Report*:
 - (5) a description of the *network* assets, including a summarised description of their locations;
 - (6) the reasons, including methodologies and assumptions used by the *Distribution Network Service Provider*, for deciding that it is necessary or prudent for the *network* assets to be retired or de-rated, taking into account factors such as the condition of the *network* assets;
 - (7) the date from which the *Distribution Network Service Provider* proposes that the *network* assets will be retired or de-rated; and
 - (8) if the calendar year to retire or de-rate the *network* assets has changed since the previous *Distribution Annual Planning Report*, an explanation of why this has occurred;
 - (c) information on system limitations for sub-transmission lines and zone substations, including at least:
 - (1) estimates of the location and timing (month(s) and year) of the system limitation;
 - (2) analysis of any potential for load transfer capacity between *supply* points that may decrease the impact of the system limitation or defer the requirement for investment;

- (3) impact of the system limitation, if any, on the capacity at transmission-distribution connection points;
- (4) a brief discussion of the types of potential solutions that may address the system limitation in the forward planning period, if a solution is required; and
- (5) where an estimated reduction in forecast *load* would defer a forecast system limitation for a period of at least 12 months, include:
 - (i) an estimate of the month and year in which a system limitation is forecast to occur as required under subparagraph (1);
 - (ii) the relevant *connection points* at which the estimated reduction in forecast *load* may occur; and
 - (iii) the estimated reduction in forecast *load* in MW or improvements in *power factor* needed to defer the forecast system limitation;
- (d) for any primary distribution feeders for which a *Distribution Network Service Provider* has prepared forecasts of *maximum demands* under clause 5.13.1(d)(1)(iii) and which are currently experiencing an overload, or are forecast to experience an overload in the next two years the *Distribution Network Service Provider* must set out:
 - (1) the location of the primary distribution feeder;
 - (2) the extent to which load exceeds, or is forecast to exceed, 100% (or lower utilisation factor, as appropriate) of the normal cyclic rating under normal conditions (in summer periods or winter periods);
 - (3) the types of potential solutions that may address the overload or forecast overload; and
 - (4) where an estimated reduction in forecast *load* would defer a forecast overload for a period of 12 months, include:
 - (i) estimate of the month and year in which the overload is forecast to occur;
 - (ii) a summary of the location of relevant *connection points* at which the estimated reduction in forecast *load* would defer the overload;
 - (iii) the estimated reduction in forecast *load* in MW needed to defer the forecast system limitation;
- (e) a high-level summary of each RIT-D project for which the *regulatory investment test for distribution* has been completed in the preceding year or is in progress, including:

- (1) if the *regulatory investment test for distribution* is in progress, the current stage in the process;
 - (2) a brief description of the *identified need*;
 - (3) a list of the credible options assessed or being assessed (to the extent reasonably practicable);
 - (4) if the *regulatory investment test for distribution* has been completed a brief description of the conclusion, including:
 - (i) the net economic benefit of each credible option;
 - (ii) the estimated capital cost of the preferred option; and
 - (iii) the estimated construction timetable and commissioning date (where relevant) of the preferred option; and
 - (5) any impacts on *Network Users*, including any potential material impacts on *connection charges* and *distribution use of system charges* that have been estimated;
- (f) for each identified system limitation which a *Distribution Network Service Provider* has determined will require a *regulatory investment test for distribution*, provide an estimate of the month and year when the test is expected to commence;
- (g) a summary of all committed investments to be carried out within the forward planning period with an estimated capital cost of \$2 million or more (as varied by a cost threshold determination) that are to address an urgent and unforeseen *network* issue as described in clause 5.17.3(a)(1), including:
- (1) a brief description of the investment, including its purpose, its location, the estimated capital cost of the investment and an estimate of the date (month and year) the investment is expected to become operational;
 - (2) a brief description of the alternative options considered by the *Distribution Network Service Provider* in deciding on the preferred investment, including an explanation of the ranking of these options to the committed project. Alternative options could include, but are not limited to, *generation* options, demand side options, and options involving other *distribution* or *transmission networks*;
- (h) the results of any joint planning undertaken with a *Transmission Network Service Provider* in the preceding year, including:
- (1) a summary of the process and methodology used by the *Distribution Network Service Provider* and relevant *Transmission Network Service Providers* to undertake joint planning;

- (2) a brief description of any investments that have been planned through this process, including the estimated capital costs of the investment and an estimate of the timing (month and year) of the investment; and
 - (3) where additional information on the investments may be obtained;
- (i) the results of any joint planning undertaken with other *Distribution Network Service Providers* in the preceding year, including:
 - (1) a summary of the process and methodology used by the *Distribution Network Service Providers* to undertake joint planning;
 - (2) a brief description of any investments that have been planned through this process, including the estimated capital cost of the investment and an estimate of the timing (month and year) of the investment; and
 - (3) where additional information on the investments may be obtained;
- (j) information on the performance of the *Distribution Network Service Provider's network*, including:
 - (1) a summary description of reliability measures and standards in *applicable regulatory instruments*;
 - (2) a summary description of the quality of *supply* standards that apply, including the relevant codes, standards and guidelines;
 - (3) a summary description of the performance of the *distribution network* against the measures and standards described under subparagraphs (1) and (2) for the preceding year;
 - (4) where the measures and standards described under subparagraphs (1) and (2) were not met in the preceding year, information on the corrective action taken or planned;
 - (5) a summary description of the *Distribution Network Service Provider's* processes to ensure compliance with the measures and standards described under subparagraphs (1) and (2); and
 - (6) an outline of the information contained in the *Distribution Network Service Provider's* most recent submission to the AER under the *service target performance incentive scheme*;
- (k) information on the *Distribution Network Service Provider's* asset management approach, including:
 - (1) a summary of any asset management strategy employed by the *Distribution Network Service Provider*;
 - (1A) an explanation of how the *Distribution Network Service Provider* takes into account the cost of *distribution losses* when developing and implementing its asset management and investment strategy;

- (2) a summary of any issues that may impact on the system limitations identified in the *Distribution Annual Planning Report* that has been identified through carrying out asset management; and
 - (3) information about where further information on the asset management strategy and methodology adopted by the *Distribution Network Service Provider* may be obtained;
- (l) information on the *Distribution Network Service Provider's* demand management activities, including:
 - (1) a qualitative summary of:
 - (i) *non-network options* that have been considered in the past year, including *generation from embedded generating units*;
 - (ii) key issues arising from *applications to connect embedded generating units* received in the past year;
 - (iii) actions taken to promote non-network proposals in the preceding year, including *generation from embedded generating units*; and
 - (iv) the *Distribution Network Service Provider's* plans for demand management and *generation from embedded generating units* over the forward planning period;
 - (2) a quantitative summary of:
 - (i) *connection* enquiries received under clause 5.3A.5;
 - (ii) *applications to connect* received under clause 5.3A.9; and
 - (iii) the average time taken to complete *applications to connect*;
- (m) information on the *Distribution Network Service Provider's* investments in information technology and communication systems which occurred in the preceding year, and planned investments in information technology and communication systems related to management of *network* assets in the forward planning period; and
- (n) a regional development plan consisting of a map of the *Distribution Network Service Provider's network* as a whole, or maps by regions, in accordance with the *Distribution Network Service Provider's* planning methodology or as required under any *regulatory obligation or requirement*, identifying:
 - (1) sub-transmission lines, zone substations and transmission-distribution connection points; and

- (2) any system limitations that have been forecast to occur in the forward planning period, including, where they have been identified, overloaded primary distribution feeders.

Schedule 5.9 Demand side engagement document (clause 5.13.1(h))

Note

The local definitions in clause 5.10.2 apply to this schedule.

For the purposes of clause 5.13.1(h), the following information must be included in a *Distribution Network Service Provider's* demand side engagement document:

- (a) a description of how the *Distribution Network Service Provider* will investigate, develop, assess and report on potential *non-network options*;
- (b) a description of the *Distribution Network Service Provider's* process to engage and consult with potential non-network providers to determine their level of interest and ability to participate in the development process for potential *non-network options*;
- (c) an outline of the process followed by the *Distribution Network Service Provider* when negotiating with non-network providers to further develop a potential *non-network option*;
- (d) an outline of the information a non-network provider is to include in a non-network proposal, including, where possible, an example of a best practice non-network proposal;
- (e) an outline of the criteria that will be applied by the *Distribution Network Service Provider* in evaluating non-network proposals;
- (f) an outline of the principles that the *Distribution Network Service Provider* considers in developing the payment levels for *non-network options*;
- (g) a reference to any applicable incentive payment schemes for the implementation of *non-network options* and whether any specific criteria is applied by the *Distribution Network Service Provider* in its application and assessment of the scheme;
- (h) the methodology to be used for determining *avoided Customer TUOS charges*, in accordance with clauses 5.4AA and 5.5; and;
- (i) a summary of the factors the *Distribution Network Service Provider* takes into account when negotiating *connection agreements* with *Embedded Generators*;
- (j) the process used, and a summary of any specific regulatory requirements, for setting charges and the terms and conditions of *connection agreements* for *embedded generating units*;

- (k) the process for lodging an *application to connect* for an *embedded generating unit* and the factors taken into account by the *Distribution Network Service Provider* when assessing such applications;
- (l) worked examples to support the description of how the *Distribution Network Service Provider* will assess potential *non-network options* in accordance with paragraph (a);
- (m) a hyperlink to any relevant, publicly available information produced by the *Distribution Network Service Provider*;
- (n) a description of how parties may be listed on the demand side engagement register; and
- (o) the *Distribution Network Service Provider*'s contact details.

Schedule 5.10 Information requirements for Primary Transmission Network Service Providers (clause 5.2A.5)

Information	Via website or direct enquiry	Additional fee ¹	Comments
Technical specification			
Generic interface works	Website	No	Typical standards and layouts must be published. This information: (a) may be generic but should provide a high level overview of the components of a <i>connection</i> ; and (b) must provide <i>Connection Applicants</i> with a high level understanding of what a <i>connection</i> consists of.
Generic substation layouts	Website	No	
Typical overhead line structures	Website	No	
Typical underground cable arrangements	Website	No	
Typical primary plant	Website	No	<i>Primary Transmission Network Service Providers</i> must provide the design standards which are specific
Design standards	Website	No	

¹ This refers to the right for the *Primary Transmission Network Service Providers* to charge an additional fee for the provision of this information to the *connection* enquiry under clause 5.3.2(g) and the *connection* application fee under clause 5.3.4.(b)(2).

Information	Via website or direct enquiry	Additional fee ¹	Comments
Typical secondary systems	Website	No	to their <i>network</i> .
Detailed technical requirements for a particular <i>connection</i>	Direct enquiry	No	Functional specification to describe the requirements that must be met by the detailed design. The functional specifications must include: (a) description of any proposed <i>augmentation</i>; and (b) references to typical plant including primary and secondary equipment so that the detailed design will interface to the existing <i>network</i> and be able to be adopted by the <i>Primary Transmission Network Service Provider</i>.
Operation and maintenance			
Typical operation and maintenance scheduling	Website	No	Operation and maintenance intervals for specific items of <i>plant</i> used regularly by the <i>Primary Transmission Network Service Provider</i> must be published. These are routine activities irrespective of whether assets are unregulated or regulated and should be in line with <i>good electricity industry practice</i> .
Timescales			
Easement acquisition (site specific)	Direct enquiry	Yes	Site specific timescales may be discussed and negotiated on a project by project basis

Information	Via website or direct enquiry	Additional fee ¹	Comments
			as part of the <i>connection enquiry / connection application</i> process if the <i>Connection Applicant</i> requests it at their election.
Commission- ing (generic)	Website	No	Generic timescales must be published.
Commission- ing (site specific)	Direct enquiry	Yes	Site specific timescales may be provided as part of the <i>connection enquiry / connection application</i> process if the <i>Connection Applicant</i> requests it at their election.
Legal			
Standard connection agreements	Website	No	Standard forms of these agreements and deeds to be published.
Standard network operating agreement	Website	No	The standard form construction agreement must cover the construction of any interface works.
Standard interface works construction agreements	Website	No	The standard form <i>connection agreement</i> must cover the <i>connection</i> of the asset to the <i>transmission</i> network.
Standard relocation deeds	Website	No	The standard form <i>network operating agreement</i> must cover those aspects referred to in clause 5.2.7(b).
Environment- al approvals (generic)	Website	No	Standard forms or lists of required approvals must be published.
Environment- al approvals (site specific)	Direct enquiry	Yes	Site specific information may be provided as part of the <i>connection enquiry / connection application</i> process if <i>Connection</i>
Development approvals	Website	No	

Information	Via website or direct enquiry	Additional fee ¹	Comments
(generic)			<i>Applicant</i> requests it at their election.
Development approvals (site specific)	Direct enquiry	Yes	
Financial			
Amount and terms and conditions of the connection application charge ²	Website	No	A guide to the structure of the application fee under clause 5.3.4, and the terms and conditions under which the charge is paid, must be published.
Relocation of existing assets	Direct enquiry	Yes	Specific information about relocation of existing assets may be provided by the <i>Primary Transmission Network Service Provider</i> , if the <i>Connection Applicant</i> requests it at their election. The <i>Connection Applicant</i> would be required to pay for any costs associated with the relocation of assets.

Schedule 5.11 Negotiating principles for negotiated transmission services (clause 5.2A.6)

- 1 The price for a *negotiated transmission service* should be based on the costs incurred in providing that service, determined in accordance with the principles and policies set out in the *Cost Allocation Methodology* for the relevant *Transmission Network Service Provider*.
- 2 Subject to paragraphs (3) and (4), the price for a *negotiated transmission service* should be at least equal to the avoided cost of providing it but no more than the cost of providing it on a stand-alone basis.
- 3 If the *negotiated transmission service* is the provision of a *shared transmission service* that:

² For clarification, information about the structure, terms and conditions of the charge should be made available free of charge on the *Primary Transmission Network Service Provider's* website, but the *Connection Applicant* would still be required to pay the *connection* application fee under clause 5.3.4(b)(2).

- (1) exceeds the *network* performance requirements (if any) which that *shared transmission service* is required to meet under any *jurisdictional electricity legislation*; or
- (2) exceeds the *network* performance requirements set out in schedules 5.1a and 5.1,

then the differential between the price for that service and the price for the *shared transmission service* which meets (but does not exceed) the *network* performance requirements under any *jurisdictional electricity legislation* or as set out in schedules 5.1a and 5.1 (as the case may be) should reflect the increase in the *Transmission Network Service Provider's* incremental cost of providing that service.

- 4 If the *negotiated transmission service* is the provision of a *shared transmission service* that does not meet (and does not exceed) the *network* performance requirements set out in schedules 5.1a and 5.1, the differential between the price for that service and the price for the *shared transmission service* which meets (but does not exceed) the *network* performance requirements set out in schedules 5.1a and 5.1 should reflect the amount of the *Transmission Network Service Provider's* avoided cost of providing that service.
- 5 The price for a *negotiated transmission service* must be the same for all *Transmission Network Users* unless there is a material difference in the costs of providing the *negotiated transmission service* to different *Transmission Network Users* or classes of *Transmission Network Users*.
- 6 The price for a *negotiated transmission service* should be subject to adjustment over time to the extent that the assets used to provide that service are subsequently used to provide services to another person, in which case such adjustment should reflect the extent to which the costs of that asset is being recovered through charges to that other person.
- 7 The price for a *negotiated transmission service* should be such as to enable the *Transmission Network Service Provider* to recover the efficient costs of complying with all *regulatory obligations or requirements* associated with the provision of the *negotiated transmission service*.
- 8 The *terms and conditions of access* for a *negotiated transmission service* should be fair and reasonable and consistent with the safe and reliable operation of the *power system* in accordance with the *Rules* (for these purposes, the price for a *negotiated transmission service* is to be treated as being fair and reasonable if it complies with principles (1) to (7) of this schedule 5.11).
- 9 The *terms and conditions of access* for a *negotiated transmission service* (including, in particular, any exclusions and limitations of liability and indemnities) must not be unreasonably onerous taking into account the allocation of risk between the *Transmission Network Service Provider* and the other party, the price for the *negotiated transmission service* and the

costs to the *Transmission Network Service Provider* of providing the *negotiated transmission service*.

- 10 The *terms and conditions of access* for a *negotiated transmission service* should be provided in a manner that does not adversely affect the safe and reliable operation of the *power system* in accordance with the *Rules*.
- 11 The *Connection Applicant* should only be required to pay the costs directly incurred as a result of its *connection*, including its share of costs associated with an *identified user shared asset*.
- 12 Subsequent connections to an *identified user shared asset* by other *connecting parties* should not adversely affect the *negotiated transmission services* provided to the original *identified user group* for that *identified user shared asset*.
- 13 Subject to principle 11, future *Connection Applicants* should pay for a proportion of the costs paid by the *identified user groups* for *negotiated transmission services*. The proportion of costs will be calculated with respect to:
 - (1) the relative capacity of the *Connection Applicant's generating plant*;
or
 - (2) the relative number of bays; or
 - (3) respective bays,

with the applicable cost sharing methodology determined as appropriate by the nature of the *negotiated transmission services*.

Schedule 5.12 Negotiating principles for large DCA services

- 1 Principles 2 -7 of schedule 5.11 apply in relation to *connection* and access to *large DCA services*, except a reference to a *negotiated transmission service* and a *Transmission Network Service Provider* will be taken to be a reference to a *large DCA service* and a *Dedicated Connection Asset Service Provider* respectively.
- 2 An applicant for *large DCA services* should pay for the cost of any enlargement or increase in capacity of (an “**upgrade**”), or alterations to, an existing *large dedicated connection asset* required to provide it with *large DCA services*, including the moving of metering and other related equipment, necessary for the applicant’s *connection* to the *large dedicated connection asset*.
- 3 The *connection* of an applicant to an existing *large dedicated connection asset* and access to *large DCA services* must not adversely affect the *access standards*, including *performance standards* and *power transfer capability* of an existing connecting party at the time of the access application by the applicant.

- 4 The *connection* of an applicant to an existing *large dedicated connection asset* and access to *large DCA services* must not adversely affect contractual obligations of an existing connecting party to the *large dedicated connection asset* with the relevant *Dedicated Connection Asset Service Provider*.
- 5 An applicant must compensate the *Dedicated Connection Asset Service Provider* (and any existing connecting party) for any lost revenue incurred during an upgrade of, or alterations to, an existing *large dedicated connection asset* and metering and other related equipment moves to provide for the *connection* and operation of the applicant's *facilities* and access to *large DCA services*.
- 6 The *connection* of an applicant to a *large dedicated connection asset* and access to *large DCA services* must not:
 - (a) prevent an existing connecting party at the time of the applicant's access application from obtaining a sufficient amount of *large DCA services* to be able to meet that person's reasonably anticipated requirements, measured at the time of the access application by the applicant;
 - (b) result in the applicant becoming the owner (or one of the owners) of any part of the existing *large dedicated connection asset* or upgrade of that asset without the consent of the existing owner;
 - (c) require an existing connecting party or the owner of the *large dedicated connection asset* to bear all or some of the costs of an upgrade of the *large dedicated connection asset* or maintaining an upgrade;
 - (d) require an existing connecting party to the *large dedicated connection asset* to bear all or some of the costs of an interconnection to the *large dedicated connection asset* or maintaining an interconnection.

CHAPTER 5A

Chapter 5A Electricity connection for retail customers

Part A Preliminary

5A.A.1 Definitions

In this Chapter:

basic connection service

means a *connection service* related to a *connection* (or a proposed *connection*) between a *distribution system* and a *retail customer's* premises (excluding a non-registered *embedded generator's* premises) in the following circumstances:

- (a) either:
 - (1) the *retail customer* is typical of a significant class of *retail customers* who have sought, or are likely to seek, the service; or
 - (2) the *retail customer* is, or proposes to become, a *micro embedded generator*; and
- (b) the provision of the service involves minimal or no *augmentation* of the *distribution network*; and
- (c) a *model standing offer* has been approved by the *AER* for providing that service as a *basic connection service*.

basic micro EG connection service

means a *basic connection service* for a *retail customer* who is a *micro embedded generator*.

confidential information

means, in relation to a *Registered Participant*, *AEMO* or a *connection applicant*, information which is or has been provided to that *Registered Participant*, *AEMO* or *connection applicant* under or in connection with the *Rules* and which is stated under the *Rules*, or by *AEMO*, the *AER* or the *AEMC*, to be *confidential information* or is otherwise confidential or commercially sensitive. It also includes any information which is derived from such information.

connection

means a physical link between a *distribution system* and a *retail customer's* premises to allow the flow of electricity.

connection alteration

means an alteration to an existing *connection* including an addition, upgrade, *extension*, expansion, *augmentation* or any other kind of alteration.

connection applicant

means an applicant for a *connection service* of 1 of the following categories:

- (a) *retail customer*;
- (b) *retailer* or other person acting on behalf of a *retail customer*;
- (c) *real estate developer*.

connection application

means an application under clause 5A.D.3.

connection charge

means a charge imposed by a *Distribution Network Service Provider* for a *connection service*.

connection charge guidelines

– see clause 5A.E.3.

connection charge principles

– see clause 5A.E.1.

connection contract

means a contract formed by the making and acceptance of a *connection offer*.

connection offer

means an offer by a *Distribution Network Service Provider* to enter into a *connection contract* with:

- (a) a *retail customer*; or
- (b) a *real estate developer*.

connection policy

means a document, approved as a *connection policy* by the AER under Chapter 6, Part E, setting out the circumstances in which *connection charges* are payable and the basis for determining the amount of such charges.

connection service

means either or both of the following:

- (a) a service relating to a *new connection* for premises;
- (b) a service relating to a *connection alteration* for premises,

but, to avoid doubt, does not include a service of providing, installing or maintaining a *metering installation* for premises.

contestable

– a service is *contestable* if the laws of the *participating jurisdiction* in which the service is to be provided permit the service to be provided by more than one supplier as a *contestable* service or on a competitive basis.

customer connection contract

– see section 67 of the *NERL*.

embedded generator

means a person that owns, controls or operates an *embedded generating unit*.

enquiry

means a preliminary *enquiry* under clause 5A.D.2.

micro EG connection

means a *connection* between an *embedded generating unit* and a *distribution network* of the kind contemplated by *Australian Standard AS 4777* (Grid connection of energy systems via inverters).

micro embedded generator

means a *retail customer* who operates, or proposes to operate, an *embedded generating unit* for which a *micro EG connection* is appropriate.

model standing offer

means a document approved by the *AER* as a *model standing offer* to provide *basic connection services* (see clause 5A.B.3) or as a *model standing offer* to provide *standard connection services* (see clause 5A.B.5).

negotiated connection contract

– see clause 5A.C.1.

new connection

means a *connection* established or to be established, in accordance with this Chapter and applicable *energy laws*, where there is no existing *connection*.

non-registered embedded generator

means an *embedded generator* that is neither a *micro embedded generator* nor a *Registered Participant*.

premises connection assets

means the components of a *distribution system* used to provide *connection services*.

real estate developer

means a person who carries out a *real estate development*.

real estate development

means the commercial development of land including its development in 1 or more of the following ways:

- (a) subdivision;
- (b) the construction of commercial or industrial premises (or both);
- (c) the construction of multiple new residential premises.

retail customer

includes a non-registered *embedded generator* and a *micro embedded generator*.

standard connection service

means a *connection service* (other than a *basic connection service*) for a particular class (or sub-class) of *connection applicant* and for which a *model standing offer* has been approved by the AER.

supply service

means a service (other than a *connection service*) relating to the *supply* of electricity.

5A.A.2 Application of this Chapter

- (a) This Chapter does not apply to, or in relation to, a *connection applicant* that is a *Registered Participant* or an *Intending Participant* unless the *Registered Participant* or *Intending Participant* is acting as the agent of a *retail customer*.
- (b) Where a *non-registered embedded generator* wishing to connect an *embedded generating unit* to a *Distribution Network Service Provider's network*:
 - (1) falls within a particular class (or subclass) of *connection applicant* for which that *Distribution Network Service Provider* provides a *standard connection service*, this Chapter will apply;
 - (2) does not fall within a particular class (or subclass) of *connection applicant* for which that *Distribution Network Service Provider* provides a *standard connection service*, paragraph (c) will apply.
- (c) A *non-registered embedded generator* that meets the requirements in paragraph (b)(2) may elect to seek *connection* of the relevant *embedded generating unit* under rule 5.3A instead of this Chapter.
- (d) Any election made by a *non-registered embedded generator* under paragraph (c) must be:

- (1) made before an *enquiry* is made or if no *enquiry* is made, before a *connection application* is lodged with the relevant *Distribution Network Service Provider*;
 - (2) in writing; and
 - (3) delivered to the relevant *Distribution Network Service Provider* at the same time as lodging an *enquiry* under clause 5.3A.5.
- (e) For the avoidance of doubt, clause 5A.C.1(a)(2) is still applicable when a *non-registered embedded generator* meets the requirements in paragraph (b)(1).

5A.A.3 Small Generation Aggregator deemed to be agent of a retail customer

A *Market Small Generation Aggregator* is deemed to be the agent of a *retail customer*, where there is an agreement between the *Market Small Generation Aggregator* and the *retail customer* relating to the *retail customer's small generating unit* under which the *Market Small Generation Aggregator* is financially responsible for the *market connection point* at which the *small generating unit* is connected to the *national grid*.

Part B Standardised offers to provide basic and standard connection services

Division 1 Basic connection services

5A.B.1 Obligation to have model standing offer to provide basic connection services

- (a) Subject to paragraph (b), a *Distribution Network Service Provider* must have a *model standing offer* to provide *basic connection services* to *retail customers*.
- (b) *Basic connection services* are of 2 classes:
 - (1) *basic connection services* for *retail customers* who are not *embedded generators*; and
 - (2) *basic connection services* for *retail customers* who are *micro embedded generators*.

Note

Basic connection services are not available to *non-registered embedded generator*

- (c) A *model standing offer* may relate to each class of *basic connection services* (or a subclass for which there is significant demand) within the area served by the relevant *distribution network*.

5A.B.2 Proposed model standing offer for basic connection services

- (a) A *Distribution Network Service Provider* must submit for the *AER*'s approval a proposed *model standing offer* to provide *basic connection services* for each class (or subclass) of *basic connection services* on specified terms and conditions.
- (b) The terms and conditions of the proposed *model standing offer* must cover:
 - (1) a description of the *connection* (and the *premises connection assets* of which it is to be comprised) including a statement of its maximum capacity; and
 - (2) timeframes for commencing and completing the work; and
 - (3) the qualifications required for carrying out the work involved in providing a *contestable* service (including reference to the jurisdictional or other legislation and statutory instruments under which the qualifications are required); and
 - (4) the safety and technical requirements (including reference to the jurisdictional or other legislation and statutory instruments under which the requirements are imposed) to be complied with by the provider of a *contestable* service or the *retail customer* (or both); and
 - (5) details of the *connection charges* (or the basis on which they will be calculated) including details of the following (so far as applicable):
 - (i) the cost of any necessary *extension* to the *distribution system* for which provision has not already been made through existing *distribution use of system* charges or a tariff applicable to the *connection*;
 - (ii) **[Deleted]**
 - (iii) the cost of any other relevant *premises connection assets*;
 - (iv) the costs of common components of minor variations from the standard specifications;
 - (v) any other incidental costs; and
 - (6) the manner in which *connection charges* are to be paid by the *retail customer*; and
 - (7) if the service is a *basic micro EG connection service*, the particular requirements with regard to the export of electricity into the *distribution system* including:
 - (i) the special requirements for *metering* and other equipment for the export of electricity; and

- (ii) the required qualification for installers of relevant equipment (including reference to the jurisdictional or other legislation and statutory instruments under which the qualifications are required); and
- (iii) the special safety and technical requirements (including reference to the jurisdictional or other legislation and statutory instruments under which they are imposed) to be complied with by the provider of a *contestable* service or the *retail customer* (or both).

5A.B.3 Approval of terms and conditions of model standing offer to provide basic connection services

- (a) The *AER* may approve a proposed *model standing offer* to provide *basic connection services* of a particular class (or subclass) on specified terms and conditions if satisfied that:
 - (1) the services are likely to be sought by:
 - (i) a significant number of *retail customers* in the area served by the *distribution network* (excluding *embedded generators*); or
 - (ii) *micro embedded generators*; and
 - (2) the *connection charges* are consistent with the *Distribution Network Service Provider's* distribution determination including the *connection policy*; and
 - (3) the terms and conditions are fair and reasonable; and
 - (4) the terms and conditions comply with applicable requirements of the *energy laws*.
- (b) In deciding whether to approve a proposed *model standing offer* to provide *basic connection services* on specified terms and conditions, the *AER* must have regard to:
 - (1) the *national electricity objective*; and
 - (2) the basis on which the *Distribution Network Service Provider* has provided the relevant services in the past; and
 - (3) the geographical characteristics of the area served by the relevant *distribution network*.
- (c) If the *AER* does not approve a proposed *model standing offer* to provide *basic connection services* of a particular class on specified terms and conditions:
 - (1) the *AER* must give the *Distribution Network Service Provider* written reasons for its decision; and

- (2) the *Distribution Network Service Provider* must re-submit the proposed *model standing offer* with appropriate amendments as soon as reasonably practicable.
- (d) The *AER* must deal expeditiously with a proposed *model standing offer* to provide *basic connection services*.

Division 2 **Standard connection services**

5A.B.4 **Standard connection services**

- (a) A *Distribution Network Service Provider* may submit for the *AER*'s approval a proposed *model standing offer* to provide *standard connection services* on specified terms and conditions.
- (b) Different sets of terms and conditions may be submitted under this *rule* for different classes of *connection services* or different classes of *retail customer*.
- (c) The terms and conditions must cover:
 - (1) a description of the *connection* (and the *premises connection assets* of which it is to be comprised) including a statement of its maximum capacity; and
 - (2) timeframes for commencing and completing the work; and
 - (3) the qualifications required for carrying out the work involved in providing a *contestable* service (including reference to the jurisdictional or other legislation and statutory instruments under which the qualifications are required); and
 - (4) the safety and technical requirements (including reference to the jurisdictional or other legislation and statutory instruments under which the requirements are imposed) to be complied with by the provider of a *contestable* service or the *retail customer* (or both); and
 - (5) details of the *connection charges* (or the basis on which they will be calculated) including details of the following (so far as applicable):
 - (i) the cost of *premises connection assets* to which the *connection charges* relate;
 - (ii) the cost of any necessary *augmentation* of the *distribution system* for which provision has not already been made through existing *distribution use of system* charges or a tariff applicable to the *connection*;
 - (iii) the costs of common components of minor variations from the standard specifications;

- (iv) any other incidental costs; and
- (6) the manner in which *connection charges* are to be paid by the *retail customer*.

5A.B.5 Approval of model standing offer to provide standard connection services

- (a) The *AER* may approve a proposed *model standing offer* to provide a particular class of *standard connection services* on specified terms and conditions if satisfied that:
 - (1) the terms and conditions are fair and reasonable; and
 - (2) the *connection charges* are consistent with the *Distribution Network Service Provider's* distribution determination including the *connection policy*; and
 - (3) the terms and conditions comply with applicable requirements of the *energy laws*.
- (b) In deciding whether to approve the proposed *model standing offer*, the *AER* must have regard to the *national electricity objective*.
- (c) If the *AER* does not approve a proposed *model standing offer* to provide *standard connection services*:
 - (1) the *AER* must give the *Distribution Network Service Provider* written reasons for its decision; and
 - (2) the *Distribution Network Service Provider* may re-submit the proposed *model standing offer* with appropriate amendments.
- (d) The *AER* must deal expeditiously with a proposed *model standing offer* to provide *standard connection services*.

Division 3 Miscellaneous

5A.B.6 Amendment etc of model standing offer

- (a) A *Distribution Network Service Provider* may submit, for the *AER's* approval, a proposal:
 - (1) for the amendment or substitution of a *model standing offer* to provide *basic connection services*; or
 - (2) for the amendment, substitution or revocation of a *model standing offer* to provide *standard connection services*.
- (b) In deciding whether to approve a proposal submitted for its approval under this clause, the *AER* must, so far as relevant, apply the same principles and

have regard to the same matters as are relevant to the approval of a proposed *model standing offer* to provide *basic connection services* or *standard connection services*.

- (c) The amendment, substitution or revocation of a *model standing offer* takes effect on the date of the *AER*'s approval or a later date fixed by the *AER* in its approval.
- (d) If the *AER* does not approve a proposal submitted under paragraph (a):
 - (1) the *AER* must give the *Distribution Network Service Provider* written reasons for its decision; and
 - (2) the *Distribution Network Service Provider* may re-submit the proposal with appropriate amendments.
- (e) The amendment, substitution or revocation of a *model standing offer* does not affect the validity or effect of:
 - (1) a *connection offer* made before the amendment, substitution or revocation takes effect; or
 - (2) a *connection contract* formed on the basis of such an offer.
- (f) The *AER* must deal expeditiously with a proposal for the amendment, substitution or revocation of a *model standing offer*.
- (g) If the *AER*, after making a distribution determination, considers that an existing *model standing offer* to provide *basic connection services* or *standard connection services* may be inconsistent with the *Distribution Network Service Provider*'s distribution determination (including the *connection policy*), the *AER* may require the *Distribution Network Service Provider* to submit a proposal under paragraph (a) to bring the *model standing offer* into consistency with the distribution determination.

5A.B.7 Publication of model standing offers

A *Distribution Network Service Provider* must publish, on its website, each of its *model standing offers* to provide *basic connection services* or *standard connection services*.

Part C Negotiated connection

5A.C.1 Negotiation of connection

- (a) A *connection applicant* and a *Distribution Network Service Provider* may negotiate a *connection contract* (a **negotiated connection contract**):
 - (1) where the *connection service* sought by the *connection applicant* is neither a *basic connection service* nor a *standard connection service*; or

- (2) where the *connection service* sought by the *connection applicant* is a *basic connection service* or a *standard connection service* but the *connection applicant* elects to negotiate the terms and conditions on which the *connection service* is to be provided.
- (b) The negotiations may, if the *connection applicant* elects, extend to *supply services* available from the *Distribution Network Service Provider*.
- (c) This Part sets out the requirements for negotiation referred to in the *NERL*.
- (d) When reading this Part in the context of the *NERL*:
 - (1) a reference to a *connection applicant* in this Part corresponds to a reference to a *customer* in the *NERL*; and
 - (2) a reference to a *Distribution Network Service Provider* in this Part corresponds to a reference to a distributor in the *NERL*; and
 - (3) this Part will be read subject to any further adaptations and modifications necessary to give effect to the intendment of the *NERL*.
- (e) If, but for this paragraph, a contract negotiable under this Part, or parts or aspects of such a contract, would also be negotiable under Chapter 6, this Part applies to the exclusion of the relevant provisions of Chapter 6.

5A.C.2 Process of negotiation

A *Distribution Network Service Provider* and a *connection applicant* for a negotiated *connection contract* must negotiate in accordance with the negotiation framework set out in clause 5A.C.3.

5A.C.3 Negotiation framework

- (a) The following rules (collectively described as the **negotiation framework**) govern negotiations between a *Distribution Network Service Provider* and a *connection applicant*:
 - (1) each party must negotiate in good faith.
 - (2) the *connection applicant* must, at the request of the *Distribution Network Service Provider*, provide the *Distribution Network Service Provider* with information it reasonably requires in order to negotiate on an informed basis.

Note

The information might (for example) include estimates of average and *maximum demand* for electricity to be *supplied* through the *connection*.

- (3) the *Distribution Network Service Provider* must provide the *connection applicant* with information the *connection applicant* reasonably requires in order to negotiate on an informed basis including;

- (i) an estimate of the amount to be charged by the *Distribution Network Service Provider* for assessment of the application and the making of a connection offer for a negotiated *connection contract*; and
- (ii) an estimate of *connection charges*; and
- (iii) a statement of the basis on which *connection charges* are calculated; and
- (iv) if the *connection applicant* has elected to extend the negotiations to *supply services*— an estimate of any applicable charges for *supply services* and a statement of the basis of their calculation.

Note

The *Distribution Network Service Provider* might, according to the circumstances of a particular case, need to provide further information to ensure the *connection applicant* is properly informed – for example, information about:

- technical and safety requirements;
 - the types of *connection* that are technically feasible;
 - *network capacity* at the proposed *connection point*;
 - possible strategies to reduce the cost of the *connection*.
- (4) the *Distribution Network Service Provider* may consult with other users of the *distribution network* who may be adversely affected by the proposed *new connection* or *connection alteration*.
 - (5) in assessing the application, the *Distribution Network Service Provider* must determine:
 - (i) the technical requirements for the proposed *new connection* or *connection alteration*; and
 - (ii) the extent and costs of any necessary *augmentation* of the *distribution system*; and
 - (iii) any consequent *change* in charges for *distribution use of system services*; and
 - (iv) any possible material effect of the proposed *new connection* or *connection alteration* on the *network power transfer capability* of the *distribution network* to which the *new connection* or *connection alteration* is proposed to be made and any other *distribution network* that might be affected by the proposed *new connection* or *connection alteration*.
 - (6) the *Distribution Network Service Provider* must make reasonable endeavours to make a *connection offer* that complies with the *connection applicant's* reasonable requirements.

Example

Reasonable requirements as to the location of the proposed *connection point* or the level and standard of the *distribution network's power transfer capability*.

- (7) the *Distribution Network Service Provider* must comply with its *connection policy*.
- (b) The following supplementary rules apply:
 - (1) if a *Distribution Network Service Provider* requires information from a *connection applicant* in addition to the information provided in the application, a request for the additional information under paragraph (a)(2) must (if practicable) be made within 20 *business days* after the *Distribution Network Service Provider* receives the relevant application;
 - (2) the *Distribution Network Service Provider* must provide the information required under paragraph (a)(3) as soon as practicable after the *Distribution Network Service Provider* receives the *connection applicant's* application or, if the *Distribution Network Service Provider* requests additional information under paragraph (a)(2), as soon as practicable after the *Distribution Network Service Provider* receives the relevant information.
- (c) Each party to the negotiations must maintain the confidentiality of *confidential information* disclosed by the other party in the course of the negotiations unless disclosure of the information is authorised:
 - (1) by the party to whom the duty of confidentiality is owed; or
 - (2) under:
 - (i) the Law or the Rules; or
 - (ii) any other law.

5A.C.4 Fee to cover cost of negotiation

- (a) A *Distribution Network Service Provider* may charge a *connection applicant* for a negotiated *connection contract* a reasonable fee to cover expenses directly and reasonably incurred by the *Distribution Network Service Provider* in assessing the applicant's application and making a *connection offer*.
- (b) A fee charged under paragraph (a) is recoverable as a debt (whether or not the *connection applicant* accepts the *connection offer*).

Part D Application for connection service

Division 1 Information

5A.D.1 Publication of information

- (a) A *Distribution Network Service Provider* must publish on its website the following:
- (1) an application form for a *new connection* or a *connection alteration*; and
 - (2) a description of how an application for a *new connection* or a *connection alteration* is to be made (including a statement of the information required for the application); and
 - (3) a description of the *Distribution Network Service Provider's basic connection services* and *standard connection services* and the classes (or subclasses) of *retail customer* to which they apply. If the *Distribution Network Service Provider* does not provide *standard connection services* for all or some non-registered embedded generators, a clear statement to this effect must also be included in the description; and
 - (4) an explanation of the *connection applicant's* right to negotiate with the *Distribution Network Service Provider* for a negotiated *connection contract* and a description of the negotiation process; and
 - (5) the requirements for an expedited *connection*; and
 - (6) the basis for calculation of *connection charges*; and
 - (7) information set out in clause 5.3A.3(b)(1)(vii), (2)-(7) as such information relates to the *connection of embedded generating units* by a *non-registered embedded generator*.
- (b) To the extent a *Distribution Network Service Provider* has provided the information required under paragraph (a)(7) by including that information in its information pack *published* under clause 5.3A.3(a)(3), it will be taken to have complied with paragraph (a)(7).

5A.D.1A Register of completed embedded generation projects

- (a) For the purposes of this clause 5A.D.1A:

completed non-registered embedded generation projects means all *embedded generating units*, operated or controlled by a non-registered embedded generator that are *connected* to the *Distribution Network Service Provider's network*.

DAPR date has the same meaning as in clause 5.13.2.

- (b) In relation to completed non-registered embedded generation projects, a *Distribution Network Service Provider* must establish and *publish*, on its website, a register of the *plant*, including but not limited to:
 - (1) technology of *generating unit* (e.g. *synchronous generating unit*, induction generator, photovoltaic array, etc) and its make and model;
 - (2) maximum power *generation* capacity of all *embedded generating units* comprised in the relevant *generating system*;
 - (3) contribution to fault levels;
 - (4) the size and rating of the relevant *transformer*;
 - (5) a single line diagram of the *connection* arrangement;
 - (6) *protection systems* and communication systems;
 - (7) *voltage* control, *power factor* control and/or *reactive power capability* (where relevant); and
 - (8) details specific to the location of a *facility connected* to the *network* that are relevant to any of the details in subparagraphs (1)-(7).
- (c) The *Distribution Network Service Provider* must not *publish confidential information* as part of, or in connection with, the register, unless disclosure of the information is authorised:
 - (1) by the party to whom the duty of confidentiality is owed; or
 - (2) under:
 - (i) the *National Electricity Law* or the *Rules*; or
 - (ii) any other law.
- (d) The *Distribution Network Service Provider* must:
 - (1) by the DAPR date each year, include in the register the details contained in paragraph (b) for all completed non-registered embedded generation projects since the date the register referred to in paragraph (b) is established; and
 - (2) in the fifth year after the establishment of the register, and in each year thereafter, update the register by the DAPR date with details of all completed non-registered embedded generation projects in the 5 year period preceding the DAPR date.
- (e) To the extent a *Distribution Network Service Provider* includes the information required under paragraphs (b) and (d) in its register established under clause 5.4.5, it will be taken to have complied with paragraphs (b) and (d).

Division 2 Preliminary enquiry

5A.D.2 Preliminary enquiry

- (a) A *Distribution Network Service Provider* must, within 5 *business days* after receiving an *enquiry* about a *connection service* (or some other period agreed between the *Distribution Network Service Provider* and the enquirer), provide the enquirer with the information required to make an informed application.
- (b) The information must include:
 - (1) a description of the *Distribution Network Service Provider*'s basic and *standard connection services* and the terms and conditions of the *model standing offers* to provide such services (including possible costs); and
 - (2) a description of the process, including a statement of the information required, for submission of a *connection application* including an application for an expedited *connection*; and
 - (3) a statement of possible site inspection charges; and
 - (4) a statement of a *connection applicant*'s right to negotiate the terms of a *connection contract* and a description of the relevant process (including the types of possible costs and expenses); and
 - (5) an indication of whether any aspects of the proposed *connection* are likely to be *contestable*; and
 - (6) any additional information reasonably required by the enquirer.
- (c) A *Distribution Network Service Provider* that publishes any of the above information on its website complies with its obligation to disclose information under this clause if it refers the enquirer to the relevant part of the website.

Exception:

If the enquirer asks for a written reply to the *enquiry* or asks for specific advice about the enquirer's particular situation, the *Distribution Network Service Provider* must reply to the *enquiry* as soon as reasonably practicable and in writing if requested.

- (d) If an *enquiry* is made to a *Distribution Network Service Provider* about a *connection* within the area of another *Distribution Network Service Provider*, the *Distribution Network Service Provider*:
 - (1) must inform the enquirer of the identity, and contact details, of the responsible *Distribution Network Service Provider*; and

- (2) on doing so, is released from further obligations in relation to the *enquiry*.

Division 3 Applications

5A.D.3 Application process

- (a) An application for a *connection service* must be in the appropriate form determined by the *Distribution Network Service Provider*.
- (b) An application for a *connection service* may be made by:
 - (1) a *retail customer* for whom the *connection service* is sought; or
 - (2) a *retailer* or other person acting on behalf of a *retail customer*; or
 - (3) a *real estate developer* who seeks *connection services* for premises comprised in a *real estate development*.
- (c) If an application for a *connection service* has been made in error to the wrong *Distribution Network Service Provider*, that *Distribution Network Service Provider*:
 - (1) must inform the *connection applicant* of the identity, and contact details, of the responsible *Distribution Network Service Provider*; and
 - (2) on doing so, is released from further obligations in relation to the application.
- (d) If an application is incomplete in a *material* respect, the *Distribution Network Service Provider* must advise the applicant of the deficiency and may require the *connection applicant* to complete the application and re-submit it.
- (e) If the *Distribution Network Service Provider* reasonably requires additional information to assess the application, it may require the *connection applicant* to provide the necessary information.
- (f) The *Distribution Network Service Provider* must, within 10 *business days* after receipt of a complete application for a *connection service* or if the *connection applicant* is required to provide additional information under paragraph (e), within 10 *business days* after receipt of the information, (or some other period agreed between the *Distribution Network Service Provider* and the *connection applicant*):
 - (1) subject to any statements made on its website under clause 5A.D.1(a)(3), advise the *connection applicant* whether the proposed *connection service* is a *basic connection service*, a *standard connection service* or neither; and
 - (2) if;

- (i) the *connection service* is neither a *basic connection service* nor a *standard connection service*; or
- (ii) the *connection applicant* elects to have a negotiated *connection contract* even though the proposed *connection service* is a basic or *standard connection service*;

advise the *connection applicant* of the negotiated *connection* process and of possible costs and expenses related to the negotiations.

- (g) A single application may relate to multiple *connection services* of the same or different kinds.

5A.D.4 Site inspection

If a *Distribution Network Service Provider* reasonably needs to make a site inspection in order to determine the nature of a *connection service* sought by a *connection applicant*, the *Distribution Network Service Provider* may charge its reasonable expenses to the *connection applicant* and recover those expenses as a debt.

Part E Connection charges

5A.E.1 Connection charge principles

- (a) This clause states the *connection charge principles*.
- (b) A *retail customer* (other than a *non-registered embedded generator* or a *real estate developer*) who applies for a *connection service* for which an *augmentation* is required cannot be required to make a capital contribution towards the cost of the *augmentation* (insofar as it involves more than an *extension*) if:
 - (1) the application is for a *basic connection service*; or
 - (2) a relevant threshold set in the *Distribution Network Service Provider's connection policy* is not exceeded.

Note

In general, the intention is to exclude deep system *augmentation* charges for *retail customers*.

- (c) Subject to paragraph (b), in determining *connection charges* in accordance with its *connection policy*, a *Distribution Network Service Provider* must apply the following principles:
 - (1) if an *extension* to the *distribution network* is necessary in order to provide a *connection service*, *connection charges* for the service may include a reasonable capital contribution towards the cost of the *extension* necessary to provide the service;

- (2) if *augmentation of premises connection assets* at the *retail customer's connection point* is necessary in order to provide a *connection service*, *connection charges* for the service may include a reasonable capital contribution towards the cost of the *augmentation of premises connection assets* at the *connection point* necessary to provide the service;
 - (3) if *augmentation of the distribution system* is necessary in order to provide a *standard connection service*, *connection charges* for the service may include a reasonable capital contribution towards the cost of the *augmentation* necessary to provide the service;
 - (4) if *augmentation of the distribution system* is necessary in order to provide a *connection service* under a negotiated *connection contract*, *connection charges* for the service may, subject to any agreement to the contrary, include a reasonable capital contribution towards the cost of *augmentation of the distribution system* to the extent necessary to provide the service and to any further extent that a prudent service provider would consider necessary to provide efficiently for forecast *load growth*;
 - (5) despite subparagraphs (1) to (4) if *augmentation of the distribution system* is necessary in order to provide, on the application of a *real estate developer*, *connection services* for premises comprised in a *real estate development*, *connection charges* for the services may, subject to any agreement to the contrary, include a reasonable capital contribution towards the cost of *augmentation of the distribution system* to the extent necessary to provide the services and to any further extent that a prudent service provider would consider necessary to provide efficiently for forecast *load growth*;
 - (6) however, a capital contribution may only be required in the circumstances described in subparagraphs (1) to (5) if provision for the costs has not already been made through existing *distribution use of system charges* or a tariff applicable to the *connection*.
- (d) If:
- (1) a *connection asset* ceases, within 7 years after its construction or installation, to be dedicated to the exclusive use of the *retail customer* occupying particular premises; and
 - (2) the *retail customer* is entitled, in accordance with the *connection charge guidelines*, to a refund of *connection charges*;

the *Distribution Network Service Provider* must make the refund, and may recover the amount of the refund, by way of a *connection charge*, from the new users of the asset.

- (e) For the purposes of paragraph (d), a person is taken to be a new user of a *connection asset* if the asset comes to be used to provide a *connection* to that person's premises
- (f) For the purposes of this clause capital contribution includes a prepayment or financial guarantee.

5A.E.2 Itemised statement of connection charges

A *connection offer* must be accompanied by a schedule containing an itemised statement of *connection* costs including (so far as relevant) the following:

- (a) applicable *connection charges*;
- (b) cost of *network extension*;
- (c) details of upstream *augmentation* required to provide the *connection service* and associated cost;
- (d) any other incidental costs and the basis of their calculation including, if relevant, costs of minor deviation from the standard specification for a *basic connection service* or a *standard connection service* (as the case may require).

5A.E.3 Connection charge guidelines

- (a) The *AER* must develop and *publish* guidelines (***connection charge guidelines***) for the development of *connection policies* by *Distribution Network Service Providers*.
- (b) The purpose of the guidelines is to ensure that *connection charges*:
 - (1) are reasonable, taking into account the efficient costs of providing the *connection services* arising from the *new connection* or *connection alteration* and the revenue a prudent operator in the circumstances of the relevant *Distribution Network Service Provider* would require to provide those *connection services*; and
 - (2) provide, without undue administrative cost, a user-pays signal to reflect the efficient cost of providing the *connection services*; and
 - (3) limit cross-subsidisation of *connection* costs between different classes (or subclasses) of *retail customer*; and
 - (4) if the *connection services* are *contestable* – are competitively neutral.
- (c) The guidelines must:
 - (1) describe the method for determining charges for *premises connection assets*; and

- (2) describe the circumstances (or how to determine the circumstances) under which a *Distribution Network Service Provider* may receive a capital contribution, prepayment or financial guarantee from a *retail customer* or *real estate developer* for the provision of a *connection service*; and
 - (3) describe how the amount of any such capital contribution, prepayment or financial guarantee is to be determined; and
 - (4) establish principles for fixing a threshold (based on capacity or any other measure the *AER* thinks fit) below which *retail customers* (not being a *non-registered embedded generator* or a *real estate developer*) are exempt from any requirement to pay *connection charges* (or to give consideration in the form of a capital contribution, prepayment or financial guarantee) for an *augmentation* (other than an *extension*) to the *distribution network* necessary to make the *connection*; and
 - (5) describe the methods for calculating the *augmentation* component for the *connection assets* and, if the *augmentation* consists of or includes an *extension*, the *extension* component of a *connection charge*; and
 - (6) describe the method for calculating:
 - (i) the amount of a refund of *connection charges* for a *connection asset* when an *extension* asset originally installed to *connect* the premises of a single *retail customer* is used, within 7 years of its installation, to *connect* other premises and thus comes to be used for the benefit of 2 or more *retail customers*; and
 - (ii) the threshold below which the refund is not payable; and
 - (7) describe the treatment of *augmentation* assets.
- (d) The principles for establishing an exemption under paragraph (c)(4) must ensure that the exemption only operates in the following circumstances:
- (1) the *connection* is a *low voltage connection*; and
 - (2) the *connection* would not normally require *augmentation* of the *network* beyond the *extension* to the *distribution network* necessary to make the *connection*; and
 - (3) the *connection* is not expected to increase the *load* on the *distribution network* beyond a level the *Distribution Network Service Provider* could reasonably be expected to cope with in the ordinary course of managing the *distribution network*.
- (e) In developing the guidelines, the *AER* must have regard to:
- (1) historical and geographical differences between *networks*; and

- (2) inter-jurisdictional differences related to regulatory control mechanisms, classification of services and other relevant matters; and
 - (3) the circumstances in which *connection services* may be provided by persons other than *Distribution Network Service Providers* (and are therefore *contestable*).
- (f) In developing guidelines dealing with the method for calculating the amount of a refund of *connection charges* paid before a *connection asset* becomes a shared asset, the *AER* must have regard to:
 - (1) the *Distribution Network Service Provider's* obligation to make the refund; and
 - (2) future projections of *distribution network* expansion and usage and any consequent effect on the *Distribution Network Service Provider's* capacity to finance the acquisition of *augmentation* assets out of increased revenue; and
 - (3) the fact that the *Distribution Network Service Provider's* obligation to make the refund will expire after 7 years.
- (g) In developing guidelines under this clause, the *AER* must act in accordance with the *distribution consultation procedures*.

5A.E.4 Payment of connection charges

- (a) *Connection charges* payable in respect of a *connection service* must be paid to the *Distribution Network Service Provider* by the *retail customer's retailer* unless:
 - (1) the *retailer* did not apply for the *connection service* and the *Distribution Network Service Provider* has notified the *retail customer* that the *retail customer* must pay the *connection charge* directly; or
 - (2) the *retail customer* asks to pay the *connection charge* directly and the *Distribution Network Service Provider* agrees; or
 - (3) the *Distribution Network Service Provider* and the *retailer* agree that the *Distribution Network Service Provider* is to recover the *connection charge* from the *retail customer*.
- (b) If the *retail customer* pays, or is required to pay, a *connection charge* directly to a *Distribution Network Service Provider* under paragraph (a), the *Distribution Network Service Provider* must not recover that charge from the *retail customer's retailer*.
- (c) The *Distribution Network Service Provider* must separately identify each *connection charge* on the statement or invoice to the *retailer*.

Note

Rule 25 of the *National Energy Retail Rules* requires the listing of *connection charges* that are passed through by a *retailer* to a retail customer in the customer's bill.

Part F Formation and integration of connection contracts

Division 1 Offer and acceptance – basic and standard connection services

5A.F.1 Distribution Network Service Provider's response to application

- (a) If the *connection service* sought by a *connection applicant* is a *basic connection service* or a *standard connection service* (and the applicant does not elect to apply for a negotiated *connection contract*), the *Distribution Network Service Provider* must make a *connection offer* to the applicant within:
 - (1) 10 *business days* after receiving a properly completed application for the service and the additional information (if any) reasonably required under clause 5A.D.3(e); or
 - (2) some other period agreed between the *Distribution Network Service Provider* and the *connection applicant*.
- (b) The *connection offer* must be in accordance with the relevant *model standing offer* and must include:
 - (1) the date of the offer; and
 - (2) details of the *connection service* to be provided; and
 - (3) a statement of the *connection charges* payable by the *connection applicant*.

5A.F.2 Acceptance of connection offer

- (a) A *connection offer* to provide a *basic connection service* or *standard connection service* remains open for acceptance for 45 *business days* from the date of the offer and, if not accepted within that period, lapses unless the period for acceptance is extended by agreement between the *connection applicant* and the *Distribution Network Service Provider*.
- (b) This clause does not apply if the *connection application* is for an expedited *connection*.

5A.F.3 Offer and acceptance—application for expedited connection

- (a) If:

- (1) a *connection applicant* requests an expedited *connection* in the *connection application*; and
- (2) the *Distribution Network Service Provider* is satisfied that the *connection application* is for a *basic connection service* or *standard connection service* that falls within the terms of the relevant *model standing offer*; and
- (3) the *connection applicant* indicates in the *connection application* that a *connection offer* in terms of the relevant *model standing offer* would be acceptable to the applicant,

the *Distribution Network Service Provider* is taken to have made, and the *connection applicant* is taken to have accepted, a *connection offer* in terms of the relevant *model standing offer* on the date the *Distribution Network Service Provider* receives the application.

- (b) If a *connection applicant* applies for an expedited *connection* but the *Distribution Network Service Provider* does not agree that an offer in terms of any *model standing offer* is appropriate, the *Distribution Network Service Provider* must notify the *connection applicant* accordingly and draw the applicant's attention to the provisions of these *Rules* dealing with negotiated *connection*.

Division 2 Offer and acceptance – negotiated connection

5A.F.4 Negotiated connection offer

- (a) A *Distribution Network Service Provider* must use its best endeavours to make a negotiated *connection offer* to the *connection applicant* within 65 *business days* after the date of the application for *connection* (but the *time* taken by the applicant to provide information reasonably sought by the *Distribution Network Service Provider* under clause 5A.C.3(a)(2) will not be counted).
- (b) A negotiated *connection offer*:
 - (1) must be in the form of an offer to enter into a contract in specified terms; and
 - (2) must comply with the minimum requirements set out in Schedule 5A.1.
- (c) If the *connection applicant* elected to extend the negotiations to *supply services*, the *connection offer* must contain terms and conditions relating to the *supply services*.
- (d) A negotiated *connection offer* must not include a *connection charge* that is inconsistent with the *Distribution Network Service Provider's connection policy*.

- (e) A negotiated *connection offer* remains open for acceptance for 20 *business days* from the date of the offer and then lapses unless the period for acceptance is extended by agreement between the *Distribution Network Service Provider* and the *connection applicant*.

Division 3 Formation of contract

5A.F.5 Acceptance of connection offer

- (a) If a *connection offer* to provide a *connection service* is accepted, the terms and conditions of the *connection offer*:
 - (1) become terms and conditions of a *connection contract* formed between the *Distribution Network Service Provider* and the *connection applicant*; and
 - (2) subject to rule 5A.F.6, are enforceable accordingly.
- (b) The *Distribution Network Service Provider* must, at the request of a *connection applicant*, provide a copy of:
 - (1) the contract formed under paragraph (a); or
 - (2) if that contract has been integrated with, and forms part of, a *customer connection* contract arising under the *NERL*—the integrated contract.

Division 4 Contractual performance

5A.F.6 Carrying out connection work

- (a) A *Distribution Network Service Provider* must use its best endeavours to ensure that *connection work* is carried out within the applicable *time* limits fixed by the relevant provisions of the *connection contract*.
- (b) However, a *Distribution Network Service Provider* is not obliged to commence or continue with *connection work* if the *connection applicant* fails to comply with conditions that are to be complied with by the *connection applicant*.

Examples

The *connection applicant* fails to pay *connection charges*.

The *connection applicant* fails to comply with technical or safety requirements.

The *connection applicant* fails to complete work that is to be carried out on the *connection applicant's* premises.

The *connection applicant* fails to comply with the *Distribution Network Service Provider's* reasonable request to allow the *Distribution Network Service Provider* safe and unhindered access to the applicant's premises.

5A.F.7 Retailer required for energisation where new connection

A *Distribution Network Service Provider* is not required to *energise* a new connection unless a request to *energise* the new connection is submitted by a *retailer*, or the *Distribution Network Service Provider* is otherwise satisfied that there is a relevant contract with a *retailer* in relation to the premises.

Part G Dispute resolution between Distribution Network Service Providers and customers

5A.G.1 Relevant disputes

(a) In this Part:

customer means:

- (a) a *retail customer*; or
- (b) a *real estate developer*.

relevant dispute means:

- (1) a dispute between a *Distribution Network Service Provider* and a customer about:
 - (i) the terms and conditions on which a *basic connection service* or a *standard connection service* is to be provided; or
 - (ii) the proposed or actual terms and conditions of a negotiated *connection contract*; or
 - (2) a dispute between a *Distribution Network Service Provider* and a customer about *connection charges*.
- (b) A relevant dispute is an access dispute for the purposes of section 2A of the Law.

5A.G.2 Determination of dispute

- (a) In determining a relevant dispute, the *AER* must (so far as applicable) give effect to:
 - (1) the relevant *connection policy*; and
 - (2) a relevant *model standing offer* to provide a basic or *standard connection service*; and
 - (3) this Chapter and any other *applicable regulatory instrument*.
- (b) In determining a relevant dispute, the *AER* may also:
 - (1) have regard to other matters the *AER* considers relevant; and

- (2) hear evidence or receive submissions from the *Distribution Network Service Provider* and the customer; and
- (3) if the dispute relates to a negotiated *connection contract* – have regard to the negotiation framework set out in clause 5A.C.3.

5A.G.3 Termination of proceedings

- (a) If the *AER* considers that a relevant dispute could be effectively resolved by some means other than an access determination, the *AER* may give the parties to the dispute notice of the alternative means of resolving the dispute.

Example

The *AER* might give such a notice if of the opinion that a particular dispute could be dealt with more efficiently, and with less expense, by a jurisdictional ombudsman.

- (b) The giving of such a notice is a specified dispute termination circumstance for the purposes of section 131(3) of the Law.

Note

It follows that the *AER* may exercise its power to terminate the dispute without making an access determination (See section 131(1)(d) of the Law).

SCHEDULE 5A.1 – Minimum content requirements for connection contract

Part A Connection offer not involving embedded generation

- (a) A *connection offer* must contain:
 - (1) a provision stating that a *connection contract* will be formed, and will come into operation, on acceptance of the *connection offer*; and
 - (2) details of the *connection point*, the maximum capacity of the *connection*, and the *connection assets* required at the *connection point*; and
 - (3) details of the *premises connection assets* and additional equipment to be installed on the premises and responsibility for undertaking the work; and
 - (4) details of any *distribution network extension* or other *augmentation* required for the purposes of the *connection*; and
 - (5) an undertaking to complete the work required to establish the *connection* within a specified *time frame*; and
 - (6) a requirement that the *retail customer* have appropriate metering installed ; and

- (7) the relevant technical and safety obligations to be met by the *retail customer* relating to the installation; and
 - (8) the *retail customer's* obligation to allow access to the premises by the *Distribution Network Service Provider's* agents, contractors and employees; and
 - (9) the *retail customer's* obligation to accommodate on its premises, and protect from harm, any equipment necessary for the *connection*; and
 - (10) details of the *retail customer's* monetary obligations including billing arrangements and any security to be provided by the *retail customer*; and
 - (11) details of the *Distribution Network Service Provider's* monetary obligations (if any) to the *retail customer*; and
 - (12) a provision requiring the *Distribution Network Service Provider* to provide information about the *connection* to the *retail customer*; and
 - (13) provision for amendment of the *connection contract* by agreement between the *Distribution Network Service Provider* and the *retail customer*.
- (b) A *connection offer* that relates to *supply services* must also deal with:
- (1) the *Distribution Network Service Provider's* power to interrupt or reduce the *supply* of electricity to the *connection point*; and
 - (2) warranties and limitations on the *Distribution Network Service Provider's* liability; and
 - (3) *disconnection* and reconnection; and
 - (4) reporting and correction of faults; and
 - (5) dispute resolution; and
 - (6) ongoing *customer* obligations; and
 - (7) termination of the *connection contract*.

Part B Connection offer involving embedded generation

- (a) A *connection offer* to a person who operates, or proposes to operate, an *embedded generating unit* (the **embedded generator**) must contain:
- (1) a provision stating that a *connection contract* will be formed, and will come into operation, on acceptance of the *connection offer*; and

- (2) details of the *connection point*, the maximum capacity of the *connection* to import and export electricity, and the *embedded generator's* installation required at the *connection point*; and
 - (3) details of the *premises connection assets* and additional equipment to be installed on the premises and responsibility for undertaking the work; and
 - (4) details of any *distribution network extension* or other *augmentation* required for the purposes of the *connection*; and
 - (5) an undertaking to complete the work required to establish the *connection* within a specified *time frame*; and
 - (6) a requirement that the *embedded generator* have appropriate *metering* installed; and
 - (7) the relevant technical and safety obligations to be met by the *embedded generator* relating to the installation; and
 - (8) the *embedded generator's* obligation to allow access to the premises by the *Distribution Network Service Provider's* agents, contractors and employees; and
 - (9) the *embedded generator's* obligation to accommodate on its premises, and protect from harm, any equipment necessary for the *connection*; and
 - (10) details of the *embedded generator's* monetary obligations including billing arrangements and any security to be provided by the *embedded generator*; and
 - (11) details of the *Distribution Network Service Provider's* monetary obligations (if any) to the *embedded generator*; and
 - (12) a provision requiring the *Distribution Network Service Provider* to provide information about the *connection* to the *embedded generator*; and
 - (13) provision for amendment of the *connection contract* by agreement between the *Distribution Network Service Provider* and the *embedded generator*.
- (b) A *connection contract* that relates to *supply services* must also deal with:
- (1) the *Distribution Network Service Provider's* power to interrupt or reduce the *supply* of electricity to the *connection point*; and
 - (2) warranties and limitations on the *Distribution Network Service Provider's* liability; and
 - (3) *disconnection* and reconnection; and

- (4) reporting and correction of faults; and
- (5) dispute resolution; and
- (6) ongoing obligations of the *Distribution Network Service Provider* and the *embedded generator*; and
- (7) termination of the *connection contract*.

CHAPTER 6

6. Economic Regulation of Distribution Services

Part A Introduction

6.1 Introduction to Chapter 6

6.1.1 AER's regulatory responsibility

The *AER* is responsible, in accordance with this Chapter, for the economic regulation of *distribution services* provided by means of, or in connection with, *distribution systems* that form part of the *national grid*.

6.1.1A [Deleted]

6.1.2 Structure of this Chapter

- (a) This Chapter deals with the classification and economic regulation of *distribution services*.
- (b) It is divided into parts as follows:
 - (1) this Part is introductory;
 - (2) Part B confers power on the *AER* to classify *distribution services*, to determine the forms of control for *distribution services*, and to make distribution determinations;
 - (3) Part C sets out the building block approach to the regulation of services classified as *standard control services*;
 - (4) Part D regulates the prices that may be charged by *Distribution Network Service Providers* for the provision of services classified as *negotiated distribution services*;
 - (4A) Part DA deals with the preparation of, requirements for and approval of, *connection policies*;
 - (5) Part E sets out the procedure and approach for the making of a distribution determination;
 - (6) Part F regulates cost allocation;
 - (7) Part G contains the distribution consultation procedures;
 - (8) Part H deals with ring-fencing;
 - (9) Part I deals with *tariff classes* and tariffs;
 - (10) Part J deals with billing and settlements;

- (11) Part K deals with prudential requirements, prepayments and capital contributions;
- (12) Part L deals with dispute resolution;
- (13) Part M deals with the disclosure of *transmission* and *distribution* charges;
- (14) Part N provides for services provided by, or in connection with, *dual function assets* to be the subject of distribution determinations; and
- (15) Part O sets out the requirements to prepare *annual benchmarking reports*.

6.1.3 Access to direct control services and negotiated distribution services

- (a) Subject to and in accordance with the *Rules*:
 - (1) a person (a **Service Applicant**) may apply to a *Distribution Network Service Provider* for provision of *direct control services* or *negotiated distribution services*;
 - (2) a *Distribution Network Service Provider* must provide *direct control services* or *negotiated distribution services* (as the case may be) on *terms and conditions of access* as determined under Chapters 4, 5, this Chapter 6 and Chapter 7 of the Rules.
- (b) The *terms and conditions of access* are:
 - (1) in relation to *negotiated distribution services*:
 - (i) the price of those services (including, if relevant, *access charges*); and
 - (ii) other terms and conditions for the provision of those services;
 - (2) in relation to *direct control services*:
 - (i) the price of those services under the *approved pricing proposal*; and
 - (ii) other terms and conditions for the provision of those services.

6.1.4 Prohibition of DUOS charges for the export of energy

- (a) A *Distribution Network Service Provider* must not charge a *Distribution Network User* *distribution use of system* charges for the export of electricity generated by the user into the *distribution network*.
- (b) This does not, however, preclude charges for the provision of *connection services*.

Part B Classification of Distribution Services and Distribution Determinations

6.2 Classification

6.2.1 Classification of distribution services

- (a) The *AER* may classify a *distribution service* to be provided by a *Distribution Network Service Provider* as:

- (1) a *direct control service*; or
- (2) a *negotiated distribution service*.

Note

If the *AER* decides against classifying a *distribution service*, the service is, subject to Chapter 5A, not regulated under the *Rules*.

- (b) The *AER* may group *distribution services* together for the purpose of classification and, if it does so, a single classification made for the group applies to each service comprised in the group as if it had been separately classified.
- (c) The *AER* must, in classifying a *distribution service* or *distribution services*, have regard to:
- (1) the form of regulation factors; and
 - (2) the form of regulation (if any) previously applicable to the relevant service or services and, in particular, any previous classification under the present system of classification or under the previous regulatory system (as the case requires); and
 - (3) the desirability of consistency in the form of regulation for similar services (both within and beyond the relevant jurisdiction); and
 - (4) any other relevant factor.
- (d) **[Deleted]**
- (e) If the *Rules*, however, require that a particular classification be assigned to a *distribution service* of a specified kind, a *distribution service* of the relevant kind is to be classified in accordance with that requirement.

6.2.2 Classification of direct control services as standard control services or alternative control services

- (a) *Direct control services* are to be further divided into 2 subclasses:
- (1) *standard control services*; and
 - (2) *alternative control services*.

- (b) The *AER* may group *direct control services* together for the purpose of classification and, if it does so, a single classification made for the group applies to each service comprised in the group as if it had been separately classified.
- (c) The *AER* must, in classifying a *direct control service* as a *standard control service* or an *alternative control service*, have regard to:
 - (1) the potential for development of competition in the relevant market and how the classification might influence that potential; and
 - (2) the possible effects of the classification on administrative costs of the *AER*, the *Distribution Network Service Provider* and users or potential users; and
 - (3) the regulatory approach (if any) applicable to the relevant service immediately before the commencement of the distribution determination for which the classification is made; and
 - (4) the desirability of a consistent regulatory approach to similar services (both within and beyond the relevant jurisdiction); and
 - (5) the extent the costs of providing the relevant service are directly attributable to the person to whom the service is provided; and

Example:

In circumstances where a service is provided to a small number of identifiable customers on a discretionary or infrequent basis, and costs can be directly attributed to those customers, it may be more appropriate to classify the service as an alternative control service than as a standard control service.

- (6) any other relevant factor.
- (d) **[Deleted]**
- (e) If the *Rules*, however, require that a *direct control service* of a specified kind be classified either as a *standard control service* or as an *alternative control service*, a *direct control service* of the relevant kind is to be classified in accordance with that requirement.

6.2.3 Term for which classification operates

A classification forms part of a distribution determination and operates for the *regulatory control period* for which the distribution determination is made.

Note:

The classification is to be reviewed in the course of the making of the next distribution determination, and (subject to these Rules) a reclassification may be made for the purposes of that determination.

6.2.3A Distribution Service Classification Guidelines

- (a) The *AER* must, in accordance with the *distribution consultation procedures*, develop, maintain and *publish* guidelines (the *Distribution Service Classification Guidelines*) that set out the approach the *AER* proposes to take when classifying *distribution services* as:
 - (1) *direct control services* or *negotiated distribution services* under clause 6.2.1(a); and
 - (2) *standard control services* or *alternative control services* under clause 6.2.2(a).
- (b) The *Distribution Service Classification Guidelines* must set out an explanation of the *AER*'s proposed approach (including worked examples) to:
 - (1) determining whether to classify a *distribution service*;
 - (2) applying the factors set out in:
 - (i) clause 6.2.1(c), when classifying *distribution services* as *direct control services* or *negotiated distribution services*; and
 - (ii) clause 6.2.2(c), when classifying *direct control services* as *standard control services* or *alternative control services*; and
 - (3) distinguishing between *distribution services* (including, but not limited to, those that are classified as *direct control services*) and the operating and capital inputs that are used to provide such services.
- (c) Nothing prevents the *AER* from *publishing* the *Distribution Service Classification Guidelines* in the same document as another guideline *published* under this Chapter.

6.2.4 Duty of AER to make distribution determinations

- (a) The *AER* must make a distribution determination for each *Distribution Network Service Provider*.
- (b) When the *AER* makes a distribution determination it must follow the process set out in Part E.
- (c) If more than one *distribution system* is owned, controlled or operated by a *Distribution Network Service Provider*, then, unless the *AER* otherwise determines, a separate distribution determination is to be made for each *distribution system*.
- (d) If 2 or more parts of the same *distribution system* were separately regulated at the commencement of this Chapter, then, unless the *AER* otherwise determines, a separate distribution determination is to be made for each of those parts of the *distribution system*.

6.2.5 Control mechanisms for direct control services

- (a) A distribution determination is to impose controls over the prices of *direct control services*, the revenue to be derived from *direct control services* or both.
- (b) The control mechanism may consist of:
 - (1) a schedule of fixed prices;
 - (2) caps on the prices of individual services;
 - (3) caps on the revenue to be derived from a particular combination of services;
 - (4) tariff basket price control;
 - (5) revenue yield control; or
 - (6) a combination of any of the above.
- (c) In deciding on a control mechanism for *standard control services*, the *AER* must have regard to:
 - (1) the need for efficient tariff structures; and
 - (2) the possible effects of the control mechanism on administrative costs of the *AER*, the *Distribution Network Service Provider* and users or potential users; and
 - (3) the regulatory arrangements (if any) applicable to the relevant service immediately before the commencement of the distribution determination; and
 - (4) the desirability of consistency between regulatory arrangements for similar services (both within and beyond the relevant jurisdiction); and
 - (5) any other relevant factor.
- (d) In deciding on a control mechanism for *alternative control services*, the *AER* must have regard to:
 - (1) the potential for development of competition in the relevant market and how the control mechanism might influence that potential; and
 - (2) the possible effects of the control mechanism on administrative costs of the *AER*, the *Distribution Network Service Provider* and users or potential users; and
 - (3) the regulatory arrangements (if any) applicable to the relevant service immediately before the commencement of the distribution determination; and

- (4) the desirability of consistency between regulatory arrangements for similar services (both within and beyond the relevant jurisdiction); and
- (5) any other relevant factor.

6.2.6 Basis of control mechanisms for direct control services

- (a) For *standard control services*, the control mechanism must be of the prospective CPI minus X form, or some incentive-based variant of the prospective CPI minus X form, in accordance with Part C.
- (b) For *alternative control services*, the control mechanism must have a basis stated in the distribution determination.
- (c) The control mechanism for *alternative control services* may (but need not) utilise elements of Part C (with or without modification).

Examples:

The control mechanism might be based on the building block approach.

The distribution determination might provide for the application of clause 6.6.1 to pass through events with necessary adaptations and specified modifications.

6.2.7 Negotiated distribution services

Negotiated distribution services are regulated in accordance with Part D.

6.2.8 Guidelines

- (a) The *AER*:
 - (1) must make and *publish* the *Shared Asset Guidelines*, the *Capital Expenditure Incentive Guidelines*, the *Rate of Return Guidelines*, the *Expenditure Forecast Assessment Guidelines*, the *Distribution Confidentiality Guidelines*, the *Distribution Service Classification Guidelines*, the *Asset Exemption Guidelines* and the *Cost Allocation Guidelines* in accordance with these *Rules*; and
 - (2) may, in accordance with the *distribution consultation procedures*, make and *publish* guidelines as to any other matters relevant to this Chapter.
- (b) A guideline may relate to a specified *Distribution Network Service Provider* or *Distribution Network Service Providers* of a specified class.
- (c) Except as otherwise provided in this Chapter, a guideline is not mandatory (and so does not bind the *AER* or anyone else) but, if the *AER*:
 - (1) makes a distribution determination that is not in accordance with the guideline, the *AER* must state, in its reasons for the distribution determination, the reasons for departing from the guideline;

- (2) makes a decision in respect of an *asset exemption* under clause 6.4B.1(a)(3) or (4) that is not made in accordance with the *Asset Exemption Guidelines*, the AER must state, in its reasons for that decision, the reasons for departing from that guideline; and
- (3) makes a *framework and approach paper* that is not in accordance with the *Distribution Service Classification Guidelines*, the AER must state, in the relevant *framework and approach paper*, the reasons for departing from that guideline.
- (d) If a guideline indicates that there may be a change of regulatory approach in future distribution determinations, the guideline should also (if practicable) indicate how transitional issues are to be dealt with.
- (e) Subject to paragraph (f), the AER may, from time to time and in accordance with the *distribution consultation procedures*, amend or replace a guideline.
- (f) The AER may make administrative or minor amendments to any guideline without complying with the *distribution consultation procedures*.
- (g) This clause 6.2.8 does not apply to the *Distribution Ring-Fencing Guidelines* or the *Distribution Reliability Measures Guidelines*.

Part C Building Block Determinations for standard control services

6.3 Building block determinations

6.3.1 Introduction

- (a) A *building block determination* is a component of a distribution determination.
- (b) The procedure and approach for the making of a *building block determination* is contained in Part E of this Chapter and involves the submission of a *building block proposal* to the AER by the *Distribution Network Service Provider*.
- (c) The *building block proposal*:
 - (1) must be prepared in accordance with the *post-tax revenue model* and other relevant requirements of this Part;
 - (2) must comply with the requirements of, and must contain or be accompanied by the information required by, any relevant *regulatory information instrument*; and
 - (3) must be prepared in accordance with Schedule 6.1.

6.3.2 Contents of building block determination

- (a) A *building block determination* for a *Distribution Network Service Provider* is to specify, for a *regulatory control period*, the following matters:
 - (1) the *Distribution Network Service Provider's annual revenue requirement* for each *regulatory year* of the *regulatory control period*;
 - (2) appropriate methods for the indexation of the regulatory asset base;
 - (3) how any applicable *efficiency benefit sharing scheme, capital expenditure sharing scheme, service target performance incentive scheme, demand management incentive scheme, demand management innovation allowance mechanism or small-scale incentive scheme* is to apply to the *Distribution Network Service Provider*;
 - (4) the commencement and length of the *regulatory control period*; and
 - (5) any other amounts, values or inputs on which the *building block determination* is based (differentiating between those contained in, or inferred from, the *Distribution Network Service Provider's building block proposal* and those based on the *AER's* own estimates or assumptions).
- (b) A *regulatory control period* must be not less than 5 *regulatory years*.

6.4 Post-tax revenue model

6.4.1 Preparation, publication and amendment of post-tax revenue model

- (a) The *AER* must, in accordance with the *distribution consultation procedures*, prepare and *publish* a *post-tax revenue model*.
- (b) The *AER* may, from time to time and in accordance with the *distribution consultation procedures*, amend or replace the *post-tax revenue model*.
- (c) The *AER* must develop and *publish* the first *post-tax revenue model* within 6 months after the commencement of this clause and there must be such a model in force at all times after that date.

6.4.2 Contents of post-tax revenue model

- (a) The *post-tax revenue model* must set out the manner in which the *Distribution Network Service Provider's annual revenue requirement* for each *regulatory year* of a *regulatory control period* is to be calculated.
- (b) The contents of the *post-tax revenue model* must include (but are not limited to):
 - (1) a method that the *AER* determines is likely to result in the best estimates of expected inflation; and

- (2) the timing assumptions and associated discount rates that are to apply in relation to the calculation of the building blocks referred to in clause 6.4.3; and
- (3) the manner in which working capital is to be treated; and
- (4) the manner in which the estimated cost of corporate income tax is to be calculated.

6.4.3 Building block approach

(a) Building blocks generally

The *annual revenue requirement* for a *Distribution Network Service Provider* for each *regulatory year* of a *regulatory control period* must be determined using a building block approach, under which the building blocks are:

- (1) indexation of the regulatory asset base – see paragraph (b)(1);
- (2) a return on capital for that year – see paragraph (b)(2);
- (3) the depreciation for that year – see paragraph (b)(3);
- (4) the estimated cost of corporate income tax of the *Distribution Network Service Provider* for that year – see paragraph (b)(4);
- (5) the revenue increments or decrements (if any) for that year arising from the application of any *efficiency benefit sharing scheme*, *capital expenditure sharing scheme*, *service target performance incentive scheme*, *demand management incentive scheme*, *demand management innovation allowance mechanism* or *small-scale incentive scheme* – see subparagraph (b)(5);
- (6) the other revenue increments or decrements (if any) for that year arising from the application of a control mechanism in the previous *regulatory control period* – see paragraph (b)(6);
- (6A) the revenue decrements (if any) for that year arising from the use of assets that provide *standard control services* to provide certain other services – see subparagraph (b)(6A); and
- (7) the forecast operating expenditure for that year – see paragraph (b)(7).

(b) Details of the building blocks

For the purposes of paragraph (a):

- (1) for indexation of the regulatory asset base:
 - (i) the regulatory asset base is calculated in accordance with clause 6.5.1 and schedule 6.2; and

- (ii) the building block comprises a negative adjustment equal to the amount referred to in clause S6.2.3(c)(4) for that year; and
- (2) the return on capital is calculated in accordance with clause 6.5.2;
- (3) the depreciation is calculated in accordance with clause 6.5.5;
- (4) the estimated cost of corporate income tax is determined in accordance with clause 6.5.3;
- (5) the revenue increments or decrements referred to in subparagraph (a)(5) are those that arise as a result of the operation of an applicable *efficiency benefit sharing scheme, capital expenditure sharing scheme, service target performance incentive scheme, demand management incentive scheme, demand management innovation allowance mechanism* or *small-scale incentive scheme* as referred to in clauses 6.5.8, 6.5.8A, 6.6.2, 6.6.3, 6.6.3A and 6.6.4;
- (6) the other revenue increments or decrements referred to in paragraph (a)(6) are those that are to be carried forward to the current *regulatory control period* as a result of the application of a control mechanism in the previous *regulatory control period* and are apportioned to the relevant year under the distribution determination for the current *regulatory control period*;
- (6A) the revenue decrements (if any) referred to in paragraph (a)(6A) are those that are determined by the *AER* under clause 6.4.4 as a result of assets that provide *standard control services* being used to provide:
 - (i) *distribution services* that are not classified under clause 6.2.1; or
 - (ii) services that are neither *distribution services* nor services that are provided by means of, or in connection with, *dual function assets*; and
- (7) the forecast operating expenditure for the year is the forecast operating expenditure as accepted or substituted by the *AER* in accordance with clause 6.5.6.

6.4.4 Shared assets

- (a) Where an asset is used to provide both *standard control services* and either:
 - (1) *distribution services* that are not classified under clause 6.2.1; or
 - (2) services that are neither:
 - (i) *distribution services*; nor
 - (ii) services that are provided by means of, or in connection with, *dual function assets* that are owned, operated or controlled by the *Distribution Network Service Provider*,

the *AER* may, in a distribution determination for a *regulatory control period*, reduce the *annual revenue requirement* for that *Distribution Network Service Provider* for a *regulatory year* in that *regulatory control period* by such amount as it considers reasonable to reflect such part of the costs of that asset as the *Distribution Network Service Provider* is recovering through charging for the provision of a service referred to in subparagraph (1) or (2).

- (b) In making a decision under paragraph (a), the *AER* must have regard to the *shared asset principles* and the *Shared Asset Guidelines*.
- (c) The *shared asset principles* are as follows:
 - (1) the *Distribution Network Service Provider* should be encouraged to use assets that provide *standard control services* for the provision of other kinds of services where that use is efficient and does not materially prejudice the provision of those services;
 - (2) a shared asset cost reduction should not be dependent on the *Distribution Network Service Provider* deriving a positive commercial outcome from the use of the asset other than for *standard control services*;
 - (3) a shared asset cost reduction should be applied where the use of the asset other than for *standard control services* is material;
 - (4) regard should be had to the manner in which costs have been recovered or revenues reduced in respect of the relevant asset in the past and the reasons for adopting that manner of recovery or reduction;
 - (5) a shared asset cost reduction should be compatible with the *Cost Allocation Principles* and *Cost Allocation Method*; and
 - (6) any reduction effected under paragraph (a) should be compatible with other incentives provided under the *Rules*.
- (d) The *AER* must, in accordance with the *distribution consultation procedures*, make and *publish* guidelines (the *Shared Asset Guidelines*) that set out the approach the *AER* proposes to take in applying the *shared asset principles* (which may include a methodology that the *AER* proposes to use to determine reductions for the purposes of paragraph (a)).
- (e) There must be *Shared Asset Guidelines* in force at all times after the date on which the *AER* first *publishes* the *Shared Asset Guidelines* under these *Rules*.

6.4.5 Expenditure Forecast Assessment Guidelines

- (a) The *AER* must, in accordance with the *distribution consultation procedures*, develop and *publish* guidelines (the *Expenditure Forecast Assessment Guidelines*) that specify the approach the *AER* proposes to use to assess the

forecasts of operating expenditure and capital expenditure that form part of *Distribution Network Service Providers' regulatory proposals* and the information the AER requires for the purposes of that assessment.

- (b) There must be *Expenditure Forecast Assessment Guidelines* in force at all times after the date on which the AER first publishes the *Expenditure Forecast Assessment Guidelines* under these Rules.

6.4A Capital expenditure incentive mechanisms

- (a) The *capital expenditure incentive objective* is to ensure that, where the value of a regulatory asset base is subject to adjustment in accordance with the Rules, then the only capital expenditure that is included in an adjustment that increases the value of that regulatory asset base is capital expenditure that reasonably reflects the *capital expenditure criteria*.
- (b) The AER must, in accordance with the *distribution consultation procedures*, make and publish guidelines (the *Capital Expenditure Incentive Guidelines*) that set out:
 - (1) any *capital expenditure sharing schemes* developed by the AER in accordance with clause 6.5.8A, and how the AER has taken into account the *capital expenditure sharing scheme principles* in developing those schemes;
 - (2) the manner in which it proposes to make determinations under clause S6.2.2A(a) if the *overspending requirement* is satisfied;
 - (3) the manner in which it proposes to determine whether depreciation for establishing a regulatory asset base as at the commencement of a *regulatory control period* is to be based on actual or forecast capital expenditure;
 - (4) the manner in which it proposes to make determinations under clause S6.2.2A(i) if the *margin requirement* is satisfied; and
 - (5) the manner in which it proposes to make determinations under clause S6.2.2A(j) if the *capitalisation requirement* is satisfied; and
 - (6) how each scheme and proposal referred to in subparagraphs (1) to (5), and all of them taken together, are consistent with the *capital expenditure incentive objective*.
- (c) There must be *Capital Expenditure Incentive Guidelines* in force at all times after the date on which the AER first publishes the *Capital Expenditure Incentive Guidelines* under these Rules.

6.4B Asset exemptions

6.4B.1 Asset exemption decisions and Asset Exemption Guidelines

- (a) The *AER* may, following receipt of an *exemption application* and in accordance with this Chapter, approve:
 - (1) for the purpose of clause 6.5.7(c)(2), the inclusion of *expenditure for a restricted asset* in a *Distribution Network Service Provider's* forecast of required capital expenditure;
 - (2) for the purpose of clause 6.6A.1(b1), the inclusion of *expenditure for a restricted asset* in a *Distribution Network Service Provider's* proposed contingent capital expenditure for a proposed contingent project;
 - (3) for the purpose of clause 6.6.1(d2), the inclusion of *expenditure for a restricted asset* in a *Distribution Network Service Provider's* positive pass through amount for a positive change event; and
 - (4) for the purpose of clause 6.6.5(f1), the inclusion of *expenditure for a restricted asset* in the *Distribution Network Service Provider's* proposed capital expenditure,(each being an *asset exemption*).
- (b) In considering whether to approve an *asset exemption*, the *AER* must have regard to:
 - (1) the likely impacts on the development of competition in markets for energy related services if the *Distribution Network Service Provider* invests in the assets the subject of the *asset exemption*; and
 - (2) the *Asset Exemption Guidelines*.
- (c) The *AER* must, in accordance with the *distribution consultation procedures*, develop, maintain and *publish* guidelines (the *Asset Exemption Guidelines*) that set out:
 - (1) the approach the *AER* proposes to take when determining whether to grant an *asset exemption*; and
 - (2) the information the *AER* requires from a *Distribution Network Service Provider* (in addition to that set out in clause 6.4B.2(c)(1) to (4)) in order to assess a request for an *asset exemption*.
- (d) Nothing prevents the *AER* from *publishing* the *Asset Exemption Guidelines* in the same document as another guideline *published* under this Chapter.

6.4B.2 Exemption applications

- (a) A *Distribution Network Service Provider* may request an *asset exemption* from the *AER* in respect of a specific asset or class of asset by submitting a written request in accordance with this Chapter (an *exemption application*).
- (b) A *Distribution Network Service Provider* must have regard to the *Asset Exemption Guidelines* when preparing and submitting an *exemption application*.
- (c) An *exemption application* must include:
 - (1) details of the type of *asset exemption* which is being sought by the *Distribution Network Service Provider* under clause 6.4B.1(a);
 - (2) a description of the asset or class of asset in respect of which the proposed *asset exemption* would apply, including the location and anticipated or known cost of the proposed asset or class of asset;
 - (3) details of the *standard control services* that would be provided by the asset or class of asset in respect of which the proposed *asset exemption* would apply;
 - (4) the likely impacts on the development of competition in markets for energy related services if the *Distribution Network Service Provider* invests in the assets the subject of the *asset exemption*; and
 - (5) any additional information that must be submitted by a *Distribution Network Service Provider* under the *Asset Exemption Guidelines*.

6.5 Matters relevant to the making of building block determinations

6.5.1 Regulatory asset base

Nature of regulatory asset base

- (a) The regulatory asset base for a *distribution system* owned, controlled or operated by a *Distribution Network Service Provider* is the value of those assets that are used by the *Distribution Network Service Provider* to provide *standard control services*, but only to the extent that they are used to provide such services.

Preparation, publication and amendment of model for rolling forward regulatory asset base

- (b) The *AER* must, in accordance with the *distribution consultation procedures*, develop and *publish* a model for the roll forward of the regulatory asset base for *distribution systems*, referred to as the *roll forward model*.
- (c) The *AER* may, from time to time and in accordance with the *distribution consultation procedures*, amend or replace the *roll forward model*.

- (d) The *AER* must develop and *publish* the first *roll forward model* within 6 months after the commencement of this clause, and there must be such a model available at all times after that date.

Contents of roll forward model

- (e) The *roll forward model* must set out the method for determining the roll forward of the regulatory asset base for *distribution systems*:
 - (1) from the immediately preceding *regulatory control period* to the beginning of the first year of the subsequent *regulatory control period*, so as to establish the value of the regulatory asset base as at the beginning of the first *regulatory year* of that subsequent *regulatory control period*; and
 - (2) from one *regulatory year* in a *regulatory control period* to a subsequent *regulatory year* in that same *regulatory control period*, so as to establish the value of the regulatory asset base as at the beginning of that subsequent *regulatory year*;

under which:

- (3) the roll forward of the regulatory asset base from the immediately preceding *regulatory control period* to the beginning of the first *regulatory year* of a subsequent *regulatory control period* entails the value of the first mentioned regulatory asset base being adjusted for actual inflation, consistently with the method used for the indexation of the control mechanism (or control mechanisms) for *standard control services* during the preceding *regulatory control period*.

Other provisions relating to regulatory asset base

- (f) Other provisions relating to regulatory asset bases are set out in schedule 6.2.

6.5.2 Return on capital

Calculation of return on capital

- (a) The return on capital for each *regulatory year* must be calculated by applying a rate of return for the relevant *Distribution Network Service Provider* for that *regulatory year* that is determined in accordance with this clause 6.5.2 (the *allowed rate of return*) to the value of the regulatory asset base for the relevant *distribution system* as at the beginning of that *regulatory year* (as established in accordance with clause 6.5.1 and schedule 6.2).

Allowed rate of return

- (b) The *allowed rate of return* is to be determined such that it achieves the *allowed rate of return objective*.

- (c) The *allowed rate of return objective* is that the rate of return for a *Distribution Network Service Provider* is to be commensurate with the efficient financing costs of a benchmark efficient entity with a similar degree of risk as that which applies to the *Distribution Network Service Provider* in respect of the provision of *standard control services* (the *allowed rate of return objective*).
- (d) Subject to paragraph (b), the *allowed rate of return* for a *regulatory year* must be:
 - (1) a weighted average of the return on equity for the *regulatory control period* in which that *regulatory year* occurs (as estimated under paragraph (f)) and the return on debt for that *regulatory year* (as estimated under paragraph (h)); and
 - (2) determined on a nominal vanilla basis that is consistent with the estimate of the value of imputation credits referred to in clause 6.5.3.
- (e) In determining the *allowed rate of return*, regard must be had to:
 - (1) relevant estimation methods, financial models, market data and other evidence;
 - (2) the desirability of using an approach that leads to the consistent application of any estimates of financial parameters that are relevant to the estimates of, and that are common to, the return on equity and the return on debt; and
 - (3) any interrelationships between estimates of financial parameters that are relevant to the estimates of the return on equity and the return on debt.

Return on equity

- (f) The return on equity for a *regulatory control period* must be estimated such that it contributes to the achievement of the *allowed rate of return objective*.
- (g) In estimating the return on equity under paragraph (f), regard must be had to the prevailing conditions in the market for equity funds.

Return on debt

- (h) The return on debt for a *regulatory year* must be estimated such that it contributes to the achievement of the *allowed rate of return objective*.
- (i) The return on debt may be estimated using a methodology which results in either:
 - (1) the return on debt for each *regulatory year* in the *regulatory control period* being the same; or

- (2) the return on debt (and consequently the *allowed rate of return*) being, or potentially being, different for different *regulatory years* in the *regulatory control period*.
- (j) Subject to paragraph (h), the methodology adopted to estimate the return on debt may, without limitation, be designed to result in the return on debt reflecting:
 - (1) the return that would be required by debt investors in a benchmark efficient entity if it raised debt at the time or shortly before the making of the distribution determination for the *regulatory control period*;
 - (2) the average return that would have been required by debt investors in a benchmark efficient entity if it raised debt over an historical period prior to the commencement of a *regulatory year* in the *regulatory control period*; or
 - (3) some combination of the returns referred to in subparagraphs (1) and (2).
- (k) In estimating the return on debt under paragraph (h), regard must be had to the following factors:
 - (1) the desirability of minimising any difference between the return on debt and the return on debt of a benchmark efficient entity referred to in the *allowed rate of return objective*;
 - (2) the interrelationship between the return on equity and the return on debt;
 - (3) the incentives that the return on debt may provide in relation to capital expenditure over the *regulatory control period*, including as to the timing of any capital expenditure; and
 - (4) any impacts (including in relation to the costs of servicing debt across *regulatory control periods*) on a benchmark efficient entity referred to in the *allowed rate of return objective* that could arise as a result of changing the methodology that is used to estimate the return on debt from one *regulatory control period* to the next.
- (l) If the return on debt is to be estimated using a methodology of the type referred to in paragraph (i)(2) then a resulting change to the *Distribution Network Service Provider's annual revenue requirement* must be effected through the automatic application of a formula that is specified in the distribution determination.

Rate of Return Guidelines

- (m) The *AER* must, in accordance with the *distribution consultation procedures*, make and *publish* guidelines (the *Rate of Return Guidelines*).
- (n) The *Rate of Return Guidelines* must set out:

- (1) the methodologies that the *AER* proposes to use in estimating the *allowed rate of return*, including how those methodologies are proposed to result in the determination of a return on equity and a return on debt in a way that is consistent the *allowed rate of return objective*; and
 - (2) the estimation methods, financial models, market data and other evidence the *AER* proposes to take into account in estimating the return on equity, the return on debt and the value of imputation credits referred to in clause 6.5.3.
- (o) There must be *Rate of Return Guidelines* in force at all times after the date on which the *AER* first publishes the *Rate of Return Guidelines* under these *Rules*.
- (p) The *AER* must, in accordance with the *distribution consultation procedures*, review the *Rate of Return Guidelines*:
- (1) at intervals not exceeding five years for the first interval and three years for all subsequent intervals, with the first interval starting from the date that the first *Rate of Return Guidelines* are published under these *Rules*; and
 - (2) at the same time as it reviews the *Rate of Return Guidelines* made under clause 6A.6.2.
- (q) For the avoidance of doubt, nothing prevents the *AER* from publishing the *Rate of Return Guidelines* made under this clause 6.5.2 in the same document as the *Rate of Return Guidelines* made under clause 6A.6.2.

6.5.3 Estimated cost of corporate income tax

The estimated cost of corporate income tax of a *Distribution Network Service Provider* for each *regulatory year* (ETC_t) must be estimated in accordance with the following formula:

$$ETC_t = (ETI_t \times r_t) (1 - \gamma)$$

where:

ETI_t is an estimate of the taxable income for that *regulatory year* that would be earned by a benchmark efficient entity as a result of the provision of *standard control services* if such an entity, rather than the *Distribution Network Service Provider*, operated the business of the *Distribution Network Service Provider*, such estimate being determined in accordance with the *post-tax revenue model*;

r_t is the expected statutory income tax rate for that *regulatory year* as determined by the *AER*; and

γ is the value of imputation credits.

6.5.4 [Deleted]

6.5.5 Depreciation

- (a) The depreciation for each *regulatory year*:
 - (1) must be calculated on the value of the assets as included in the regulatory asset base, as at the beginning of that *regulatory year*, for the relevant *distribution system*; and
 - (2) must be calculated:
 - (i) providing such depreciation schedules conform with the requirements set out in paragraph (b), using the depreciation schedules for each asset or category of assets that are nominated in the relevant *Distribution Network Service Provider's building block proposal*; or
 - (ii) to the extent the depreciation schedules nominated in the *Distribution Network Service Provider's building block proposal* do not so conform, using the depreciation schedules determined for that purpose by the AER.
- (b) The depreciation schedules referred to in paragraph (a) must conform to the following requirements:
 - (1) the schedules must depreciate using a profile that reflects the nature of the assets or category of assets over the economic life of that asset or category of assets;
 - (2) the sum of the real value of the depreciation that is attributable to any asset or category of assets over the economic life of that asset or category of assets (such real value being calculated as at the time the value of that asset or category of assets was first included in the regulatory asset base for the relevant *distribution system*) must be equivalent to the value at which that asset or category of assets was first included in the regulatory asset base for the relevant *distribution system*;
 - (3) the economic life of the relevant assets and the depreciation methods and rates underpinning the calculation of depreciation for a given *regulatory control period* must be consistent with those determined for the same assets on a prospective basis in the distribution determination for that period.

6.5.6 Forecast operating expenditure

- (a) A *building block proposal* must include the total forecast operating expenditure for the relevant *regulatory control period* which the *Distribution Network Service Provider* considers is required in order to achieve each of the following (the *operating expenditure objectives*):

- (1) meet or manage the expected demand for *standard control services* over that period;
 - (2) comply with all applicable *regulatory obligations or requirements* associated with the provision of *standard control services*;
 - (3) to the extent that there is no applicable *regulatory obligation or requirement* in relation to:
 - (i) the quality, reliability or security of supply of *standard control services*; or
 - (ii) the reliability or security of the *distribution system* through the supply of *standard control services*,to the relevant extent:
 - (iii) maintain the quality, reliability and security of supply of *standard control services*; and
 - (iv) maintain the reliability and security of the *distribution system* through the supply of *standard control services*; and
 - (4) maintain the safety of the *distribution system* through the supply of *standard control services*.
- (b) The forecast of required operating expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal* must:
 - (1) comply with the requirements of any relevant *regulatory information instrument*;
 - (2) be for expenditure that is properly allocated to *standard control services* in accordance with the principles and policies set out in the *Cost Allocation Method* for the *Distribution Network Service Provider*; and
 - (3) include both:
 - (i) the total of the forecast operating expenditure for the relevant *regulatory control period*; and
 - (ii) the forecast operating expenditure for each *regulatory year* of the relevant *regulatory control period*.
- (c) The *AER* must accept the forecast of required operating expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal* if the *AER* is satisfied that the total of the forecast operating expenditure for the *regulatory control period* reasonably reflects each of the following (the *operating expenditure criteria*):

- (1) the efficient costs of achieving the *operating expenditure objectives*; and
 - (2) the costs that a prudent operator would require to achieve the *operating expenditure objectives*; and
 - (3) a realistic expectation of the demand forecast and cost inputs required to achieve the *operating expenditure objectives*.
- (d) If the *AER* is not satisfied as referred to in paragraph (c), it must not accept the forecast of required operating expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal*.
- (e) In deciding whether or not the *AER* is satisfied as referred to in paragraph (c), the *AER* must have regard to the following (the *operating expenditure factors*):
- (1) **[Deleted]**
 - (2) **[Deleted]**
 - (3) **[Deleted]**
 - (4) the most recent *annual benchmarking report* that has been *published* under rule 6.27 and the benchmark operating expenditure that would be incurred by an efficient *Distribution Network Service Provider* over the relevant *regulatory control period*;
 - (5) the actual and expected operating expenditure of the *Distribution Network Service Provider* during any preceding *regulatory control periods*;
 - (5A) the extent to which the operating expenditure forecast includes expenditure to address the concerns of electricity consumers as identified by the *Distribution Network Service Provider* in the course of its engagement with electricity consumers;
 - (6) the relative prices of operating and capital inputs;
 - (7) the substitution possibilities between operating and capital expenditure;
 - (8) whether the operating expenditure forecast is consistent with any incentive scheme or schemes that apply to the *Distribution Network Service Provider* under clauses 6.5.8 or 6.6.2 to 6.6.4;
 - (9) the extent the operating expenditure forecast is referable to arrangements with a person other than the *Distribution Network Service Provider* that, in the opinion of the *AER*, do not reflect arm's length terms;

- (9A) whether the operating expenditure forecast includes an amount relating to a project that should more appropriately be included as a *contingent project* under clause 6.6A.1(b);
- (10) the extent the *Distribution Network Service Provider* has considered, and made provision for, efficient and prudent *non-network options* ; and
- (11) any relevant final project assessment report (as defined in clause 5.10.2) *published* under clause 5.17.4(o), (p) or (s);
- (12) any other factor the *AER* considers relevant and which the *AER* has notified the *Distribution Network Service Provider* in writing, prior to the submission of its revised *regulatory proposal* under clause 6.10.3, is an *operating expenditure factor*.

6.5.7 Forecast capital expenditure

- (a) A *building block proposal* must include the total forecast capital expenditure for the relevant *regulatory control period* which the *Distribution Network Service Provider* considers is required in order to achieve each of the following (the *capital expenditure objectives*):
 - (1) meet or manage the expected demand for *standard control services* over that period;
 - (2) comply with all applicable *regulatory obligations or requirements* associated with the provision of *standard control services*;
 - (3) to the extent that there is no applicable *regulatory obligation or requirement* in relation to:
 - (i) the quality, reliability or security of supply of *standard control services*; or
 - (ii) the reliability or security of the *distribution system* through the supply of *standard control services*,to the relevant extent:
 - (iii) maintain the quality, reliability and security of supply of *standard control services*; and
 - (iv) maintain the reliability and security of the *distribution system* through the supply of *standard control services*; and
 - (4) maintain the safety of the *distribution system* through the supply of *standard control services*.
- (b) The forecast of required capital expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal* must:

- (1) comply with the requirements of any relevant *regulatory information instrument*;
 - (2) be for expenditure that is properly allocated to *standard control services* in accordance with the principles and policies set out in the *Cost Allocation Method* for the *Distribution Network Service Provider*;
 - (3) include both:
 - (i) the total of the forecast capital expenditure for the relevant *regulatory control period*; and
 - (ii) the forecast capital expenditure for each *regulatory year* of the relevant *regulatory control period*; and
 - (4) identify any forecast capital expenditure for the relevant *regulatory control period* that is for an option that has satisfied the *regulatory investment test for transmission* or the *regulatory investment test for distribution* (as the case may be); and
 - (5) not include *expenditure for a restricted asset*, unless:
 - (i) to the extent that any such expenditure includes an amount of unspent capital expenditure for a *contingent project* in accordance with paragraph (g), an *asset exemption* has been granted by the AER under clause 6.4B.1(a)(2) in respect of that asset or that class of asset for that *contingent project*;
 - (ii) to the extent that any such expenditure relates to a *positive pass through amount*, an *asset exemption* has been granted by the AER under clause 6.4B.1(a)(3) in respect of that asset or that class of asset for that *positive pass through amount*; or
 - (iii) otherwise, the *Distribution Network Service Provider* has submitted an *exemption application* with the *regulatory proposal* requesting an *asset exemption* under clause 6.4B.1(a)(1) for the *regulatory control period* in respect of that asset or class of asset.
- (c) The AER must:
- (1) subject to subparagraph (c)(2), accept the forecast of required capital expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal* if the AER is satisfied that the total of the forecast capital expenditure for the *regulatory control period* reasonably reflects each of the following (the *capital expenditure criteria*):
 - (i) the efficient costs of achieving the *capital expenditure objectives*;

- (ii) the costs that a prudent operator would require to achieve the *capital expenditure objectives*; and
 - (iii) a realistic expectation of the demand forecast and cost inputs required to achieve the *capital expenditure objectives*.
- (2) not accept the forecast of required capital expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal* if that forecast includes *expenditure for a restricted asset*, unless:
 - (i) to the extent that any such expenditure includes an amount of unspent capital expenditure for a *contingent project* in accordance with paragraph (g), an *asset exemption* has been granted by the *AER* under clause 6.4B.1(a)(2) in respect of that asset or that class of asset for that *contingent project*;
 - (ii) to the extent that any such expenditure relates to a *positive pass through amount*, an *asset exemption* has been granted by the *AER* under clause 6.4B.1(a)(3) in respect of that asset or that class of asset for that *positive pass through amount*; or
 - (iii) otherwise:
 - (A) that *Distribution Network Service Provider* has requested an *asset exemption* under subparagraph (b)(5) in respect of that asset or that class of asset; and
 - (B) the *AER* has granted that *asset exemption*.
- (d) If the *AER* is not satisfied as referred to in paragraph (c), it must not accept the forecast of required capital expenditure of a *Distribution Network Service Provider*.
- (e) In deciding whether or not the *AER* is satisfied as referred to in paragraph (c), the *AER* must have regard to the following (the *capital expenditure factors*):
 - (1) **[Deleted]**
 - (2) **[Deleted]**
 - (3) **[Deleted]**
 - (4) the most recent *annual benchmarking report* that has been *published* under rule 6.27 and the benchmark capital expenditure that would be incurred by an efficient *Distribution Network Service Provider* over the relevant *regulatory control period*;
 - (5) the actual and expected capital expenditure of the *Distribution Network Service Provider* during any preceding *regulatory control periods*;

- (5A) the extent to which the capital expenditure forecast includes expenditure to address the concerns of electricity consumers as identified by the *Distribution Network Service Provider* in the course of its engagement with electricity consumers;
- (6) the relative prices of operating and capital inputs;
- (7) the substitution possibilities between operating and capital expenditure;
- (8) whether the capital expenditure forecast is consistent with any incentive scheme or schemes that apply to the *Distribution Network Service Provider* under clauses 6.5.8A or 6.6.2 to 6.6.4;
- (9) the extent the capital expenditure forecast is referable to arrangements with a person other than the *Distribution Network Service Provider* that, in the opinion of the *AER*, do not reflect arm's length terms;
- (9A) whether the capital expenditure forecast includes an amount relating to a project that should more appropriately be included as a *contingent project* under clause 6.6A.1(b);
- (10) the extent the *Distribution Network Service Provider* has considered, and made provision for, efficient and prudent *non-network options* ;
- (11) any relevant final project assessment report (as defined in clause 5.10.2) *published* under clause 5.17.4(o), (p) or (s); and
- (12) any other factor the *AER* considers relevant and which the *AER* has notified the *Distribution Network Service Provider* in writing, prior to the submission of its revised *regulatory proposal* under clause 6.10.3, is a *capital expenditure factor*.

Forecast capital expenditure and contingent projects

- (f) Paragraphs (g) - (j) apply where:
 - (1) in a *regulatory control period* (the **first regulatory control period**), the *AER* determines under clause 6.6A.2(e)(1)(iii) that the likely completion date for a *contingent project* is a date which occurs in the immediately following *regulatory control period* (the **second regulatory control period**); and
 - (2) there is an unspent amount of capital expenditure for that *contingent project* under paragraph (g).
- (g) Subject to paragraphs (ga) and (j), a *Distribution Network Service Provider's regulatory proposal* for the second *regulatory control period* must include in the forecast of required capital expenditure referred to in paragraph (a) an amount of any unspent capital expenditure for each *contingent project* as described in subparagraph (f)(2), that equals the difference (if any) between:

- (1) the total capital expenditure for that *contingent project*, as determined by the *AER* in the first *regulatory control period* under clause 6.6A.2(e)(1)(ii); and
 - (2) the total of the capital expenditure actually incurred (or estimated capital expenditure for any part of the first *regulatory control period* for which actual capital expenditure is not available) in the first *regulatory control period* for that *contingent project*.
- (ga) For the purposes of calculating any unspent capital expenditure in accordance with paragraph (g), the total or estimate of capital expenditure referred to in subparagraph (g)(2) must not include *expenditure for a restricted asset*, unless:
- (1) the *Distribution Network Service Provider* has submitted an *exemption application* under clause 6.6A.1(a1) for the previous *regulatory control period*, which requested an *asset exemption* under clause 6.4B.1(a)(2) in respect of that asset or class of asset for that *contingent project*; and
 - (2) the *AER* has granted that *asset exemption*.
- (h) The *AER* must include in any forecast capital expenditure for the second *regulatory control period* which is accepted in accordance with paragraph (c) or substituted in accordance with clause 6.12.1(3)(ii) (as the case may be) the amount of any unspent capital expenditure calculated in accordance with paragraph (g).
- (i) Without limiting the requirement in paragraph (h), in deciding whether or not to accept the forecast of required capital expenditure of a *Distribution Network Service Provider* for the second *regulatory control period* in accordance with this clause 6.5.7, the *AER* must not:
- (1) assess the reasonableness of the amount of unspent capital expenditure for a *contingent project* referred to in paragraph (g) or the remaining period to which the *contingent project* applies;
 - (2) assess the reasonableness of the timing of the unspent capital expenditure within the remaining period for a *contingent project* referred to in paragraph (g) except as part of the assessment of the total forecast capital expenditure under paragraph (c); or
 - (3) take into account any amount which represents for a *contingent project* referred to in paragraph (g) the difference between:
 - (i) the amount representing the sum of the forecast capital expenditure for that *contingent project* for each year of the immediately preceding *regulatory control period* referred to in clause 6.6A.2(e)(1)(i); and
 - (ii) the total capital expenditure actually incurred (or estimated capital expenditure for any part of the preceding *regulatory*

control period for which actual capital expenditure is not available) in the immediately preceding *regulatory control period* for that *contingent project*.

- (j) A *regulatory proposal* in respect of the second *regulatory control period* must not include in the forecast of required capital expenditure referred to in paragraph (a) any capital expenditure for a *contingent project* for the first *regulatory control period*:
 - (1) to the extent that the capital expenditure was included in the amount of capital expenditure for that *contingent project* as determined in the first *regulatory control period* under clause 6.6A.2(e)(1)(i); and
 - (2) the capital expenditure actually incurred (or estimated capital expenditure for any part of the first *regulatory control period* for which actual capital expenditure is not available) in the first *regulatory control period* for that *contingent project* exceeded the capital expenditure referred to in subparagraph (1).

6.5.8 Efficiency benefit sharing scheme

- (a) The *AER* must, in accordance with the *distribution consultation procedures*, develop and *publish* an incentive scheme or schemes (*efficiency benefit sharing scheme*) that provide for a fair sharing between *Distribution Network Service Providers* and *Distribution Network Users* of:
 - (1) the efficiency gains derived from the operating expenditure of *Distribution Network Service Providers* for a *regulatory control period* being less than; and
 - (2) the efficiency losses derived from the operating expenditure of *Distribution Network Service Providers* for a *regulatory control period* being more than,

the forecast operating expenditure accepted or substituted by the *AER* for that *regulatory control period*.
- (b) An *efficiency benefit sharing scheme* may (but is not required to) be developed to cover efficiency gains and losses related to *distribution losses*.
- (c) In developing and implementing an *efficiency benefit sharing scheme*, the *AER* must have regard to:
 - (1) the need to ensure that benefits to electricity consumers likely to result from the scheme are sufficient to warrant any reward or penalty under the scheme for *Distribution Network Service Providers*;
 - (2) the need to provide *Distribution Network Service Providers* with a continuous incentive, so far as is consistent with economic efficiency, to reduce operating expenditure ;

- (3) the desirability of both rewarding *Distribution Network Service Providers* for efficiency gains and penalising *Distribution Network Service Providers* for efficiency losses;
 - (4) any incentives that *Distribution Network Service Providers* may have to capitalise expenditure; and
 - (5) the possible effects of the scheme on incentives for the implementation of *non-network options*.
- (d) The *AER* may, from time to time and in accordance with the *distribution consultation procedures*, amend or replace an *efficiency benefit sharing scheme*.

6.5.8A Capital expenditure sharing scheme

- (a) A *capital expenditure sharing scheme* is a scheme that provides *Distribution Network Service Providers* with an incentive to undertake efficient capital expenditure during a *regulatory control period*.
- (b) If the *AER* develops a *capital expenditure sharing scheme* in accordance with this clause, the *capital expenditure sharing scheme* must be consistent with the *capital expenditure incentive objective*.
- (c) In developing a *capital expenditure sharing scheme*, the *AER* must take into account the following principles (the *capital expenditure sharing scheme principles*):
 - (1) *Distribution Network Service Providers* should be rewarded or penalised for improvements or declines in efficiency of capital expenditure; and
 - (2) the rewards and penalties should be commensurate with the efficiencies or inefficiencies in capital expenditure, but a reward for efficient capital expenditure need not correspond in amount to a penalty for the same amount of inefficient capital expenditure.
- (d) In developing a *capital expenditure sharing scheme*, the *AER* must also take into account:
 - (1) the interaction of the scheme with other incentives that *Distribution Network Service Providers* may have in relation to undertaking efficient operating or capital expenditure; and
 - (2) the *capital expenditure objectives* and, if relevant, the *operating expenditure objectives*.
- (e) In deciding:
 - (1) whether to apply a *capital expenditure sharing scheme* to a *Distribution Network Service Provider* for a *regulatory control period*; and

- (2) the nature and details of any *capital expenditure sharing scheme* that is to apply to a *Distribution Network Service Provider* for a *regulatory control period*,

the *AER* must:

- (3) make that decision in a manner that contributes to the achievement of the *capital expenditure incentive objective*; and
- (4) take into account:
 - (i) both the *capital expenditure sharing scheme principles*, and the matters referred to in paragraph (d), as they apply to the *Distribution Network Service Provider*; and
 - (ii) the circumstances of the *Distribution Network Service Provider*.

6.5.9 The X factor

- (a) A *building block determination* is to include the X factor for each control mechanism for each *regulatory year* of the *regulatory control period*.
- (b) The X factor:
 - (1) must be set by the *AER* with regard to the *Distribution Network Service Provider's total revenue requirement* for the *regulatory control period*; and
 - (2) must be such as to minimise, as far as reasonably possible, variance between expected revenue for the last *regulatory year* of the *regulatory control period* and the *annual revenue requirement* for that last *regulatory year*; and
 - (3) must conform with whichever of the following requirements is applicable:
 - (i) if the control mechanism relates generally to *standard control services* – the X factor must be designed to equalise (in terms of net present value) the revenue to be earned by the *Distribution Network Service Provider* from the provision of *standard control services* over the *regulatory control period* with the provider's *total revenue requirement* for the *regulatory control period*;
 - (ii) if there are separate control mechanisms for different *standard control services* – the X factor for each control mechanism must be designed to equalise (in terms of net present value) the revenue to be earned by the *Distribution Network Service Provider* from the provision of *standard control services* to which the control mechanism relates over the *regulatory control period* with the portion of the provider's *total revenue*

requirement for the regulatory control period attributable to those services.

- (c) There may be different X factors:
 - (1) for different *regulatory years* of the *regulatory control period*; and
 - (2) if there are 2 or more control mechanisms – for each control mechanism.

6.5.10 Pass through events

- (a) A *building block proposal* may include a proposal as to the events that should be defined as *pass through events* under clause 6.6.1(a1)(5) having regard to the *nominated pass through event considerations*.
- (b) In determining whether to accept the pass through events nominated by a *Distribution Network Service Provider* in its *building block proposal* under paragraph (a), the AER must take into account the *nominated pass through event considerations*.

6.6 Adjustments after making of building block determination.

6.6.1 Cost pass through

- (a1) Any of the following is a *pass through event* for a distribution determination:
 - (1) a *regulatory change event*;
 - (2) a *service standard event*;
 - (3) a *tax change event*;
 - (4) a *retailer insolvency event*; and
 - (5) any other event specified in a distribution determination as a *pass through event* for the determination.
- (a) If a *positive change event* occurs, a *Distribution Network Service Provider* may seek the approval of the AER to pass through to *Distribution Network Users* a *positive pass through amount*.
- (b) If a *negative change event* occurs, the AER may require the *Distribution Network Service Provider* to pass through to *Distribution Network Users* a *negative pass through amount* as determined by the AER under paragraph (g).

Positive pass through

- (c) To seek the approval of the AER to pass through a *positive pass through amount*, a *Distribution Network Service Provider* must submit to the AER,

within 90 *business days* of the relevant *positive change event* occurring, a written statement which specifies:

- (1) the details of the *positive change event*;
 - (2) the date on which the *positive change event* occurred;
 - (3) the *eligible pass through amount* in respect of that *positive change event*;
 - (4) the *positive pass through amount* the *Distribution Network Service Provider* proposes in relation to the *positive change event*;
 - (5) the amount of the *positive pass through amount* that the *Distribution Network Service Provider* proposes should be passed through to *Distribution Network Users* in the *regulatory year* in which, and each *regulatory year* after that in which, the *positive change event* occurred;
 - (6) evidence:
 - (i) of the actual and likely increase in costs referred to in subparagraph (3);
 - (ii) that such costs occur solely as a consequence of the *positive change event*; and
 - (iii) in relation to a *retailer insolvency event*, of :
 - (A) the amount to which the *Distribution Network Service Provider* is entitled under any relevant *credit support*;
 - (B) the maximum amount of *credit support* (if any) that the *Distribution Network Service Provider* was entitled to request the *retailer* to provide under the *credit support rules*; and
 - (C) any amount that the *Distribution Network Service Provider* is likely to receive on a winding-up of the *retailer*; and
 - (7) such other information as may be required under any relevant *regulatory information instrument*.
- (c1) The *positive pass through amount* proposed by the *Distribution Network Service Provider* under subparagraph (c)(4) must not, in whole or in part, be in respect of *expenditure for a restricted asset*, unless the *Distribution Network Service Provider* has submitted an *exemption application* with the statement under paragraph (c), which requests an *asset exemption* under clause 6.4B.1(a)(3) in respect of that asset or class of asset for the *positive pass through amount*.

- (d) If the *AER* determines that a *positive change event* has occurred in respect of a statement under paragraph (c), the *AER* must:
 - (1) determine:
 - (i) the *approved pass through amount*; and
 - (ii) the amount of that *approved pass through amount* that should be passed through to *Distribution Network Users* in the *regulatory year* in which, and each *regulatory year* after that in which, the *positive change event* occurred,taking into account the matters referred to in paragraph (j); and
 - (2) determine whether or not to grant the *asset exemption* requested under paragraph (c1).
- (d1) The *AER* must *publish*:
 - (1) the reasons for its determination under subparagraph (d)(2); and
 - (2) any content required under clause 6.2.8(c)(2),at the same time as making its determination under subparagraph (d)(1).
- (d2) The *AER* must not determine an *approved pass through amount* that is, in whole or in part, in respect of *expenditure for a restricted asset*, unless:
 - (1) the *Distribution Network Service Provider* has requested an *asset exemption* under paragraph (c1) in respect of that asset or that class of asset for the *positive pass through amount*; and
 - (2) the *AER* has granted that *asset exemption* under subparagraph (d)(2).
- (e) Subject to paragraph (k1), if the *AER* does not make the determinations referred to in paragraph (d) within 40 *business days* from the later of the date it receives the *Distribution Network Service Provider's* statement and accompanying evidence under paragraph (c), and the date it receives any additional information required under paragraph (e1), then, on the expiry of that period, the *AER* is taken to have determined that:
 - (1) the *positive pass through amount* as proposed in the *Distribution Network Service Provider's* statement under paragraph (c) is the *approved pass through amount* in respect of that *positive change event*;
 - (2) the amount of that *positive pass through amount* that the *Distribution Network Service Provider* proposes in its statement under paragraph(c) should be passed through to *Distribution Network Users* in the *regulatory year* in which, and each *regulatory year* after that in which, the *positive change event* occurred, is the amount that should be so passed through in each such *regulatory year*; and

- (3) the *asset exemption* requested under paragraph (c1) is granted.
- (e1) A *Distribution Network Service Provider* must provide the *AER* with such additional information as the *AER* requires for the purpose of making a determination under paragraph (d) within the time specified by the *AER* in a notice provided to the *Distribution Network Service Provider* by the *AER* for that purpose.

Negative pass through

- (f) A *Distribution Network Service Provider* must submit to the *AER*, within 90 *business days* of becoming aware of the occurrence of a *negative change event* for the *Distribution Network Service Provider*, a written statement which specifies:
 - (1) the details of the *negative change event* concerned;
 - (2) the date the *negative change event* occurred;
 - (3) the costs in the provision of *direct control services* that the *Distribution Network Service Provider* has saved and is likely to save as a result of the *negative change event* until:
 - (i) unless subparagraph (ii) applies – the end of the *regulatory control period* in which the *negative change event* occurred; or
 - (ii) if the distribution determination for the *regulatory control period* following that in which the *negative change event* occurred does not make any allowance for the pass through of those cost savings - the end of the *regulatory control period* following that in which the *negative change event* occurred;
 - (4) the aggregate amount of those saved costs that the *Distribution Network Service Provider* proposes should be passed through to *Distribution Network Users*;
 - (5) the amount of the costs referred to in subparagraph (4) the *Distribution Network Service Provider* proposes should be passed through to *Distribution Network Users* in the *regulatory year* in which, and each *regulatory year* after that in which, the *negative change event* occurred; and
 - (6) such other information as may be required under any relevant *regulatory information instrument*.
- (f1) If the occurrence of the *negative change event* is not notified by the *Distribution Network Service Provider* to the *AER* under paragraph (f) then, as soon as is reasonably practicable and before making a determination referred to in paragraph (g), the *AER* must notify the *Distribution Network Service Provider* of the occurrence of that *negative change event*.

- (g) If a *negative change event* occurs (whether or not the occurrence of that *negative change event* is notified by the *Distribution Network Service Provider* to the *AER* under paragraph (f)) and the *AER* determines to impose a requirement on the provider in relation to that *negative change event* as described in paragraph (b), the *AER* must determine:
 - (1) the *required pass through amount*; and
 - (2) taking into account the matters referred to in paragraph (j):
 - (i) how much of that *required pass through amount* should be passed through to *Distribution Network Users* (the "*negative pass through amount*"); and
 - (ii) the amount of that *negative pass through amount* that should be passed through to *Distribution Network Users* in the *regulatory year* in which, and each *regulatory year* after that in which, the *negative change event* occurred.
- (g1) Subject to paragraph (k1), if the *AER* does not make the determinations referred to in paragraph (g) within 40 *business days* from:
 - (1) where the *Distribution Network Service Provider* notifies the *AER* of the occurrence of the *negative change event* under paragraph (f) - the later of the date the *AER* receives the *Distribution Network Service Provider's* statement under paragraph (f) and the date the *AER* receives any information required by the *AER* under paragraph (h); or
 - (2) where the *Distribution Network Service Provider* does not notify the *AER* of the occurrence of the *negative change event* under paragraph (f) – the later of the date the *AER* notifies the *Distribution Network Service Provider* under paragraph (g1) and the date the *AER* receives any information required by the *AER* under paragraph (h),

then the *AER* is taken to have determined that the *required pass through amount* is zero.

- (h) A *Distribution Network Service Provider* must provide the *AER* with such information as the *AER* requires for the purpose of making a determination under paragraph (g) within the time specified by the *AER* in a notice provided to the *Distribution Network Service Provider* by the *AER* for that purpose.

Consultation

- (i) Before making a determination under paragraph (d) or (g), the *AER* may consult with the relevant *Distribution Network Service Provider* and such other persons as the *AER* considers appropriate, on any matters arising out of the relevant *pass through event* the *AER* considers appropriate.

Relevant factors

- (j) In making a determination under paragraph (d) or (g) in respect of a *Distribution Network Service Provider*, the AER must take into account:
- (1) the matters and proposals set out in any statement given to the AER by the *Distribution Network Service Provider* under paragraph (c) or (f); and
 - (2) in the case of a *positive change event*, the increase in costs in the provision of *direct control services* that, as a result of the *positive change event*, the *Distribution Network Service Provider* has incurred and is likely to incur until:
 - (i) unless subparagraph(ii) applies – the end of the *regulatory control period* in which the *positive change event* occurred; or
 - (ii) if the distribution determination for the *regulatory control period* following that in which the *positive change event* occurred does not make any allowance for the recovery of that increase in costs – the end of the *regulatory control period* following that in which the *positive change event* occurred;
 - (2A) in the case of a *negative change event*, the costs in the provision of *direct control services* that, as a result of the *negative change event*, the *Distribution Network Service Provider* has saved and is likely to save until:
 - (i) unless subparagraph(ii) applies – the end of the *regulatory control period* in which the *negative change event* occurred; or
 - (ii) if the distribution determination for the *regulatory control period* following that in which the *negative change event* occurred does not make any allowance for the pass through of those cost savings to *Distribution Network Users* – the end of the *regulatory control period* following that in which the *negative change event* occurred;
 - (3) in the case of a *positive change event*, the efficiency of the *Distribution Network Service Provider's* decisions and actions in relation to the risk of the *positive change event*, including whether the *Distribution Network Service Provider* has failed to take any action that could reasonably be taken to reduce the magnitude of the *eligible pass through amount* in respect of that *positive change event* and whether the *Distribution Network Service Provider* has taken or omitted to take any action where such action or omission has increased the magnitude of the amount in respect of that *positive change event*;
 - (4) the time cost of money based on the *allowed rate of return* for the *Distribution Network Service Provider* for the *regulatory control period* in which the *pass through event* occurred;

- (5) the need to ensure that the *Distribution Network Service Provider* only recovers any actual or likely increment in costs under this paragraph (j) to the extent that such increment is solely as a consequence of a *pass through event*;
- (6) in the case of a *tax change event*, any change in the way another *tax* is calculated, or the removal or imposition of another *tax*, which, in the *AER's* opinion, is complementary to the *tax change event* concerned;
- (7) whether the costs of the *pass through event* have already been factored into the calculation of the *Distribution Network Service Provider's annual revenue requirement* for the *regulatory control period* in which the *pass through event* occurred or will be factored into the calculation of the *Distribution Network Service Provider's annual revenue requirement* for a subsequent *regulatory control period*;
- (7A) the extent to which the costs that the *Distribution Network Service Provider* has incurred and is likely to incur are the subject of a previous determination made by the *AER* under this clause 6.6.1; and
- (8) any other factors that the *AER* considers relevant.

Extension of time limits

- (k) The *AER* must, by written notice to a *Distribution Network Service Provider*, extend a time limit fixed in paragraph (c) or (f) if the *AER* is satisfied that the difficulty of assessing or quantifying the effect of the relevant *pass through event* justifies the extension.
- (k1) If the *AER* is satisfied that the making of a determination under paragraph (d) or (g) involves issues of such complexity or difficulty that the time limit fixed in paragraph (e) or (g1) should be extended, the *AER* may extend that time limit by a further period of up to 60 *business days*, provided that it gives written notice to the *Distribution Network Service Provider* of that extension not later than 10 *business days* before the expiry of that time limit.
- (k2) If the *AER* extends a time limit under paragraph (k1), it must make available on its website a notice of that extension as soon as is reasonably practicable.
- (k3) Subject to paragraph (k6), if the *AER* gives a written notice to the *Distribution Network Service Provider* stating that it requires information from an *Authority* in order to make a determination under paragraph (d) or (g) then, for the purpose of calculating elapsed time, the period between when the *AER* gives that notice to the *Distribution Network Service Provider* and when the *AER* receives that information from that *Authority* is to be disregarded.
- (k4) Subject to paragraph (k6), if the *AER* gives a written notice to the *Distribution Network Service Provider* stating that, in order to make a determination under paragraph (d) or (g), it requires information that it anticipates will be made publicly available by a judicial body or royal commission then, for the purpose of calculating elapsed time, the period

between when the *AER* gives that notice to the *Distribution Network Service Provider* and when that information is made publicly available is to be disregarded.

- (k5) Where the *AER* gives a notice to the *Distribution Network Service Provider* under paragraph (k3) or (k4), it must:
- (1) as soon as is reasonably practicable make available on its website a notice stating when the period referred to in paragraph (k3) or (k4), as the case may be, has commenced;
 - (2) as soon as is reasonably practicable make available on its website a notice stating when the period referred to in paragraph (k3) or (k4), as the case may be, has ended; and
 - (3) if the information specified in that notice is required from an *Authority*, promptly request that information from the relevant *Authority*.
- (k6) Paragraphs (k3) and (k4) do not apply if the *AER* gives the notice specified in those paragraphs to the *Distribution Network Service Provider* later than 10 *business days* before the expiry of the time limit fixed in paragraphs (e) or (g1).

Retailer insolvency event

- (l) For the purposes of calculating the *eligible pass through amount* in relation to a *positive change event* which is a *retailer insolvency event*, the increase in costs is the *retailer insolvency costs* excluding:
- (i) any amount recovered or recoverable from a *retailer* or a guarantor of a *retailer* under any relevant *credit support*; and
 - (ii) amounts that the *Distribution Network Service Provider* is likely to receive on a winding-up of the *retailer*; and
 - (iii) any costs that are recoverable under a *RoLR cost recovery scheme distributor payment determination*.
- (m) The amount the *AER* determines should be passed through to *Distribution Network Users* in respect of a *retailer insolvency event* must be taken to be a cost that can be passed through and not a revenue impact of the event.

6.6.1A Reporting on jurisdictional schemes

- (a) If during a *regulatory control period*:
- (1) a scheme becomes a *jurisdictional scheme*; or
 - (2) a *Distribution Network Service Provider* first becomes subject to *jurisdictional scheme obligations* under a *jurisdictional scheme*; and

- (3) the relevant *jurisdictional scheme* is not an *approved jurisdictional scheme*,

then a *Distribution Network Service Provider* may request the *AER* to determine how the *Distribution Network Service Provider* is to report to the *AER* on its recovery of *jurisdictional scheme amounts* in respect of that scheme for each *regulatory year* of the *regulatory control period* and on the adjustments to be made to subsequent *pricing proposals* to account for over or under recovery of those amounts.

- (b) To make a request under paragraph (a), a *Distribution Network Service Provider* must submit to the *AER*, as soon as practicable after the event referred to in subparagraph (a)(1) or (2), a written statement which specifies:
 - (1) the name of the relevant *jurisdictional scheme*;
 - (2) the date of the event referred to in subparagraph (a)(1) or (2);
 - (3) details of how the *Distribution Network Service Provider* proposes to:
 - (i) estimate the *jurisdictional scheme amounts* for the relevant *jurisdictional scheme* for the purposes of clause 6.18.7A(b);
 - (ii) carry out any adjustments to *jurisdictional scheme amounts* for the relevant *jurisdictional scheme* for the purposes of clause 6.18.7A(b); and
 - (iii) report to the *AER* on the recovery process under clause 6.18.7A (a) to (c).
- (c) The *AER* must as soon as practicable after receiving a statement under paragraph (b), *publish* the statement.
- (d) Before making a determination under paragraph (e), the *AER* may consult with the relevant *Distribution Network Service Provider* and such other persons as the *AER* considers appropriate, on any matters arising out of the statement the *AER* considers appropriate.
- (e) Within 60 *business days* of receiving the statement under paragraph (b), the *AER* must make a determination on how the *Distribution Network Service Provider* is to report to the *AER* on its recovery of *jurisdictional scheme amounts* for the relevant *jurisdictional scheme* for each *regulatory year* of the *regulatory control period* and on the adjustments to be made to subsequent *pricing proposals* to account for over or under recovery of those amounts.
- (f) If the *AER* does not make the determination referred to in paragraph (e) within 60 *business days* of receiving the statement under paragraph (b) then, on expiry of that period, the *AER* is taken to have approved the process proposed in the *Distribution Network Service Provider's* statement.

6.6.2 Service target performance incentive scheme

- (a) The AER must, in accordance with the *distribution consultation procedures*, develop and *publish* an incentive scheme or schemes (*service target performance incentive scheme*) to provide incentives (which may include targets) for *Distribution Network Service Providers* to maintain and improve performance.
- (b) In developing and implementing a *service target performance incentive scheme*, the AER:
 - (1) must consult with the authorities responsible for the administration of relevant *jurisdictional electricity legislation*; and
 - (2) must ensure that service standards and service targets (including guaranteed service levels) set by the scheme do not put at risk the *Distribution Network Service Provider's* ability to comply with relevant service standards and service targets (including guaranteed service levels) as specified in *jurisdictional electricity legislation*; and

Note:

A *service target performance incentive scheme* operates concurrently with any average or minimum service standards and guaranteed service level schemes that apply to the *Distribution Network Service Provider* under *jurisdictional electricity legislation*.

- (3) must take into account:
 - (i) the need to ensure that benefits to electricity consumers likely to result from the scheme are sufficient to warrant any reward or penalty under the scheme for *Distribution Network Service Providers*; and
 - (ii) any *regulatory obligation or requirement* to which the *Distribution Network Service Provider* is subject; and
 - (iii) the past performance of the *distribution network*; and
 - (iv) any other incentives available to the *Distribution Network Service Provider* under the *Rules* or a relevant distribution determination; and
 - (v) the need to ensure that the incentives are sufficient to offset any financial incentives the *Distribution Network Service Provider* may have to reduce costs at the expense of service levels; and
 - (vi) the willingness of the customer or end user to pay for improved performance in the delivery of services; and
 - (vii) the possible effects of the scheme on incentives for the implementation of *non-network options*; and
- (4) must have regard to the *Distribution Reliability Measures Guidelines*.

- (c) The *AER* may, from time to time and in accordance with the *distribution consultation procedures*, amend or replace any scheme that is developed and *published* under this clause.

Note:

A *Distribution Network Service Provider* is not precluded from entering into a contract with a third party (such as a network support service provider) under which the benefits of a *service target performance incentive scheme* are passed on to the third party, or the third party is required to indemnify the provider for penalties to which the provider becomes liable under the scheme.

6.6.3 Demand management incentive scheme

- (a) The *AER* must develop a *demand management incentive scheme* consistent with the *demand management incentive scheme objective*.
- (b) The objective of the *demand management incentive scheme* is to provide *Distribution Network Service Providers* with an incentive to undertake efficient expenditure on relevant *non-network options* relating to demand management (the *demand management incentive scheme objective*).
- (c) In developing, and applying, any *demand management incentive scheme*, the *AER* must take into account the following:
 - (1) the scheme should be applied in a manner that contributes to the achievement of the *demand management incentive scheme objective*;
 - (2) the scheme should reward *Distribution Network Service Providers* for implementing relevant *non-network options* that deliver net cost savings to *retail customers*;
 - (3) the scheme should balance the incentives between expenditure on *network options* and *non-network options* relating to demand management. In doing so, the *AER* may take into account the net economic benefits delivered to all those who produce, consume and transport electricity in the *market* associated with implementing relevant *non-network options*;
 - (4) the level of the incentive:
 - (i) should be reasonable, considering the long term benefit to *retail customers*;
 - (ii) should not include costs that are otherwise recoverable from any another source, including under a relevant distribution determination; and
 - (iii) may vary by *Distribution Network Service Provider* and over time;
 - (5) penalties should not be imposed on *Distribution Network Service Providers* under any scheme;

- (6) the incentives should not be limited by the length of a *regulatory control period*, if such limitations would not contribute to the achievement of the *demand management incentive scheme objective*; and
- (7) the possible interaction between the scheme and:
 - (i) any other incentives available to the *Distribution Network Service Provider* in relation to undertaking efficient expenditure on, or implementation of, relevant *non-network options*;
 - (ii) particular control mechanisms and their effect on a *Distribution Network Service Provider's* available incentives referred to in sub-paragraph (i); and
 - (iii) meeting any *regulatory obligation or requirement*.
- (d) The *AER*:
 - (1) must develop and *publish* the scheme; and
 - (2) may, from time to time, amend or replace the scheme developed and *published* under this clause,

in accordance with the *distribution consultation procedures*.

6.6.3A Demand management innovation allowance mechanism

- (a) The *AER* must develop a *demand management innovation allowance mechanism* consistent with the *demand management innovation allowance objective*.
- (b) The objective of the *demand management innovation allowance mechanism* is to provide *Distribution Network Service Providers* with funding for research and development in demand management projects that have the potential to reduce long term *network costs* (the *demand management innovation allowance objective*).
- (c) In developing and applying any *demand management innovation allowance mechanism*, the *AER* must take into account the following:
 - (1) the mechanism should be applied in a manner that contributes to the achievement of the *demand management innovation allowance objective*;
 - (2) demand management projects, the subject of the allowance, should:
 - (i) have the potential to deliver ongoing reductions in demand or peak demand; and

- (ii) be innovative and not be otherwise efficient and prudent *non-network options* that a *Distribution Network Service Providers* should have provided for in its *regulatory proposal*;
- (3) the level of the allowance:
 - (i) should be reasonable, considering the long term benefit to *retail customers*;
 - (ii) should only provide funding that is not available from any another source, including under a relevant distribution determination; and
 - (iii) may vary by *Distribution Network Service Provider* and over time;
- (4) the allowance may fund demand management projects which occur over a period longer than a *regulatory control period*.
- (d) Any mechanism developed and applied by the *AER* must require *Distribution Network Service Providers* to *publish* reports on the nature and results of demand management projects the subject of the allowance.
- (e) The *AER*:
 - (1) must develop and *publish* the mechanism; and
 - (2) may, from time to time, amend or replace any mechanism developed and *published* under this clause,

in accordance with the *distribution consultation procedures*.

6.6.4 Small-scale incentive scheme

- (a) The *AER* may, in accordance with the *distribution consultation procedures*, develop and *publish* an incentive scheme or schemes (*small-scale incentive scheme*) that provides *Distribution Network Service Providers* with incentives to provide *standard control services* in a manner that contributes to the achievement of the *national electricity objective*.
- (b) In developing and applying a *small-scale incentive scheme*, the *AER* must have regard to the following matters:
 - (1) *Distribution Network Service Providers* should be rewarded or penalised for efficiency gains or losses in respect of their *distribution systems*;
 - (2) the rewards and penalties should be commensurate with the efficiency gains or efficiency losses in respect of a *distribution system*, but a reward for efficiency gains need not correspond in amount to a penalty for efficiency losses;

- (3) the benefits to electricity consumers that are likely to result from efficiency gains in respect of a *distribution system* should warrant the rewards provided under the scheme, and the detriments to electricity consumers that are likely to result from efficiency losses in respect of a *distribution system* should warrant the penalties provided under the scheme;
 - (4) the interaction of the scheme with other incentives that *Distribution Network Service Providers* may have under the *Rules*; and
 - (5) the *capital expenditure objectives* and the *operating expenditure objectives*.
- (c) The *AER* may, from time to time and in accordance with the *distribution consultation procedures*, amend or replace any *small-scale incentive scheme*.
- (d) Where the *AER* applies a *small-scale incentive scheme* to a *Distribution Network Service Provider* for a *regulatory control period*:
- (1) the aggregate rewards or penalties for a *regulatory year* in that *regulatory control period* that are provided or imposed under that scheme and any other *small-scale incentive schemes* that apply to that *Distribution Network Service Provider* must not exceed 0.5% of the *annual revenue requirement* for the *Distribution Network Service Provider* for that *regulatory year* unless the *Distribution Network Service Provider* consents to the contrary, in which case that aggregate must not exceed 1% of the *annual revenue requirement* for the *Distribution Network Service Provider* for that *regulatory year*; and
 - (2) the *small-scale incentive scheme* must cease to provide rewards or impose penalties in respect of a *regulatory year* after the expiry of such a period as is determined by the *AER*, being a period that is not more than two *regulatory control periods* after the commencement of that scheme.
- (e) Notwithstanding anything else contained in this clause, the *AER* may require a *Distribution Network Service Provider* to participate in a trial of a *small-scale incentive scheme* under which, for the duration of that trial, the *Distribution Network Service Provider* is not required to bear any penalty and is not entitled to earn any reward.

6.6.5 Reopening of distribution determination for capital expenditure

- (a) Subject to paragraph (b), a *Distribution Network Service Provider* may, during a *regulatory control period*, apply to the *AER* to revoke and substitute a distribution determination that applies to it where:
- (1) an event that is beyond the reasonable control of the *Distribution Network Service Provider* has occurred during that *regulatory control*

period and the occurrence of that event during that period (or of an event of a similar kind) could not reasonably have been foreseen by the *Distribution Network Service Provider* at the time of the making of the distribution determination ('**the event**');

- (2) no forecast capital expenditure was accepted or substituted by the *AER* for that period under clauses 6.5.7(c) or 6.12.1(3)(ii) (as the case may be) in relation to the event that has occurred;
- (3) the *Distribution Network Service Provider* proposes to undertake capital expenditure to rectify the adverse consequences of the event;
- (4) the total of the capital expenditure required during the *regulatory control period* to rectify the adverse consequences of the event:
 - (i) exceeds 5% of the value of the regulatory asset base for the relevant *Distribution Network Service Provider* for the first year of the relevant *regulatory control period*;
 - (ii) is such that, if undertaken, it is reasonably likely (in the absence of any other reduction in capital expenditure) to result in the total actual capital expenditure for that *regulatory control period* exceeding the total of the forecast capital expenditure for that *regulatory control period* as accepted or substituted by the *AER* in accordance with clauses 6.5.7(c) or 6.12.1(3)(ii) (as the case may be);
- (5) the *Distribution Network Service Provider* can demonstrate that it is not able to reduce capital expenditure in other areas to avoid the consequence referred to in subparagraph (a)(4)(ii) without materially adversely affecting the *reliability* and security of the relevant *distribution system*;
- (6) a failure to rectify the adverse consequences of the event would be likely to materially adversely affect the *reliability* and security of the relevant *distribution system*; and
- (7) the event is not a *pass through event* or a *contingent project*.

In this paragraph (a), a reference to an event includes a series of events or a state of affairs, which may include a greater than anticipated increase in demand.

- (b) An application referred to in paragraph (a) must not be made within 90 *business days* prior to the end of a *regulatory year*.
- (b1) The capital expenditure that the *Distribution Network Service Provider* proposes to undertake for the purposes of subparagraph (a)(3) must not include *expenditure for a restricted asset*, unless that *Distribution Network Service Provider* has submitted an *exemption application* with the application referred to in paragraph (a), which requests an *asset exemption*

under clause 6.4B.1(a)(4) for the *regulatory control period* in respect of that asset or class of asset.

- (c) Following its receipt of an application made in accordance with paragraphs (a) and (b) and an *exemption application* (if any) made in accordance with paragraph (b1), the *AER* must:
 - (1) consult with the *Distribution Network Service Provider* and such other persons as it considers appropriate in relation to the applications; and
 - (2) make its decision on the application made in accordance with paragraphs (a) and (b) and the *exemption application* (if any) within 40 *business days* from the later of the date the *AER* receives the applications and the date the *AER* receives any information required by the *AER* under paragraph (g).
- (c1) The *AER* must *publish*:
 - (1) the reasons for its decision on the *exemption application* under subparagraph (c)(2); and
 - (2) any content required under clause 6.2.8(c)(2),at the same time as making its decision on the application made under paragraph (a).
- (d) The *AER* must, and must only, revoke a distribution determination following an application made in accordance with paragraphs (a) and (b) if the *AER* is satisfied of each of the matters referred to in paragraph (a).
- (e) If the *AER* revokes a distribution determination under paragraph (d), the *AER* must make a new distribution determination in substitution for the revoked determination to apply for the remainder of the *regulatory control period* for which the revoked determination was to apply.
- (f) The substituted distribution determination must only vary from the revoked distribution determination to the extent necessary:
 - (1) to adjust the forecast capital expenditure for that *regulatory control period* to accommodate the amount of such additional capital expenditure as the *AER* determines is appropriate (in which case the amount of that adjustment will be taken to be accepted by the *AER* under clause 6.5.7(c)); and
 - (2) to reflect the effect of any resultant increase in forecast capital expenditure on:
 - (i) the forecast operating expenditure for the remainder of the *regulatory control period*;
 - (ii) the *annual revenue requirement* for each *regulatory year* in the remainder of the *regulatory control period*; and

- (iii) the X factor for each of the remaining *regulatory years* of the *regulatory control period*.
- (f1) The AER must not include an adjustment for additional expenditure under subparagraph (f)(1) that includes *expenditure for a restricted asset*, unless:
 - (1) the *Distribution Network Service Provider* has requested an *asset exemption* under paragraph (b1) for the *regulatory control period* in respect of that asset or that class of asset; and
 - (2) the AER has granted that *asset exemption* under paragraph (c).
- (g) A *Distribution Network Service Provider* must provide the AER with such additional information as the AER requires for the purpose of making a decision on an application made by that *Distribution Network Service Provider* under paragraph (a) within the time specified by the AER in a notice provided to the *Distribution Network Service Provider* by the AER for that purpose.

Extension of time limit

- (h) If the AER is satisfied that the revocation and substitution of a distribution determination under paragraphs (d) and (e) involves issues of such complexity or difficulty that the time limit fixed in subparagraph (c)(2) should be extended, the AER may extend that time limit by a further period of up to 60 *business days*, provided that it gives written notice to the *Distribution Network Service Provider* of that extension not later than 10 *business days* before the expiry of that time limit.
- (i) If the AER extends the time limit under paragraph (h), it must make available on its website a notice of that extension as soon as is reasonably practicable.
- (j) Subject to paragraph (11), if the AER gives a written notice to the *Distribution Network Service Provider* stating that it requires information from an *Authority* in order to make a decision on an application made by the *Distribution Network Service Provider* under paragraph (a) then, for the purpose of calculating elapsed time, the period between when the AER gives that notice to the *Distribution Network Service Provider* and when the AER receives that information from that *Authority* is to be disregarded.
- (k) Subject to paragraph (11), if the AER gives a written notice to the *Distribution Network Service Provider* stating that, in order to make a decision on an application made by the *Distribution Network Service Provider* under paragraph (a), it requires information that it anticipates will be made publicly available by a judicial body or royal commission then, for the purpose of calculating elapsed time, the period between when the AER gives that notice to the *Distribution Network Service Provider* and when that information is made publicly available is to be disregarded.
- (l) Where the AER gives a notice to the *Distribution Network Service Provider* under paragraph (j) or (k), it must:

- (1) as soon as is reasonably practicable make available on its website a notice stating when the period referred to in paragraph (j) or (k), as the case may be, has commenced;
 - (2) as soon as is reasonably practicable make available on its website a notice stating when the period referred to in paragraph (j) or (k), as the case may be, has ended; and
 - (3) if the information specified in that notice is required from an *Authority*, promptly request that information from the relevant *Authority*.
- (11) Paragraphs (j) and (k) do not apply if the *AER* gives the notice specified in those paragraphs to the *Distribution Network Service Provider* later than 10 *business days* before the expiry of the time limit fixed in subparagraph (c)(2).

Revocation and substitution of distribution determination

- (m) If the *AER* revokes and substitutes a distribution determination under paragraph (e), that revocation and substitution must take effect from the commencement of the next *regulatory year*.

6.6A Contingent Projects

6.6A.1 Acceptance of a contingent project in a distribution determination

- (a) Subject to paragraph (a1), a *regulatory proposal* may include *proposed contingent capital expenditure*, which the *Distribution Network Service Provider* considers is reasonably required for the purpose of undertaking a *proposed contingent project*.
- (a1) *Proposed contingent capital expenditure* that is included in a *regulatory proposal* of a *Distribution Network Service Provider* must not include *expenditure for a restricted asset*, unless that *Distribution Network Service Provider* has submitted an *exemption application* with the *regulatory proposal*, which requests an *asset exemption* under clause 6.4B.1(a)(2) in respect of that asset or class of asset for the *contingent project*.
- (b) Subject to paragraph (b1), the *AER* must determine that a *proposed contingent project* is a *contingent project* if the *AER* is satisfied that:
- (1) the *proposed contingent project* is reasonably required to be undertaken in order to achieve any of the *capital expenditure objectives*;
 - (2) the *proposed contingent capital expenditure*:
 - (i) is not otherwise provided for (either in part or in whole) in the total of the forecast capital expenditure for the relevant *regulatory control period* which is accepted in accordance with

- clause 6.5.7(c) or substituted in accordance with clause 6.12.1(3)(ii) (as the case may be);
- (ii) reasonably reflects the *capital expenditure criteria*, taking into account the *capital expenditure factors*, in the context of the *proposed contingent project* as described in the *regulatory proposal*; and
 - (iii) exceeds either \$30 million or 5% of the value of the *annual revenue requirement* for the relevant *Distribution Network Service Provider* for the first year of the relevant *regulatory control period*, whichever is the larger amount;
- (3) the *proposed contingent project* and the *proposed contingent capital expenditure*, as described or set out in the *regulatory proposal*, and the information provided in relation to these matters, complies with the relevant requirements of any relevant *regulatory information instrument*; and
 - (4) the *trigger events* in relation to the *proposed contingent project* which are proposed by the *Distribution Network Service Provider* in its *regulatory proposal* are appropriate.
- (b1) The AER must not determine that a *proposed contingent project* is a *contingent project* if the *proposed contingent capital expenditure* for that *proposed contingent project* includes *expenditure for a restricted asset*, unless:
- (1) the relevant *Distribution Network Service Provider* has requested an *asset exemption* under paragraph (a1) in respect of that asset or that class of asset; and
 - (2) the AER has granted that *asset exemption*.
- (c) In determining whether a *trigger event* in relation to a *proposed contingent project* is appropriate for the purposes of subparagraph (b)(4), the AER must have regard to the need for a *trigger event*:
- (1) to be reasonably specific and capable of objective verification;
 - (2) to be a condition or event, which, if it occurs, makes the undertaking of the *proposed contingent project* reasonably necessary in order to achieve any of the *capital expenditure objectives*;
 - (3) to be a condition or event that generates increased costs or categories of costs that relate to a specific location rather than a condition or event that affects the *distribution network* as a whole;
 - (4) to be described in such terms that the occurrence of that event or condition is all that is required for the distribution determination to be amended under clause 6.6A.2; and

- (5) to be an event or condition, the occurrence of which is probable during the *regulatory control period*, but the inclusion of capital expenditure in relation to it under clause 6.5.7 is not appropriate because:
 - (i) it is not sufficiently certain that the event or condition will occur during the *regulatory control period* or if it may occur after that *regulatory control period* or not at all; or
 - (ii) subject to the requirement to satisfy subparagraph (b)(2)(iii), the costs associated with the event or condition are not sufficiently certain.

6.6A.2 Amendment of distribution determination for contingent project

- (a) Subject to paragraph (b), a *Distribution Network Service Provider* may, during a *regulatory control period*, apply to the AER to amend a distribution determination that applies to that *Distribution Network Service Provider* where a *trigger event* for a *contingent project* in relation to that distribution determination has occurred.
- (b) Subject to paragraph (b1), an application referred to in paragraph (a):
 - (1) must not be made within 90 *business days* prior to the end of a *regulatory year*;
 - (2) subject to subparagraph (1), must be made as soon as practicable after the occurrence of the *trigger event*;
 - (3) must contain the following information:
 - (i) an explanation that substantiates the occurrence of the *trigger event*;
 - (ii) a forecast of the total capital expenditure for the *contingent project*;
 - (iii) a forecast of the capital and incremental operating expenditure, for each remaining *regulatory year* which the *Distribution Network Service Provider* considers is reasonably required for the purpose of undertaking the *contingent project*;
 - (iv) how the forecast of the total capital expenditure for the *contingent project* meets the threshold as referred to in clause 6.6A.1(b)(2)(iii);
 - (v) the intended date for commencing the *contingent project* (which must be during the *regulatory control period*);
 - (vi) the anticipated date for completing the *contingent project* (which may be after the end of the *regulatory control period*);

- (vii) an estimate of the incremental revenue which the *Distribution Network Service Provider* considers is likely to be required to be earned in each remaining *regulatory year* of the *regulatory control period* as a result of the *contingent project* being undertaken as described in subparagraph (iii); and
- (4) the estimate referred to in subparagraph (3)(vii) must be calculated:
 - (i) in accordance with the requirements of the *post-tax revenue model* referred to in clause 6.4.1;
 - (ii) in accordance with the requirements of the *roll forward model* referred to in clause 6.5.1(b);
 - (iii) using the *allowed rate of return* for that *Distribution Network Service Provider* for the *regulatory control period* as determined in accordance with clause 6.5.2;
 - (iv) in accordance with the requirements for depreciation referred to in clause 6.5.5; and
 - (v) on the basis of the capital expenditure and incremental operating expenditure referred to in subparagraph (3)(iii).
- (b1) The forecast total capital expenditure referred to in subparagraph (b)(3) must not include *expenditure for a restricted asset*, unless:
 - (1) the relevant *Distribution Network Service Provider* has requested an *asset exemption* under clause 6.6A.1(a1) for that asset or class of asset in respect of the *contingent project*; and
 - (2) the *AER* has granted that *asset exemption*.
- (c) As soon as practicable after its receipt of an application made in accordance with paragraphs (a) and (b), the *AER* must *publish* the application, together with an invitation for written submissions on the application.
- (d) The *AER* must consider any written submissions made under paragraph (c) and must make its decision on the application within 40 *business days* from the later of the date the *AER* receives the application and the date the *AER* receives any information required by the *AER* under paragraph (i). In doing so the *AER* may also take into account such other information as it considers appropriate, including any analysis (such as benchmarking) that is undertaken by it for that purpose.
- (e) Subject to paragraph (e1), if the *AER* is satisfied that the *trigger event* has occurred, and that the forecast of the total capital expenditure for the *contingent project* meets the threshold as referred to in clause 6.6A.1(b)(2)(iii), it must:
 - (1) determine:

- (i) the amount of capital and incremental operating expenditure, for each remaining *regulatory year*, which the *AER* considers is reasonably required for the purpose of undertaking the *contingent project*;
 - (ii) the total capital expenditure which the *AER* considers is reasonably required for the purpose of undertaking the *contingent project*;
 - (iii) the likely commencement and completion dates for the *contingent project*; and
 - (iv) the incremental revenue which is likely to be required by the *Distribution Network Service Provider* in each remaining *regulatory year* as a result of the *contingent project* being undertaken as described in subparagraphs (i) and (ii), such estimate being calculated in accordance with subparagraph (2);
 - (2) calculate the estimate referred to in subparagraph (1)(iv):
 - (i) on the basis of the capital expenditure and incremental operating expenditure referred to in subparagraph (1)(i); and
 - (ii) otherwise in accordance with subparagraph (b)(4); and
 - (3) amend the distribution determination in accordance with paragraph (h).
- (e1) The capital expenditure referred to in subparagraph (e)(1) must not include *expenditure for a restricted asset*, unless:
- (1) the relevant *Distribution Network Service Provider* requested an *asset exemption* under clause 6.6A.1(a1) for that asset or class of asset in respect of the *contingent project*; and
 - (2) the *AER* granted that *asset exemption*.
- (f) In making the determinations referred to in subparagraph (e)(1), the *AER* must accept the relevant amounts and dates, contained in the *Distribution Network Service Provider's* application, as referred to in subparagraph (b)(3)(ii) to (vii), if the *AER* is satisfied that:
- (1) the forecast of the total capital expenditure for the *contingent project* meets the threshold as referred to in clause 6.6A.1(b)(2)(iii) and complies with paragraph (b1);
 - (2) the amounts of forecast capital expenditure and incremental operating expenditure reasonably reflect the *capital expenditure criteria* and the *operating expenditure criteria*, taking into account the *capital expenditure factors* and the *operating expenditure factors* respectively, in the context of the *contingent project*;

- (3) the estimates of incremental revenue are reasonable; and
 - (4) the dates are reasonable.
- (g) In making the determinations referred to in subparagraph (e)(1) and paragraph (f), the *AER* must have regard to:
 - (1) the information included in or accompanying the application;
 - (2) submissions received in the course of consulting on the application;
 - (3) such analysis as is undertaken by or for the *AER*;
 - (4) the expenditure that would be incurred in respect of a *contingent project* by an efficient and prudent *Distribution Network Service Provider* in the circumstances of the *Distribution Network Service Provider*;
 - (5) the actual and expected capital expenditure of the *Distribution Network Service Provider* for *contingent projects* during any preceding *regulatory control periods*;
 - (6) the extent to which the forecast capital expenditure for the *contingent project* is referable to arrangements with a person other than the *Distribution Network Service Provider* that, in the opinion of the *AER*, do not reflect arm's length terms;
 - (7) the relative prices of operating and capital inputs in relation to the *contingent project*;
 - (8) the substitution possibilities between operating and capital expenditure in relation to the *contingent project*; and
 - (9) whether the capital and operating expenditure forecasts for the *contingent project* are consistent with any incentive scheme or schemes that apply to the *Distribution Network Service Provider* under clauses 6.5.8, 6.5.8A or 6.6.2 to 6.6.4.
- (h) Amendments to a distribution determination referred to in subparagraph (e)(3) must only vary the determination to the extent necessary:
 - (1) to adjust the forecast capital expenditure for that *regulatory control period* to accommodate the amount of capital expenditure determined under subparagraph (e)(1)(i) (in which case the amount of that adjustment will be taken to be accepted by the *AER* under clause 6.5.7(c));
 - (2) to adjust the forecast operating expenditure for that *regulatory control period* to accommodate the amount of incremental operating expenditure determined under subparagraph (e)(1)(i) (in which case the amount of that adjustment will be taken to be accepted by the *AER* under clause 6.5.6(c));

- (3) to reflect the effect of any resultant increase in forecast capital and operating expenditure on:
 - (i) the *annual revenue requirement* for each *regulatory year* in the remainder of the *regulatory control period*; and
 - (ii) the X factor for each *regulatory year* in the remainder of the *regulatory control period*.
- (i) A *Distribution Network Service Provider* must provide the *AER* with such additional information as the *AER* requires for the purpose of making a decision on an application made by that *Distribution Network Service Provider* under paragraph (a) within the time specified by the *AER* in a notice provided to the *Distribution Network Service Provider* by the *AER* for that purpose.

Extension of time limit

- (j) If the *AER* is satisfied that amending a distribution determination under subparagraphs (e)(3) and (h) involves issues of such complexity or difficulty that the time limit fixed in paragraph (d) should be extended, the *AER* may extend that time limit by a further period of up to 60 *business days*, provided that it gives written notice to the *Distribution Network Service Provider* of that extension no later than 10 *business days* before the expiry of that time limit.
- (k) If the *AER* extends the time limit under paragraph (j), it must make available on its website a notice of that extension as soon as is reasonably practicable.
- (l) Subject to paragraph (n1), if the *AER* gives a written notice to the *Distribution Network Service Provider* stating that it requires information from an *Authority* in order to make a decision on an application made by the *Distribution Network Service Provider* under paragraph (a) then, for the purpose of calculating elapsed time, the period between when the *AER* gives that notice to the *Distribution Network Service Provider* and when the *AER* receives that information from that *Authority* is to be disregarded.
- (m) Subject to paragraph (n1), if the *AER* gives a written notice to the *Distribution Network Service Provider* stating that, in order to make a decision on an application made by the *Distribution Network Service Provider* under paragraph (a), it requires information from a judicial body or royal commission then, for the purpose of calculating elapsed time, the period between when the *AER* gives that notice to the *Distribution Network Service Provider* and when that information is made publicly available is to be disregarded.
- (n) Where the *AER* gives a notice to the *Distribution Network Service Provider* under paragraph (l) or (m), it must:
 - (1) as soon as is reasonably practicable make available on its website a notice stating when the period referred to in paragraph (l) or (m), as the case may be, has commenced;

- (2) as soon as is reasonably practicable make available on its website a notice stating when the period referred to in paragraph (l) or (m), as the case may be, has ended; and
 - (3) if the information specified in that notice is required from an *Authority*, promptly request that information from the relevant *Authority*.
- (n1) Paragraphs (l) and (m) do not apply if the *AER* gives the notice specified in those paragraphs to the *Distribution Network Service Provider* later than 10 *business days* before the expiry of the time limit fixed in paragraph (d).

Amendment of distribution determination

- (o) If the *AER* amends a distribution determination under paragraph (h), that amendment must take effect from the commencement of the next *regulatory year*.

Part D Negotiated distribution services

6.7 Negotiated distribution services

6.7.1 Principles relating to access to negotiated distribution services

The following principles constitute the *Negotiated Distribution Service Principles*:

- (1) the price for a *negotiated distribution service* should be based on the costs incurred in providing that service, determined in accordance with the principles and policies set out in the *Cost Allocation Method* for the relevant *Distribution Network Service Provider*;
- (2) subject to subparagraphs (3) and (4), the price for a *negotiated distribution service* should be at least equal to the cost that would be avoided by not providing the service but no more than the cost of providing it on a stand alone basis;
- (3) if the *negotiated distribution service* is the provision of a *shared distribution service* that:
 - (i) exceeds the *network* performance requirements (if any) which that *shared distribution service* is required to meet under any *jurisdictional electricity legislation*; or
 - (ii) exceeds the *network* performance requirements set out in schedules 5.1a and 5.1,

then the differential between the price for that service and the price for the *shared distribution service* which meets (but does not exceed) the *network* performance requirements under any *jurisdictional electricity legislation* or as set out in schedules 5.1a and 5.1 (as the case may be) should reflect the

increase in the *Distribution Network Service Provider's* incremental cost of providing that service;

- (4) if the *negotiated distribution service* is the provision of a *shared distribution service* that does not meet (and does not exceed) the *network* performance requirements set out in schedules 5.1a and 5.1, the differential between the price for that service and the price for the *shared distribution service* which meets (but does not exceed) the *network* performance requirements set out in schedules 5.1a and 5.1 should reflect the cost the *Distribution Network Service Provider* would avoid by not providing that service;
- (5) the price for a *negotiated distribution service* must be the same for all *Distribution Network Users* unless there is a material difference in the costs of providing the *negotiated distribution service* to different *Distribution Network Users* or classes of *Distribution Network Users*;
- (6) the price for a *negotiated distribution service* should be subject to adjustment over time to the extent that the assets used to provide that service are subsequently used to provide services to another person, in which case the adjustment should reflect the extent to which the costs of that asset are being recovered through charges to that other person;
- (7) the price for a *negotiated distribution service* should be such as to enable the *Distribution Network Service Provider* to recover the efficient costs of complying with all *regulatory obligations or requirements* associated with the provision of the *negotiated distribution service*;
- (8) any *access charges*:
 - (A) in respect of providing *distribution network user access* to *negotiated distribution services* which would have been *negotiated distribution services* regardless of the operation of clause 6.24.2(c) should be based on the costs reasonably incurred by the *Distribution Network Service Provider* in providing that access and, in the case of compensation referred to in clauses 5.3AA(f)(4)(ii) and (iii), on the revenue that is likely to be foregone and the costs that are likely to be incurred by a person referred to in those provisions where an event referred to in those provisions occurs; and
 - (B) for the *declared transmission system* of an *adoptive jurisdiction*, in respect of providing *transmission network user access* to *negotiated distribution services* which would have been treated as *negotiated transmission services* were it not for the operation of clause 6.24.2(c), should be based on the costs reasonably incurred by the *Distribution Network Service Provider* in providing that access and, in the case of compensation referred to in clauses 5.4A(h) - (j) (as preserved under clause 11.98.8(a)(2)), on the revenue that is likely to be foregone and the costs that are likely to be incurred by a person referred to in those provisions where an event referred to in those provisions occurs;

- (9) the *terms and conditions of access* for a *negotiated distribution service* should be fair and reasonable and consistent with the safe and reliable operation of the *power system* in accordance with the *Rules* (for these purposes, the price for a *negotiated distribution service* is to be treated as being fair and reasonable if it complies with principles (1) to (7) of this clause);
- (10) the *terms and conditions of access* for a *negotiated distribution service* (including, in particular, any exclusions and limitations of liability and indemnities) must not be unreasonably onerous taking into account the allocation of risk between the *Distribution Network Service Provider* and the other party, the price for the *negotiated distribution service* and the costs to the *Distribution Network Service Provider* of providing the *negotiated distribution service*;
- (11) the *terms and conditions of access* for a *negotiated distribution service* should take into account the need for the service to be provided in a manner that does not adversely affect the safe and reliable operation of the *power system* in accordance with the *Rules*.

6.7.2 Determination of terms and conditions of access for negotiated distribution services

- (a) A *Distribution Network Service Provider* must comply with:
 - (1) the provider's *negotiating framework*; and
 - (2) the provider's *Negotiated Distribution Service Criteria*,when the provider is negotiating the *terms and conditions of access* to *negotiated distribution services*.
- (b) The *Distribution Network Service Provider* must also comply with any other applicable requirements of the *Rules*, including the requirements of:
 - (1) rules 5.3, 5.3A and 5.3AA, when negotiating for the provision of *connection services* and the associated *connection service* charges in respect of the provision of *negotiated distribution services* which would have been *negotiated distribution services* regardless of the operation of clause 6.24.2(c);
 - (2) rules 5.3 and 5.3A, when negotiating for the provision of *connection services* and the associated *connection service* charges in respect of the provision of *negotiated distribution services* which would have been treated as *negotiated transmission services* were it not for the operation of clause 6.24.2(c);
 - (3) rule 5.3AA, when negotiating the *use of system services charges* and *access charges* to be paid to or by a *Distribution Network User* in respect of the provision of *negotiated distribution services* which

would have been *negotiated distribution services* regardless of the operation of clause 6.24.2(c); and

- (4) for the *declared transmission system* of an *adoptive jurisdiction*, rule 5.4A (as preserved under clause 11.98.8(a)(2)), when negotiating the *use of system services charges* and *access charges* to be paid to or by a *Distribution Network User* in respect of the provision of *negotiated distribution services* which would have been treated as *negotiated transmission services* were it not for the operation of clause 6.24.2(c).

6.7.3 Negotiating framework determination

The determination specifying requirements relating to the *negotiating framework* forming part of a distribution determination for a *Distribution Network Service Provider* is to set out requirements that are to be complied with in respect of the preparation, replacement, application or operation of its *negotiating framework*.

6.7.4 Negotiated Distribution Service Criteria determination

- (a) The determination by the *AER* specifying the *Negotiated Distribution Service Criteria* forming part of a distribution determination for a *Distribution Network Service Provider* is to set out the criteria that are to be applied:
 - (1) by the provider in negotiating *terms and conditions of access* including:
 - (i) the prices that are to be charged for the provision of *negotiated distribution services* by the provider for the relevant *regulatory control period*; or
 - (ii) any *access charges* which are negotiated by the provider during that *regulatory control period*; and
 - (2) by the *AER* in resolving an access dispute about *terms and conditions of access* including:
 - (i) the price that is to be charged for the provision of a *negotiated distribution service* by the provider; or
 - (ii) any *access charges* that are to be paid to or by the provider.
- (b) The *Negotiated Distribution Service Criteria* must give effect to and be consistent with the *Negotiated Distribution Service Principles* set out in clause 6.7.1.

6.7.5 Preparation of and requirements for negotiating framework for negotiated distribution services

- (a) A *Distribution Network Service Provider* must prepare a document (the *negotiating framework*) setting out the procedure to be followed during

negotiations between that provider and any person (the *Service Applicant* or applicant) who wishes to receive a *negotiated distribution service* from the provider, as to the *terms and conditions of access* for the provision of the service.

- (b) The *negotiating framework* for a *Distribution Network Service Provider* must comply with and be consistent with:

- (1) the applicable requirements of the relevant distribution determination; and

Note:

See clause 6.7.3.

- (2) paragraph (c), which sets out the minimum requirements for a *negotiating framework*.

- (c) The *negotiating framework* for a *Distribution Network Service Provider* must specify:

- (1) a requirement for the provider and a *Service Applicant* to negotiate in good faith the *terms and conditions of access* to a *negotiated distribution service*; and

- (2) a requirement for the provider to provide all such commercial information a *Service Applicant* may reasonably require to enable that applicant to engage in effective negotiation with the provider for the provision of the *negotiated distribution service*, including the cost information described in subparagraph (3); and

- (3) a requirement for the provider:

- (i) to identify and inform a *Service Applicant* of the reasonable costs and/or the increase or decrease in costs (as appropriate) of providing the *negotiated distribution service*; and

- (ii) to demonstrate to a *Service Applicant* that the charges for providing the *negotiated distribution service* reflect those costs and/or the cost increment or decrement (as appropriate); and

- (iii) to have appropriate arrangements for assessment and review of the charges and the basis on which they are made; and

Note:

If (for example) a charge, or an element of a charge, is based on a customer's actual or assumed *maximum demand*, the assessment and review arrangements should allow for a change to the basis of the charge so that it more closely reflects the customer's *load* profile where a reduction or increase in *maximum demand* has been demonstrated.

- (4) a requirement for a *Service Applicant* to provide all commercial information the provider may reasonably require to enable the

- provider to engage in effective negotiation with that applicant for the provision of the *negotiated distribution service*; and
- (5) a requirement that negotiations with a *Service Applicant* for the provision of the *negotiated distribution service* be commenced and finalised within specified periods and a requirement that each party to the negotiations must make reasonable endeavours to adhere to the specified time limits; and
 - (6) a process for dispute resolution which provides that all disputes as to the *terms and conditions of access* for the provision of *negotiated distribution services* are to be dealt with in accordance with the relevant provisions of the Law and the *Rules* for dispute resolution; and
 - (7) the arrangements for payment by a *Service Applicant* of the provider's reasonable direct expenses incurred in processing the application to provide the *negotiated distribution service*; and
 - (8) a requirement that the *Distribution Network Service Provider* determine the potential impact on other *Distribution Network Users* of the provision of the *negotiated distribution service*; and
 - (9) a requirement that the *Distribution Network Service Provider* must notify and consult with any affected *Distribution Network Users* and ensure that the provision of *negotiated distribution services* does not result in non-compliance with obligations in relation to other *Distribution Network Users* under the *Rules*; and
 - (10) a requirement that the *Distribution Network Service Provider* publish the results of negotiations on its website.
- (d) Notwithstanding the foregoing, the *negotiating framework* must not be inconsistent with any of the requirements of:
- (1) rules 5.3, 5.3A and 5.3AA insofar as the *negotiating framework* applies to *negotiated distribution services* which would have been *negotiated distribution services* regardless of the operation of clause 6.24.2(c); and
 - (2) rules 5.3 and 5.3A and, for the *declared transmission system* of an *adoptive jurisdiction*, rule 5.4A (as preserved under clause 11.98.8(a)(2)) insofar as the *negotiating framework* applies to *negotiated distribution services* which would have been treated as *negotiated transmission services* were it not for the operation of clause 6.24.2(c),
- and any other relevant provisions of this Chapter 6 and, in the event of any inconsistency, those requirements prevail.
- (e) Each *Distribution Network Service Provider* and *Service Applicant* who is negotiating for the provision of a *negotiated distribution service* by the

provider must comply with the requirements of the *negotiating framework* in accordance with its terms.

6.7.6 Confidential information

- (a) Commercial information to be provided to a *Service Applicant* in accordance with clause 6.7.5(c)(2):
 - (1) does not include *confidential information* provided to the *Distribution Network Service Provider* by another person; and
 - (2) may be provided subject to a condition that the *Service Applicant* must not provide any part of that commercial information to any other person without the consent of the *Distribution Network Service Provider*.
- (b) Commercial information to be provided to a *Distribution Network Service Provider* in accordance with clause 6.7.5(c)(4):
 - (1) does not include *confidential information* provided to a *Service Applicant* by another person; and
 - (2) may be provided subject to a condition that the provider must not provide any part of that commercial information to any other person without the consent of the *Service Applicant*.

Part DA Connection policies

6.7A Connection policy requirements

This *Rule* deals with the preparation of, requirements for and approval of *connection policies*.

6.7A.1 Preparation of, and requirements for, connection policy

- (a) A *Distribution Network Service Provider* must prepare a document (its proposed *connection policy*) setting out the circumstances in which it may require a *retail customer* or *real estate developer* to pay a *connection charge*, for the provision of a *connection service* under Chapter 5A.
- (b) The proposed *connection policy*:
 - (1) must be consistent with:
 - (i) the *connection charge principles*; and
 - (ii) the *connection charge guidelines*; and
 - (2) must specify:

- (i) the categories of persons that may be required to pay a *connection charge* and the circumstances in which such a requirement may be imposed; and
- (ii) the aspects of a *connection service* for which a *connection charge* may be made; and

Example

The *Distribution Network Service Provider* might (for example) make separate *connection charges* for the provision of a *distribution connection asset* and for making a necessary *extension* to, or other *augmentation* of, the *distribution network*.

- (iii) the basis on which *connection charges* are determined; and
- (iv) the manner in which *connection charges* are to be paid (or equivalent consideration is to be given); and

Examples

The payment (or equivalent consideration) might take the form of a capital contribution, prepayment or financial guarantee.

- (v) a threshold (based on capacity or any other measure identified in the *connection charge guidelines*) below which a *retail customer* (not being a non-registered *embedded generator* or a *real estate developer*) will not be liable for a *connection charge* for an *augmentation* other than an *extension*.

Part E Regulatory proposal and proposed tariff structure statement

6.8 Regulatory proposal and proposed tariff structure statement

6.8.1 AER's framework and approach paper

- (a) The *AER* must make and *publish* a document (a *framework and approach paper*) that applies in respect of a distribution determination for a matter listed in paragraph (b) in accordance with this clause if:
 - (1) there is no *framework and approach paper* that applies in respect of that distribution determination for that matter; or
 - (2) there is a *framework and approach paper* that would apply in respect of that distribution determination for that matter, but the *AER* has *published* a notice under paragraph (c)(3) stating that it will make an amended or replacement *framework and approach paper* with respect to that matter.
- (b) A *framework and approach paper* that applies in respect of a distribution determination must set out:

- (1) the AER's decision (together with its reasons for the decision), for the purposes of the forthcoming distribution determination, on the following matters:

- (i) the form (or forms) of the control mechanisms; and
- (ii) as to whether or not Part J of Chapter 6A is to be applied to determine the pricing of *transmission standard control services* provided by any *dual function assets* owned, controlled or operated by the *Distribution Network Service Provider*; and

Note:

See clause 6.25(b).

- (2) the AER's proposed approach (together with its reasons for the proposed approach), in the forthcoming distribution determination, to the following matters:

- (i) the classification of *distribution services* under this Chapter;
- (ii) the formulae that give effect to the control mechanisms referred to in subparagraph (1)(i);
- (iii) the application to the *Distribution Network Service Provider* of any *service target performance incentive scheme*;
- (iv) the application to the *Distribution Network Service Provider* of any *efficiency benefit sharing scheme*;
- (v) the application to the *Distribution Network Service Provider* of any *capital expenditure sharing scheme*;
- (vi) the application to the *Distribution Network Service Provider* of any *demand management incentive scheme* or *demand management innovation allowance mechanism*;
- (vii) the application to the *Distribution Network Service Provider* of any *small-scale incentive scheme*;
- (viii) the application to the *Distribution Network Service Provider* of the *Expenditure Forecast Assessment Guidelines*;
- (ix) whether depreciation for establishing the regulatory asset base for the relevant *distribution system* as at the commencement of the following *regulatory control period* is to be based on actual or forecast capital expenditure in accordance with clause S6.2.2B; and

- (3) any content required under clause 6.2.8(c)(3).

- (c) If there is a *framework and approach paper* that would apply in respect of the distribution determination for a matter listed in paragraph (b) then:

- (1) no later than 32 months before the end of the *regulatory control period* that precedes that for which the distribution determination is to be made, the *Distribution Network Service Provider* may request the *AER* in writing to make an amended or replacement *framework and approach paper* in respect of a matter. The request must specify the *Distribution Network Service Provider's* reasons for making that request;
- (2) no later than 31 months before the end of the *regulatory control period* that precedes that for which the distribution determination is to be made, the *AER* must *publish* a notice inviting submissions on whether it is necessary or desirable to amend or replace that *framework and approach paper* in so far as it relates to a matter (other than any matter specified in a request from the *Distribution Network Service Provider* under subparagraph (1)); and
- (3) no later than 30 months before the end of the *regulatory control period* that precedes that for which the distribution determination is to be made, the *AER* must make and *publish* a notice that:
 - (i) states that it will make an amended or replacement *framework and approach paper* in respect of the matters specified in a request from the *Distribution Network Service Provider* under subparagraph (1) (if any);
 - (ii) if subparagraph (i) applies, is accompanied by a copy of the request from the *Distribution Network Service Provider* under subparagraph (1); and
 - (iii) states whether it will make an amended or replacement *framework and approach paper* in respect of any matter other than any matters referred to in subparagraph (i) above and, if so, the reasons why it considers that it is necessary or desirable to make an amended or replacement *framework and approach paper* in respect of that matter.
- (d) In making the decision referred to in paragraph (c)(3)(iii), the *AER* must have regard to any submissions made in response to the invitation under paragraph (c)(2).
- (e) Where paragraph (a) applies then, at least 23 months before the end of the current *regulatory control period*, the *AER* must, after consulting with the relevant *Distribution Network Service Provider* and other persons as the *AER* considers appropriate, make, amend or replace the *framework and approach paper*, as the case may be, and:
 - (1) give a copy of it to the relevant *Distribution Network Service Provider*; and
 - (2) *publish* it,as soon as is reasonably practicable.

- (f) Subject to clauses 6.12.3 and 6.25(d), a *framework and approach paper* is not binding on the AER or a *Distribution Network Service Provider*.
- (g) The AER may make and *publish a framework and approach paper* that applies in respect of a distribution determination for a matter that is not listed in paragraph (b) and, if it does so, this clause 6.8.1 applies as if that matter were listed in paragraph (b).

6.8.1A Notification of approach to forecasting expenditure

- (a) A *Distribution Network Service Provider* must inform the AER of the methodology it proposes to use to prepare the forecasts of operating expenditure and capital expenditure that form part of its *regulatory proposal*.
- (b) A *Distribution Network Service Provider* must submit the information referred to in paragraph (a):
 - (1) at least 24 months before the expiry of a distribution determination that applies to the *Distribution Network Service Provider*; or
 - (2) if no distribution determination applies to the *Distribution Network Service Provider*, within 3 months after being required to do so by the AER.

6.8.2 Submission of regulatory proposal, tariff structure statement and exemption application

- (a) A *Distribution Network Service Provider* must, whenever required to do so under paragraph (b), submit to the AER a *regulatory proposal* and a proposed *tariff structure statement* related to the *distribution services* provided by means of, or in connection with, the *Distribution Network Service Provider's distribution system*.
- (a1) A *Distribution Network Service Provider* must submit to the AER any *exemption application* for an *asset exemption* under clause 6.4B.1(a)(1) or 6.4B.1(a)(2) for the *regulatory control period* at the same time as submitting the relevant *regulatory proposal* under paragraph (a).
- (b) A *regulatory proposal*, a proposed *tariff structure statement* and, if required under paragraph (a1), an *exemption application* must be submitted:
 - (1) at least 17 months before the expiry of a distribution determination that applies to the *Distribution Network Service Provider*; or
 - (2) if no distribution determination applies to the *Distribution Network Service Provider*, within 3 months after being required to do so by the AER.
- (c) A *regulatory proposal* must include (but need not be limited to) the following elements:

- (1) a classification proposal:
 - (i) showing how the *distribution services* to be provided by the *Distribution Network Service Provider* should, in the *Distribution Network Service Provider's* opinion, be classified under this Chapter; and
 - (ii) if the proposed classification differs from the classification suggested in the relevant *framework and approach paper* – including the reasons for the difference;
 - (2) for *direct control services* classified under the proposal as *standard control services* – a *building block proposal*;
 - (3) for *direct control services* classified under the proposal as *alternative control services* – a demonstration of the application of the control mechanism, as set out in the *framework and approach paper*, and the necessary supporting information;
 - (4) **[Deleted]**.
 - (5) for services classified under the proposal as *negotiated distribution services* – the proposed *negotiating framework*;
 - (5A) the proposed *connection policy*;
 - (6) an identification of any parts of the *regulatory proposal* the *Distribution Network Service Provider* claims to be confidential and wants suppressed from publication on that ground in accordance with the *Distribution Confidentiality Guidelines*; and
- Note:**
- Additional information that must be included in a *regulatory proposal* is referred to in clause 6.3.1(c) and Schedule 6.1.
- (7) a description (with supporting materials) of how the proposed *tariff structure statement* complies with the *pricing principles for direct control services* including:
 - (i) a description of where there has been any departure from the pricing principles set out in paragraphs 6.18.5(e) to (g); and
 - (ii) an explanation of how that departure complies with clause 6.18.5(c).
- (c1) The *regulatory proposal* must be accompanied by an overview paper which includes each of the following matters:
- (1) a summary of the *regulatory proposal* the purpose of which is to explain the *regulatory proposal* in reasonably plain language to electricity consumers;

- (2) a description of how the *Distribution Network Service Provider* has engaged with electricity consumers in developing the *regulatory proposal* and has sought to address any relevant concerns identified as a result of that engagement;
 - (3) a description of the key risks and benefits of the *regulatory proposal* for electricity consumers; and
 - (4) a comparison of the *Distribution Network Service Provider's* proposed *total revenue requirement* with its *total revenue requirement* for the current *regulatory control period* and an explanation for any material differences between the two amounts;
- (c1a) The overview paper must also include a description of how the *Distribution Network Service Provider* has engaged with *retail customers* and *retailers* in developing the proposed *tariff structure statement* and has sought to address any relevant concerns identified as a result of that engagement.
- (c2) The *regulatory proposal* must be accompanied by information required by the *Expenditure Forecast Assessment Guidelines* as set out in the *framework and approach paper*.
- (d) The *regulatory proposal* must comply with the requirements of, and must contain or be accompanied by the information required by any relevant *regulatory information instrument*.
- (d1) The proposed *tariff structure statement* must be accompanied by an *indicative pricing schedule*.
- (d2) The proposed *tariff structure statement* must comply with the *pricing principles for direct control services*.
- (e) If more than one *distribution system* is owned, controlled or operated by a *Distribution Network Service Provider*, then, unless the AER otherwise determines, a separate *regulatory proposal* and a separate *tariff structure statement* are to be submitted for each *distribution system*.
- (f) If, at the commencement of this Chapter, different parts of the same *distribution system* were separately regulated, then, unless the AER otherwise determines, a separate *regulatory proposal* and a separate *tariff structure statement* are to be submitted for each part as if it were a separate *distribution system*.

6.9 Preliminary examination and consultation

6.9.1 Preliminary examination

- (a) If the AER considers that:
 - (1) a *regulatory proposal* submitted by a *Distribution Network Service Provider*;

- (2) a proposed *tariff structure statement* submitted by a *Distribution Network Service Provider*;
- (3) any *exemption application* submitted with the *regulatory proposal*; or
- (4) any information accompanying such a *regulatory proposal*, proposed *tariff structure statement* or *exemption application*,

does not comply, in any respect, with a requirement of the Law or the *Rules*, the *AER* may notify the *Distribution Network Service Provider* that it requires resubmission of the relevant *regulatory proposal*, proposed *tariff structure statement*, *exemption application* or accompanying information.

- (b) The notice must be given as soon as practicable and must state why, and in what respects, the *AER* considers the *regulatory proposal*, proposed *tariff structure statement*, *exemption application* or the accompanying information (as the case may be) to be non-compliant.

6.9.2 Resubmission of proposal

- (a) A *Distribution Network Service Provider* must, within 20 *business days* after receiving a notice under clause 6.9.1, resubmit its *regulatory proposal*, proposed *tariff structure statement*, *exemption application* or the accompanying information (as the case may be) in an amended form that complies with the relevant requirements set out in the notice.
- (b) A *Distribution Network Service Provider* may only make changes to its *regulatory proposal*, proposed *tariff structure statement*, *exemption application* or the accompanying information (as the case may be) to address the deficiencies identified in the notice.

6.9.2A Confidential information

If the *Distribution Network Service Provider* has identified any part of the *regulatory proposal* as submitted or resubmitted to the *AER* (as the case may be) under this Part to be confidential, the *AER* must, as soon as is reasonably practicable, include on its website a notice that sets out:

- (a) the fact that the *regulatory proposal* contains information over which a claim of confidentiality has been made;
- (b) the proportion of material in the *regulatory proposal* that is subject to any claim of confidentiality compared to that which is not subject to any such claim; and
- (c) the comparative proportion of material in the *regulatory proposal* that is subject to any claim of confidentiality compared to that which is subject to claims of confidentiality in the *regulatory proposals* of other *Distribution Network Service Providers*.

6.9.3 Consultation

- (a) Subject to the provisions of the Law and the *Rules* about the disclosure of *confidential information*, the AER must *publish*:

- (1) a *regulatory proposal*;
- (2) a proposed *tariff structure statement*;
- (3) an *exemption application* (if any); and
- (4) any information accompanying such a *regulatory proposal*, *proposed tariff structure statement* or *exemption application*,

submitted or resubmitted to it (as the case may be) by the *Distribution Network Service Provider* under clause 6.8.2 or 6.9.2, together with:

- (5) the AER's proposed *Negotiated Distribution Service Criteria* for the *Distribution Network Service Provider*; and
- (6) an invitation for written submissions on the documents and information referred to in sub-paragraphs (1) to (5),

after the AER decides that the *regulatory proposal*, *proposed tariff structure statement*, *exemption application* (if any) and accompanying information comply (or that there is sufficient compliance) with the requirements of the Law and the *Rules*.

- (b) The AER must *publish*:

- (1) an issues paper not more than 40 *business days* after the submission, under clause 6.8.2, of the documents and information, but not any resubmitted documents or information, referred to in sub-paragraphs (a)(1) to (a)(4);
- (2) an invitation for written submissions on the issues paper; and
- (3) an invitation to attend a public forum on the issues paper.

- (b1) The issues paper referred to in paragraph (b) must identify preliminary issues, whether or not arising out of the documents and information referred to in sub-paragraphs (a)(1) to (a)(4), that the AER considers are likely to be relevant to its assessment of those documents or that information (however, nothing in this clause is to be taken as precluding the AER from considering other issues in making a distribution determination for the *Distribution Network Service Provider*).

- (b2) The AER must hold a public forum on the issues paper not more than 10 *business days* after the *publication* of the issues paper.

- (c) Any person may make a written submission to the AER on the documents and information referred to in sub-paragraphs (a)(1) to (a)(5) or the issues paper within the time specified in the invitations referred to in paragraphs

(a)(6) and (b), which in each case must be not earlier than 30 *business days* after the *publication* of the issues paper.

6.10 Draft distribution determination and further consultation

6.10.1 Making of draft distribution determination

- (a) The *AER* must make a draft distribution determination in relation to the *Distribution Network Service Provider*.
- (b) In making a draft distribution determination in relation to the *Distribution Network Service Provider*, and subject to clause 6.14, the *AER* must have regard to each of the following:
 - (1) the information included in or accompanying the *regulatory proposal*, the proposed *tariff structure statement* and the *exemption application*;
 - (2) written submissions on the issues paper received under clause 6.9.3 and on the documents and information referred to in sub-paragraphs 6.9.3(a)(1) to 6.9.3(a)(5); and
 - (3) any analysis undertaken by or for the *AER* that is *published* prior to the making of the draft distribution determination or as part of the draft distribution determination.

6.10.2 Publication of draft determination and consultation

- (a) The *AER* must, as soon as practicable after the relevant date referred to in clause 6.8.2(b), *publish*:
 - (1) the draft distribution determination;
 - (2) notice of the making of the draft distribution determination;
 - (3) the *AER's* reasons for suggesting that the distribution determination should be made as proposed including the draft constituent decisions i.e. the decisions made in accordance with rule 6.12 on which the draft distribution determination is predicated;
 - (4) notice of a predetermination conference; and
 - (5) an invitation for written submissions on its draft distribution determination.
- (b) The *AER* must hold the predetermination conference at the time, date and place specified in the notice under subparagraph (a)(4) for the purpose of explaining the draft distribution determination.
- (c) Any person may make a written submission to the *AER* on the draft distribution determination within the time specified in the invitation referred to in paragraph (a)(5), which must be not earlier than 45 *business days* after the making of the draft determination.

6.10.3 Submission of revised proposal

- (a) In addition to making written submissions, the *Distribution Network Service Provider* may, not more than 45 *business days* after the publication of the draft distribution determination, submit a revised *regulatory proposal* or a revised proposed *tariff structure statement* to the *AER*.
- (b) A *Distribution Network Service Provider* may only make the revisions referred to in paragraph (a) so as to incorporate the substance of any changes required to address matters raised by the draft distribution determination or the *AER*'s reasons for it.
 - (b1) A revised proposed *tariff structure statement* must comply with the *pricing principles for direct control services* and must be accompanied by a revised *indicative pricing schedule*.
- (c) A revised *regulatory proposal* must comply with the requirements of, and must contain or be accompanied by the information required by, any relevant *regulatory information instrument* or the *Rules*.
 - (c1) If the *Distribution Network Service Provider* has identified any part of the revised *regulatory proposal* to the *AER* under this Part to be confidential, the *AER* must, as soon as is reasonably practicable, make available on its website a notice that sets out:
 - (1) the fact that the revised *regulatory proposal* contains information over which a claim of confidentiality has been made;
 - (2) the proportion of material in the revised *regulatory proposal* that is subject to any claim of confidentiality compared to that which is not subject to any such claim; and
 - (3) the comparative proportion of material in the revised *regulatory proposal* that is subject to any claim of confidentiality compared to that which is subject to claims of confidentiality in the revised *regulatory proposals* of other *Distribution Network Service Providers*.
- (d) Subject to the provisions of the Law and the *Rules* about the disclosure of *confidential information*, the *AER* must *publish* a revised *regulatory proposal* or a revised proposed *tariff structure statement* submitted by the *Distribution Network Service Provider* under paragraph (a), together with the accompanying information, as soon as practicable after receipt by the *AER*.
- (e) The *AER* may invite written submissions on the revised *regulatory proposal* or the revised proposed *tariff structure statement*.

6.10.4 Submissions on specified matters

If the *AER* invites submissions on a revised *regulatory proposal* or a revised proposed *tariff structure statement* under clause 6.10.3(e), the *AER* may invite

further written submissions on the submissions received under clause 6.10.2(c) or 6.10.3(e) by *publishing* an invitation which specifies:

- (a) the matters in respect of which submissions are invited; and
- (b) the time for making submissions, which must not be earlier than 15 *business days* after the date on which the invitation was *published*.

6.11 Distribution determination

6.11.1 Making of distribution determination

- (a) The *AER* must make a distribution determination in relation to the *Distribution Network Service Provider*.
- (b) In making a distribution determination in relation to the *Distribution Network Service Provider*, and subject to rule 6.14, the *AER* must have regard to each of the following:
 - (1) the information included in or accompanying the *regulatory proposal*, the proposed *tariff structure statement* and the *exemption application* (if any);
 - (2) written submissions received under this Part E; and
 - (3) any analysis undertaken by or for the *AER* that is *published* prior to the making of the distribution determination or as part of the distribution determination.
- (c) The *AER* must use its best endeavours to *publish*, a reasonable time prior to the making of the distribution determination, any analysis undertaken by or for it on which it proposes to rely, or to which it proposes to refer, for the purposes of the distribution determination.

6.11.1A Out of scope revised regulatory proposal or late submissions

On or before making a distribution determination, the *AER* must make available on its website:

- (a) a summary of any revisions to the relevant *regulatory proposal* or proposed *tariff structure statement* that have been made in a revised *regulatory proposal* or revised proposed *tariff structure statement* that do not comply with clause 6.10.3(b), together with an indication of the amount of that information;
- (b) a summary of any submissions on the draft distribution determination, revised *regulatory proposal* or revised proposed *tariff structure statement* that were made by the *Distribution Network Service Provider* and that contain information that the *Distribution Network Service Provider* was entitled to incorporate in the revised *regulatory proposal* or the revised

proposed *tariff structure statement* under clause 6.10.3(b), together with an indication of the amount of that information;

- (c) a summary of any submissions that purport to be made by the *Distribution Network Service Provider* under clause 6.10.4 but are in respect of matters other than those specified by the *AER* under that clause, together with an indication of the length of those submissions; and
- (d) a summary of any submissions on the draft determination, revised *regulatory proposal* or revised proposed *tariff structure statement* that were made by the *Distribution Network Service Provider* after the time for making the submissions has expired, together with an indication of the length of those submissions.

For the purpose of this clause 6.11.1A, revisions or submissions may be summarised by cross-referencing to the relevant *regulatory proposal*, proposed *tariff structure statement* or submissions.

6.11.2 Notice of distribution determination

The *AER* must as soon as practicable, but not later than 2 months before the commencement of the relevant *regulatory control period*, publish:

- (1) notice of the making of the distribution determination;
- (2) the distribution determination itself; and
- (3) the *AER's* reasons for making the distribution determination in its final form including the constituent decisions i.e. the decisions made in accordance with rule 6.12 on which the distribution determination is predicated.

6.11.3 Commencement of distribution determination

- (a) A distribution determination takes effect at the commencement of the *regulatory control period* to which it relates.
- (b) If a period intervenes between the end of one *regulatory control period* and the commencement of a new distribution determination providing for the next *regulatory control period*:
 - (1) the previous distribution determination continues in force during the intervening period;
 - (2) the previous *approved pricing proposal* continues in force (despite any contrary provision of these *Rules*) during the intervening period and the first *regulatory year* of the later *regulatory control period*; and
 - (3) the later distribution determination is to make provision for appropriate adjustments to the *approved pricing proposals* for subsequent *regulatory years* of the *regulatory control period*.

6.12 Requirements relating to draft and final distribution determinations

6.12.1 Constituent decisions

A distribution determination is predicated on the following decisions by the AER (**constituent decisions**):

- (1) a decision on the classification of the services to be provided by the *Distribution Network Service Provider* during the course of the *regulatory control period*;
- (2) a decision on the *Distribution Network Service Provider's* current *building block proposal* in which the AER either approves or refuses to approve:
 - (i) the *annual revenue requirement* for the *Distribution Network Service Provider*, as set out in the *building block proposal*, for each *regulatory year* of the *regulatory control period*; and
 - (ii) the commencement and length of the *regulatory control period* as proposed in the *building block proposal*;
- (2A) a decision in which the AER determines to either grant or reject a request for an *asset exemption* under clause 6.4B.1(a)(1) in respect of a *building block proposal* for the *regulatory control period*;
- (3) a decision in which the AER either:
 - (i) acting in accordance with clause 6.5.7(c), accepts the total of the forecast capital expenditure for the *regulatory control period* that is included in the current *building block proposal*; or
 - (ii) acting in accordance with clause 6.5.7(c)(2) or 6.5.7(d), does not accept the total of the forecast capital expenditure for the *regulatory control period* that is included in the current *building block proposal*, in which case the AER must set out its reasons for that decision and an estimate of the total of the *Distribution Network Service Provider's* required capital expenditure for the *regulatory control period* that the AER is satisfied reasonably reflects the *capital expenditure criteria*, taking into account the *capital expenditure factors*;
- (3A) the AER's estimate of the total of the *Distribution Network Service Provider's* required capital expenditure referred to in subparagraph (3)(ii) must not include *expenditure for a restricted asset*, unless:
 - (i) the relevant *Distribution Network Service Provider* has requested an *asset exemption* under:
 - (A) clause 6.4B.1(a)(2) for the previous *regulatory control period*, to the extent any of the AER's estimate relates to the *Distribution Network Service Provider's* forecast for unspent capital expenditure under clause 6.5.7(g) for a *contingent*

project that commenced in the previous regulatory control period and that unspent capital was in respect of expenditure for a restricted asset;

- (B) *clause 6.4B.1(a)(3) for the previous regulatory control period, to the extent any of the AER's estimate relates to an approved pass through amount for the Distribution Network Service Provider for the regulatory control period and that approved pass through amount is in respect of expenditure for a restricted asset; or*
- (C) *clause 6.4B.1(a)(1) for the regulatory control period, to the extent any of the AER's estimate otherwise relates to the Distribution Network Service Provider's required capital expenditure for the regulatory control period and that capital expenditure is in respect of expenditure for a restricted asset,*

for that asset or class of asset; and

- (ii) *the AER has granted the asset exemption.*

(4) *a decision in which the AER either:*

- (i) *acting in accordance with clause 6.5.6(c), accepts the total of the forecast operating expenditure for the regulatory control period that is included in the current building block proposal; or*
- (ii) *acting in accordance with clause 6.5.6(d), does not accept the total of the forecast operating expenditure for the regulatory control period that is included in the current building block proposal, in which case the AER must set out its reasons for that decision and an estimate of the total of the Distribution Network Service Provider's required operating expenditure for the regulatory control period that the AER is satisfied reasonably reflects the operating expenditure criteria, taking into account the operating expenditure factors;*

(4A) *a decision in which the AER determines:*

- (i) *whether each of the proposed contingent projects (if any) described in the current regulatory proposal are contingent projects for the purposes of the distribution determination in which case the decision must clearly identify each of those contingent projects;*
- (ii) *the capital expenditure that it is satisfied reasonably reflects the capital expenditure criteria, taking into account the capital expenditure factors, in the context of each contingent project as described in the current regulatory proposal;*
- (iii) *the trigger events in relation to each contingent project (in which case the decision must clearly specify those trigger events);*

- (iv) if the *AER* determines that such a *proposed contingent project* is not a *contingent project* for the purposes of the distribution determination, its reasons for that conclusion, having regard to the requirements of clause 6.6A.1(b); and
- (v) to grant or reject a request for an *asset exemption* under clause 6.4B.1(a)(2) in respect of a *proposed contingent project*;
- (5) a decision on the *allowed rate of return* for each *regulatory year* of the *regulatory control period* in accordance with clause 6.5.2;
- (5A) a decision on whether the return on debt is to be estimated using a methodology referred to in clause 6.5.2(i)(2) and, if that is the case, the formula that is to be applied in accordance with clause 6.5.2(l);
- (5B) a decision on the value of imputation credits as referred to in clause 6.5.3;
- (6) a decision on the regulatory asset base as at the commencement of the *regulatory control period* in accordance with clause 6.5.1 and schedule 6.2;
- (7) a decision on the estimated cost of corporate income tax to the *Distribution Network Service Provider* for each *regulatory year* of the *regulatory control period* in accordance with clause 6.5.3;
- (8) a decision on whether or not to approve the depreciation schedules submitted by the *Distribution Network Service Provider* and, if the *AER* decides against approving them, a decision determining depreciation schedules in accordance with clause 6.5.5(b);
- (9) a decision on how any applicable *efficiency benefit sharing scheme*, *capital expenditure sharing scheme*, *service target performance incentive scheme*, *demand management incentive scheme*, *demand management innovation allowance mechanism* or *small-scale incentive scheme* is to apply to the *Distribution Network Service Provider*;
- (10) a decision in which the *AER* decides other appropriate amounts, values or inputs;
- (11) a decision on the form of the control mechanisms (including the X factor) for *standard control services* (to be in accordance with the relevant *framework and approach paper*) and on the formulae that give effect to those control mechanisms;
- (12) a decision on the form of the control mechanisms for *alternative control services* (to be in accordance with the relevant *framework and approach paper*) and on the formulae that give effect to those control mechanisms;
- (13) a decision on how compliance with a relevant control mechanism is to be demonstrated;
- (14) a decision on the additional *pass through events* that are to apply for the *regulatory control period* in accordance with clause 6.5.10;

- (14A) a decision on the *Distribution Network Service Provider's* proposed *tariff structure statement*, in which the AER either approves or refuses to approve that statement;
- (15) a decision on the *negotiating framework* that is to apply to the *Distribution Network Service Provider* for the *regulatory control period* (which may be the *negotiating framework* as proposed by the *Distribution Network Service Provider*, some variant of it, or a framework substituted by the AER);
- (16) a decision in which the AER decides the *Negotiated Distribution Service Criteria* for the *Distribution Network Service Provider*;
- (17) a decision on the policies and procedures for assigning *retail customers* to *tariff classes*, or reassigning *retail customers* from one *tariff class* to another (including any applicable restrictions);
- (17A) a decision on the approval of the proposed *pricing methodology* for *transmission standard control services* (if rule 6.26 applies);
- (18) a decision on whether depreciation for establishing the regulatory asset base as at the commencement of the following *regulatory control period* is to be based on actual or forecast capital expenditure;

Note:

See clause S6.2.2B.

- (19) a decision on how the *Distribution Network Service Provider* is to report to the AER on its recovery of *designated pricing proposal charges* for each *regulatory year* of the *regulatory control period* and on the adjustments to be made to subsequent *pricing proposals* to account for over or under recovery of those charges;
- (20) a decision on how the *Distribution Network Service Provider* is to report to the AER on its recovery of *jurisdictional scheme amounts* for each *regulatory year* of the *regulatory control period* and on the adjustments to be made to subsequent *pricing proposals* to account for over or under recovery of those amounts. A decision under this subparagraph (20) must be made in relation to each *jurisdictional scheme* under which the *Distribution Network Service Provider* has *jurisdictional scheme obligations* at the time the decision is made; and
- (21) a decision on the *connection policy* that is to apply to the *Distribution Network Service Provider* for the *regulatory control period* (which may be the *connection policy* as proposed by the *Distribution Network Service Provider*, some variant of it, or a policy substituted by the AER).

6.12.2 Reasons for decisions

- (a) The reasons given by the AER for a draft distribution determination under rule 6.10 or a final distribution determination under rule 6.11 must set out the basis and rationale of the determination, including:

- (1) details of the qualitative and quantitative methods applied in any calculations and formulae made or used by the *AER*;
 - (2) the values adopted by the *AER* for each of the input variables in any calculations and formulae, including:
 - (i) whether those values have been taken or derived from the *Distribution Network Service Provider's* current building block proposal; and
 - (ii) if not, the rationale for the adoption of those values;
 - (3) details of any assumptions made by the *AER* in undertaking any material qualitative and quantitative analyses; and
 - (4) reasons for the making of any decisions, the giving or withholding of any approvals, and the exercise of any discretions as referred to in this Chapter 6, for the purposes of the determination, such reasons being expressed by reference to the requirements relating to such decisions, approvals or discretions as are contained in this Chapter.
- (b) The *AER* must include in its reasons for a draft distribution determination under rule 6.10 or a final distribution determination under rule 6.11 a statement, with supporting reasons, as to the extent to which the roll forward of the regulatory asset base as determined under clause 6.12.1(6) contributes to the achievement of the *capital expenditure incentive objective*.

6.12.3 Extent of AER's discretion in making distribution determinations

- (a) Subject to this clause and other provisions of this Chapter 6 explicitly negating or limiting the *AER's* discretion, the *AER* has a discretion to accept or approve, or to refuse to accept or approve, any element of:
- (1) a *regulatory proposal*;
 - (2) proposed *tariff structure statement*; or
 - (3) *exemption application* (if any).
- (b) The classification of *distribution services* must be as set out in the relevant *framework and approach paper* unless the *AER* considers that a material change in circumstances justify departing from the classification as set out in that paper.
- (c) The form of the control mechanism must be as set out in the relevant *framework and approach paper* unless the *AER*:
- (1) has departed from the classification of a *distribution service* as set out in that paper in accordance with paragraph (b); and
 - (2) considers that no form of control mechanism set out in that paper should apply to that *distribution service*.

- (c1) The formulae that give effect to the control mechanisms set out in the relevant *framework and approach paper* must be as set out in that paper unless the AER considers that a material change in circumstances justify departing from the formulae as set out in that paper.
- (d) The AER must approve the *total revenue requirement* for a *Distribution Network Service Provider* for a *regulatory control period*, and the *annual revenue requirement* for each *regulatory year* of the *regulatory control period*, as set out in the *Distribution Network Service Provider's* current *building block proposal*, if the AER is satisfied that those amounts have been properly calculated using the *post-tax revenue model* on the basis of amounts calculated, determined or forecast in accordance with the requirements of Part C of this Chapter 6.
- (e) The AER must approve a proposed *regulatory control period* if the proposed period consists of 5 *regulatory years*.
- (f) **[Deleted]**
- (g) The AER must approve a proposed *negotiating framework* if the AER is satisfied that it adequately complies with the requirements of Part D.
- (h) If the AER refuses to approve the proposed *negotiating framework*, the approved amended *negotiating framework* must be:
 - (1) determined on the basis of the current proposed *negotiating framework*; and
 - (2) amended from that basis only to the extent necessary to enable it to be approved in accordance with the *Rules*.
- (i) The AER must approve the proposed *connection policy* if the AER is satisfied that it adequately complies with the requirements of Part DA.
- (j) If the AER refuses to approve the proposed *connection policy*, the approved amended *connection policy* must be:
 - (1) determined on the basis of the current proposed *connection policy*; and
 - (2) amended from that basis only to the extent necessary to enable it to be approved in accordance with the *Rules*.
- (k) The AER must approve a *Distribution Network Service Provider's* proposed *tariff structure statement* unless the AER is reasonably satisfied that the proposed *tariff structure statement* does not comply with the *pricing principles for direct control services* or other applicable requirements of the *Rules*.
- (l) If, in making a distribution determination in relation to a *Distribution Network Service Provider*, the AER refuses to approve the *Distribution Network Service Provider's* proposed *tariff structure statement*, the AER

must include in that distribution determination an amended *tariff structure statement* which is:

- (1) determined on the basis of the *Distribution Network Service Provider's* proposed *tariff structure statement*; and
- (2) amended from that basis only to the extent necessary to enable it to be approved in accordance with the *Rules*.

6.13 Revocation and substitution of distribution determination for wrong information or error

- (a) The *AER* may (but is not required to) revoke a distribution determination during a *regulatory control period* if it appears to the *AER* that the distribution determination is affected by a material error or deficiency of one or more of the following kinds:
 - (1) a clerical mistake or an accidental slip or omission;
 - (2) a miscalculation or misdescription;
 - (3) a defect in form; or
 - (4) a deficiency resulting from the provision of false or materially misleading information to the *AER*.
- (b) If the *AER* revokes a distribution determination under paragraph (a), the *AER* must make a new distribution determination in substitution for the revoked distribution determination to apply for the remainder of the *regulatory control period* for which the revoked distribution determination was to apply.
- (c) If the *AER* revokes and substitutes a distribution determination under paragraphs (a) and (b), the substituted distribution determination must only vary from the revoked distribution determination to the extent necessary to correct the relevant error or deficiency.
- (d) The *AER* may only revoke and substitute a distribution determination under this rule 6.13, if it has first consulted with the relevant *Distribution Network Service Provider* and such other persons as it considers appropriate.

6.14 Miscellaneous

- (a) The *AER* may, but is not required to, consider any submission made pursuant to an invitation for submissions after the time for making the submission has expired.
- (b) Nothing in this Part E is to be construed as precluding the *AER* from *publishing* any issues, consultation and discussion papers, or holding any conferences and information sessions, that the *AER* considers appropriate.

- (c) Subject to paragraph (d), as soon as practicable after the *AER* receives a submission in response to an invitation for submissions that is made under this Chapter (whether or not the submission was made before the time for making it has expired), the *AER* must *publish* that submission.
- (d) The *AER* must not *publish* a submission referred to in paragraph (c) to the extent it contains information which has been clearly identified as confidential by the person making the submission.
- (e) The *AER* may give such weight to *confidential information* identified in accordance with paragraph (d) in a submission as it considers appropriate, having regard to the fact that such information has not been made publicly available.
- (f) Paragraph (d) does not apply to the extent that any other provision of the Law or the *Rules* permits or requires such information to be publicly released by the *AER*.

6.14A Distribution Confidentiality Guidelines

- (a) The *AER* must, in accordance with the *distribution consultation procedures*, make and *publish* guidelines (*Distribution Confidentiality Guidelines*).
- (b) The *Distribution Confidentiality Guidelines* must specify the manner in which the *Distribution Network Service Provider* may make confidentiality claims in its *regulatory proposal*, which may include categories of confidential information by reference to which *Distribution Network Service Providers* must classify any claims of confidentiality in their *regulatory proposals*.
- (c) There must be *Distribution Confidentiality Guidelines* in force at all times after the date on which the *AER* first *publishes* the *Distribution Confidentiality Guidelines* under these *Rules*.
- (d) The *Distribution Confidentiality Guidelines* are binding on the *AER* and each *Distribution Network Service Provider* to which they apply.

Part F Cost Allocation

6.15 Cost allocation

6.15.1 Duty to comply with Cost Allocation Method

A *Distribution Network Service Provider* must comply with the *Cost Allocation Method* that has been approved in respect of that provider from time to time by the *AER* under this rule 6.15.

6.15.2 Cost Allocation Principles

The following principles constitute the *Cost Allocation Principles*:

- (1) the detailed principles and policies used by a *Distribution Network Service Provider* to allocate costs between different categories of *distribution services* must be described in sufficient detail to enable the *AER* to replicate reported outcomes through the application of those principles and policies;
- (2) the allocation of costs must be determined according to the substance of a transaction or event rather than its legal form;
- (3) only the following costs may be allocated to a particular category of *distribution services*:
 - (i) costs which are directly attributable to the provision of those services;
 - (ii) costs which are not directly attributable to the provision of those services but which are incurred in providing those services, in which case such costs must be allocated to the provision of those services using an appropriate allocator which should:
 - (A) except to the extent the cost is immaterial or a causal based method of allocation cannot be established without undue cost and effort, be causation based; and
 - (B) to the extent the cost is immaterial or a causal based method of allocation cannot be established without undue cost and effort, be an allocator that accords with a well accepted cost allocation method;
- (4) any cost allocation method which is used, the reasons for using that method and the numeric quantity (if any) of the chosen allocator must be clearly described;
- (5) the same cost must not be allocated more than once;
- (6) the principles, policies and approach used to allocate costs must be consistent with the *Distribution Ring-Fencing Guidelines*;
- (7) costs which have been allocated to a particular service cannot be reallocated to another service during the course of a *regulatory control period*.

Note:

The *Cost Allocation Guidelines* are required by clause 6.15.3 to give effect to and be consistent with, the *Cost Allocation Principles*.

6.15.3 Cost Allocation Guidelines

- (a) The *AER* must, in accordance with the *distribution consultation procedures*, make and *publish* guidelines (the *Cost Allocation Guidelines*) relating to the preparation by a *Distribution Network Service Provider* of its *Cost Allocation Method*.
- (b) The *Cost Allocation Guidelines* must give effect to and be consistent with the *Cost Allocation Principles*.

- (c) Without limiting the generality of paragraph (b), the *Cost Allocation Guidelines* may specify:
 - (1) the format of a *Cost Allocation Method*;
 - (2) the detailed information that is to be included in a *Cost Allocation Method*;
 - (3) the categories of *distribution services* which are to be separately addressed in a *Cost Allocation Method*, such categories being determined by reference to the nature of those services, the persons to whom those services are provided or such other factors as the AER considers appropriate; and
 - (4) the allocation methods which are acceptable and the supporting information that is to be included in relation to such methodologies in a *Cost Allocation Method*.
- (d) The *Cost Allocation Guidelines* are binding on the AER and each *Distribution Network Service Provider* to which they apply.
- (e) The AER must *publish* the first *Cost Allocation Guidelines* within 6 months after the commencement of these *Rules* and there must be *Cost Allocation Guidelines* in force at all times after that date.

6.15.4 Cost Allocation Method

- (a) Each *Distribution Network Service Provider* must submit to the AER for its approval a document setting out its proposed *Cost Allocation Method*:
 - (1) within 12 months after the commencement of these *Rules*; or
 - (2) in the case of an entity that becomes a *Distribution Network Service Provider* more than 6 months after the commencement of these *Rules*, within 6 months of being required to do so by the AER.
- (b) The *Cost Allocation Method* proposed by a *Distribution Network Service Provider* must give effect to and be consistent with the *Cost Allocation Guidelines*.
- (c) The AER may approve or refuse to approve a *Cost Allocation Method* submitted under paragraph (a).
- (d) The AER must notify the relevant *Distribution Network Service Provider* of its decision to approve or refuse to approve the *Cost Allocation Method* submitted to it under paragraph (a) within 6 months of its submission, failing which the AER will be taken to have approved it.
- (e) As part of giving any approval referred to in paragraph (c), the AER may, after consulting with the relevant *Distribution Network Service Provider*, amend the *Cost Allocation Method* submitted to it, in which case the *Cost Allocation Method* as so amended will be taken to be approved by the AER.

- (f) A *Distribution Network Service Provider* may, with the *AER's* approval, amend its *Cost Allocation Method* from time to time but:
 - (1) the amendment:
 - (i) may be approved on condition that the *Distribution Network Service Provider* agree to incorporate into the amendment specified additional changes to the *Cost Allocation Method* the *AER* reasonably considers necessary or desirable as a result of the amendment as submitted; and
 - (ii) if approved on such a condition, does not take effect unless and until the *Distribution Network Service Provider* notifies the *AER* of its agreement; and
 - (2) if 6 months elapse from the date of the submission of the amendment and the *AER* has not notified the *Distribution Network Service Provider* within that period of its approval or refusal to approve the amendment, the amendment is, at the end of that period, conclusively presumed to have been unconditionally approved.
- (g) A *Distribution Network Service Provider* must amend its *Cost Allocation Method* where the amendment is required by the *AER* to take into account any change to the *Cost Allocation Guidelines*, but the amendment only comes into effect:
 - (1) on the date that the *AER* approves that amendment, or 3 months after the submission of the amendment, whichever is the earlier; and
 - (2) subject to additional changes to the *Cost Allocation Method* (if any) the *AER* reasonably considers necessary or desirable as a result of the amendment and notifies to the *Distribution Network Service Provider* before the amendment takes effect.
- (h) A *Distribution Network Service Provider* must maintain a current copy of its *Cost Allocation Method* on its website.

Part G Distribution consultation procedures

6.16 Distribution consultation procedures

- (a) This rule 6.16 applies wherever the *AER* is required to comply with the *distribution consultation procedures*. For the avoidance of doubt, the *distribution consultation procedures* are separate from, and (where they are required to be complied with) apply to the exclusion of, the *Rules consultation procedures* under rule 8.9.
- (b) If the *AER* is required to comply with the *distribution consultation procedures* in preparing, making, developing, reviewing, amending or replacing any guidelines, methodologies, models, schemes, or tests, it must *publish*:

- (1) the proposed guideline, methodology, model, scheme, test or amendment;
 - (2) an explanatory statement that sets out the provision of the *Rules* under or for the purposes of which the guideline, methodology, model, scheme, test or amendment is proposed to be prepared, made or developed or is required to be reviewed, and the reasons for the proposed guideline, methodology, model, scheme, test or amendment; and
 - (3) an invitation for written submissions on the proposed guideline, methodology, model, scheme, test or amendment, or the review, (as the case may be).
- (c) The invitation must allow no less than 30 *business days* for the making of submissions, and the *AER* is not required to consider any submission made pursuant to that invitation after this time period has expired.
- (d) The *AER* may *publish* such issues, consultation and discussion papers, and hold such conferences and information sessions, in relation to the proposed guideline, methodology, model, scheme, test or amendment, or the review, as it considers appropriate.
- (e) Within 80 *business days* of *publishing* the documents referred to in paragraph (b), the *AER* must *publish*:
 - (1) its final decision on the guideline, methodology, model, scheme, test, amendment or review that sets out:
 - (i) the guideline, methodology, model, scheme, test or amendment (if any);
 - (ii) the provision of the *Rules* under which or for the purposes of which the guideline, methodology, model, scheme, test or amendment is being prepared, made or developed or is being reviewed;
 - (iii) the reasons for the guideline, methodology, model, scheme, test or amendment; and
 - (iv) the reasons for the outcome of any review; and
 - (2) notice of the making of the final decision on the guideline, methodology, model, scheme, test, amendment or review.
- (f) Subject to paragraph (c), the *AER* must, in making its final decision referred to in paragraph (e)(1), consider any submissions made pursuant to the invitation for submissions referred to in paragraph (b)(3), and the reasons referred to in paragraph (e)(1)(iii) or (iv) must include:
 - (1) a summary of each issue raised in those submissions that the *AER* reasonably considers to be material; and

- (2) the *AER*'s response to each such issue.
- (g) The *AER* may extend the time within which it is required to publish its final decision if:
 - (1) the consultation involves issues of unusual complexity or difficulty; and
 - (2) the extension of time has become necessary because of circumstances beyond the *AER*'s control.

Part H Ring-Fencing Arrangements for Distribution Network Service Providers

6.17 Distribution Ring-Fencing Guidelines

6.17.1 Compliance with Distribution Ring-Fencing Guidelines

All *Distribution Network Service Providers* must comply with the *Distribution Ring-Fencing Guidelines* prepared in accordance with clause 6.17.2.

6.17.2 Development of Distribution Ring-Fencing Guidelines

- (a) Guidelines must be developed by the *AER* for the accounting and functional separation of the provision of *direct control services* by *Distribution Network Service Providers* from the provision of other services by *Distribution Network Service Providers* (the *Distribution Ring-Fencing Guidelines*). The guidelines may vary in application as between different *participating jurisdictions*.

Note:

Clause 11.14.5 will have a bearing on the application of these guidelines in certain cases.

- (b) The *Distribution Ring-Fencing Guidelines* may include, but are not limited to:
 - (1) provisions defining the need for and extent of:
 - (i) legal separation of the entity through which a *Distribution Network Service Provider* provides *network services* from any other entity through which it conducts business; and
 - (ii) the establishment and maintenance of consolidated and separate accounts for *standard control services*, *alternative control services* and other services provided by the *Distribution Network Service Provider*; and
 - (iii) allocation of costs between *standard control services*, *alternative control services* and other services provided by the *Distribution Network Service Provider*; and

- (iv) limitations on the flow of information between the *Distribution Network Service Provider* and any other person; and
 - (v) limitations on the flow of information where there is the potential for a competitive disadvantage between those parts of the *Distribution Network Service Provider's* business which provide *direct control services* and parts of the provider's business which provide any other services; and
- (2) provisions allowing the AER to add to or to waive a *Distribution Network Service Provider's* obligations under the *Distribution Ring-Fencing Guidelines*.
- (c) In developing or amending the *Distribution Ring-Fencing Guidelines* the AER must consider, without limitation, the need, so far as practicable, for consistency between the *Distribution Ring-Fencing Guidelines* and the *Transmission Ring-Fencing Guidelines*.
- (d) In developing or amending the *Distribution Ring-Fencing Guidelines*, the AER must consult with *participating jurisdictions, Registered Participants, AEMO* and other *interested parties*, and such consultation must be otherwise in accordance with the *distribution consultation procedures*.

Part I Distribution Pricing Rules

6.18 Distribution Pricing Rules

6.18.1 Application of this Part

This Part applies to tariffs and *tariff classes* related to *direct control services*.

6.18.1A Tariff structure statement

- (a) A *tariff structure statement* of a *Distribution Network Service Provider* must include the following elements:
- (1) the *tariff classes* into which *retail customers* for *direct control services* will be divided during the relevant *regulatory control period*;
 - (2) the policies and procedures the *Distribution Network Service Provider* will apply for assigning *retail customers* to tariffs or reassigning *retail customers* from one tariff to another (including any applicable restrictions);
 - (3) the structures for each proposed tariff;
 - (4) the *charging parameters* for each proposed tariff; and
 - (5) a description of the approach that the *Distribution Network Service Provider* will take in setting each tariff in each *pricing proposal* of the

Distribution Network Service Provider during the relevant *regulatory control period* in accordance with clause 6.18.5.

- (b) A *tariff structure statement* must comply with the *pricing principles* for *direct control services*.
- (c) A *Distribution Network Service Provider* must comply with the *tariff structure statement* approved by the AER and any other applicable requirements in the *Rules*, when the provider is setting the prices that may be charged for *direct control services*.
- (d) Subject to clause 6.18.1B, a *tariff structure statement* may not be amended during a *regulatory control period*.

Note

Rule 6.13 still applies in relation to a *tariff structure statement* because that rule deals with the revocation and substitution of a distribution determination (which includes a *tariff structure statement*) as opposed to its amendment.

- (e) A *tariff structure statement* must be accompanied by an *indicative pricing schedule* which sets out, for each tariff for each *regulatory year* of the *regulatory control period*, the indicative price levels determined in accordance with the *tariff structure statement*.

6.18.1B Amending a tariff structure statement with the AER's approval

- (a) No later than nine months before the start of a *regulatory year* (other than the first *regulatory year* of a *regulatory control period*) (**relevant regulatory year**), a *Distribution Network Service Provider* may request the AER to approve an amendment to its current *tariff structure statement*.
- (b) A request for an amendment to a *tariff structure statement* under paragraph (a) must include:
 - (1) the proposed amended *tariff structure statement*;
 - (2) a description of the event that has occurred to cause the *Distribution Network Service Provider* to seek an amendment to its current *tariff structure statement* and why the event:
 - (i) was beyond the reasonable control of the *Distribution Network Service Provider*; and
 - (ii) could not reasonably have been foreseen by the *Distribution Network Service Provider* at the time its current *tariff structure statement* was approved by the AER.
 - (3) a description and justification of the differences between the proposed amended *tariff structure statement* and the *Distribution Network Service Provider's* current *tariff structure statement*;

- (4) a description of how the differences referred to in sub-paragraph (3) would impact the other elements of the *tariff structure statement*;
 - (5) a description of how the proposed amended *tariff structure statement* would better comply with the *pricing principles for direct control services* than the current *tariff structure statement*; and
 - (6) a description of how the *Distribution Network Service Provider* has engaged with *retail customers* and *retailers* in developing the proposed amended *tariff structure statement* and has sought to address any relevant concerns identified as a result of that engagement.
- (c) The *AER* must, on receipt of a *Distribution Network Service Provider's* request for an amendment to its *tariff structure statement*, *publish* the request.
- (d) The *AER* must approve the request for an amendment to a *tariff structure statement* under paragraph (a) if the *Distribution Network Service Provider* demonstrates to the reasonable satisfaction of the *AER* that:
 - (1) an event has occurred that:
 - (i) was beyond the reasonable control of the *Distribution Network Service Provider*; and
 - (ii) could not reasonably have been foreseen by the *Distribution Network Service Provider* at the time its current *tariff structure statement* was approved by the *AER*; and
 - (2) as a result of the event referred to in sub-paragraph (1), the proposed amended *tariff structure statement* would, or would be likely to, materially better comply with the *pricing principles for direct control services* than the *Distribution Network Service Provider's* current *tariff structure statement*.
- (e) No later than four months before the start of the relevant *regulatory year*, the *AER* must either approve or refuse to approve the request for an amendment to a *tariff structure statement* under paragraph (a) and set out reasons for its decision.
- (f) If the *AER* refuses to approve the request for an amendment to a *tariff structure statement* under paragraph (a), the current *tariff structure statement* will apply for the relevant *regulatory year* and, subject to any subsequent amendment approved under this clause 6.18.1B, the remainder of the *regulatory control period*.

Note

Rule 6.13 still applies in relation to a *tariff structure statement* because that rule deals with the revocation and substitution of a distribution determination (which includes a *tariff structure statement*) as opposed to its amendment.

6.18.1C Sub-threshold tariffs

- (a) No later than four months before the start of a *regulatory year* (other than the first *regulatory year* of a *regulatory control period*), a *Distribution Network Service Provider* may notify the *AER*, affected *retailers* and affected *retail customers* of a new proposed tariff (a **relevant tariff**) that is determined otherwise than in accordance with the *Distribution Network Service Provider's current tariff structure statement*, if both of the following are satisfied:
 - (1) the *Distribution Network Service Provider's* forecast revenue from the relevant tariff during each *regulatory year* in which the tariff is to apply is no greater than 0.5 per cent of the *Distribution Network Service Provider's annual revenue requirement* for that *regulatory year* (the **individual threshold**); and
 - (2) the *Distribution Network Service Provider's* forecast revenue from the relevant tariff, as well as from all other relevant tariffs, during each *regulatory year* in which those tariffs are to apply is no greater than one per cent of the *Distribution Network Service Provider's annual revenue requirement* for that *regulatory year* (the **cumulative threshold**).
- (b) Notwithstanding any other provision in the *Rules* to the contrary, a relevant tariff notified by the *Distribution Network Service Provider* in accordance with paragraph (a) is, for the remainder of the *regulatory control period* in which the notification is given:
 - (1) not required to comply with the *pricing principles for direct control services*; and
 - (2) for the purposes of the submission and approval of a *pricing proposal*, deemed to comply with the *Distribution Network Service Provider's current tariff structure statement*,

unless, at any point in time after the notification of the relevant tariff is given under paragraph (a) (the **post-notification point**), either the individual threshold or the cumulative threshold (in each case calculated using actual rather than forecast revenue) are exceeded by virtue of the amount of revenue that is attributable to the relevant tariff, in which case sub-paragraphs (1) and (2) cease to apply to the relevant tariff in relation to the *regulatory years* that commence after the post-notification point.

- (c) Where sub-paragraphs (b)(1) and (2) cease to apply to a relevant tariff in accordance with paragraph (b), then sub-paragraphs (b)(1) and (2) will be taken to continue to apply to other relevant tariffs that were notified before the post-notification point, but only to the extent that those sub-paragraphs would apply if the first-mentioned relevant tariff were not a relevant tariff.

6.18.2 Pricing proposals

- (a) A *Distribution Network Service Provider* must:

- (1) submit to the *AER*, as soon as practicable, and in any case within 15 *business days*, after *publication* of the distribution determination, a *pricing proposal* (the **initial pricing proposal**) for the first *regulatory year* of the *regulatory control period*; and
 - (2) submit to the *AER*, at least 3 months before the commencement of the second and each subsequent *regulatory year* of the *regulatory control period*, a further *pricing proposal* (an **annual pricing proposal**) for the relevant *regulatory year*.
- (b) A *pricing proposal* must:
- (1) **[Deleted]**;
 - (2) set out the proposed tariffs for each *tariff class* that is specified in the *Distribution Network Service Provider's tariff structure statement* for the relevant *regulatory control period*;
 - (3) set out, for each proposed tariff, the *charging parameters* and the elements of service to which each *charging parameter* relates;
 - (4) set out, for each *tariff class* related to *standard control services*, the expected weighted average revenue for the relevant *regulatory year* and also for the current *regulatory year*;
 - (5) set out the nature of any variation or adjustment to the tariff that could occur during the course of the *regulatory year* and the basis on which it could occur;
 - (6) set out how *designated pricing proposal charges* are to be passed on to customers and any adjustments to tariffs resulting from over or under recovery of those charges in the previous *regulatory year*;
 - (6A) set out how *jurisdictional scheme amounts* for each *approved jurisdictional scheme* are to be passed on to customers and any adjustments to tariffs resulting from over or under recovery of those amounts;
 - (6B) describe how each *approved jurisdictional scheme* that has been amended since the *last jurisdictional scheme approval date* meets the *jurisdictional scheme eligibility criteria*;
 - (7) demonstrate compliance with the *Rules* and any applicable distribution determination, including the *Distribution Network Service Provider's tariff structure statement* for the relevant *regulatory control period*;
 - (7A) demonstrate how each proposed tariff is consistent with the corresponding indicative pricing levels for the relevant *regulatory year* as set out in the relevant *indicative pricing schedule*, or explain any material differences between them; and

- (8) describe the nature and extent of change from the previous *regulatory year* and demonstrate that the changes comply with the *Rules* and any applicable distribution determination.
- (c) The *AER* must on receipt of a *pricing proposal* from a *Distribution Network Service Provider* publish the proposal.
- (d) At the same time as a *Distribution Network Service Provider* submits a *pricing proposal* under paragraph (a), the *Distribution Network Service Provider* must submit to the *AER* a revised *indicative pricing schedule* which sets out, for each tariff and for each of the remaining *regulatory years* of the *regulatory control period*, the indicative price levels determined in accordance with the *Distribution Network Service Provider's tariff structure statement* for that *regulatory control period* and updated so as to take into account that *pricing proposal*.
- (e) Where the *Distribution Network Service Provider* submits an annual *pricing proposal*, the revised *indicative pricing schedule* referred to in paragraph (d) must also set out, for each relevant tariff under clause 6.18.1C, the indicative price levels for that relevant tariff for each of the remaining *regulatory years* of the *regulatory control period*, updated so as to take into account that *pricing proposal*.

6.18.3 Tariff classes

- (a) **[Deleted]**.
- (b) Each *retail customer* for *direct control services* must be a member of 1 or more *tariff classes*.
- (c) Separate *tariff classes* must be constituted for *retail customers* to whom *standard control services* are supplied and *retail customers* to whom *alternative control services* are supplied (but a *retail customer* for both *standard control services* and *alternative control services* may be a member of 2 or more *tariff classes*).
- (d) A *tariff class* must be constituted with regard to:
 - (1) the need to group *retail customers* together on an economically efficient basis; and
 - (2) the need to avoid unnecessary transaction costs.

6.18.4 Principles governing assignment or re-assignment of retail customers to tariff classes and assessment and review of basis of charging

- (a) In formulating provisions of a distribution determination governing the assignment of *retail customers* to *tariff classes* or the re-assignment of *retail customers* from one *tariff class* to another, the *AER* must have regard to the following principles:

- (1) *retail customers* should be assigned to *tariff classes* on the basis of one or more of the following factors:
 - (i) the nature and extent of their usage;
 - (ii) the nature of their *connection* to the *network*;
 - (iii) whether remotely-read interval metering or other similar metering technology has been installed at the *retail customer's* premises as a result of a *regulatory obligation or requirement*;
- (2) *retail customers* with a similar *connection* and usage profile should be treated on an equal basis;
- (3) however, *retail customers* with micro-generation facilities should be treated no less favourably than *retail customers* without such facilities but with a similar load profile;
- (4) a *Distribution Network Service Provider's* decision to assign a customer to a particular *tariff class*, or to re-assign a customer from one *tariff class* to another should be subject to an effective system of assessment and review.

Note:

If (for example) a customer is assigned (or reassigned) to a *tariff class* on the basis of the customer's actual or assumed *maximum demand*, the system of assessment and review should allow for the reassignment of a customer who demonstrates a reduction or increase in *maximum demand* to a *tariff class* that is more appropriate to the customer's *load profile*.

- (b) If the *charging parameters* for a particular tariff result in a basis of charge that varies according to the usage or load profile of the customer, a distribution determination must contain provisions for an effective system of assessment and review of the basis on which a customer is charged.

6.18.5 Pricing principles

Network pricing objective

- (a) The *network pricing objective* is that the tariffs that a *Distribution Network Service Provider* charges in respect of its provision of *direct control services* to a *retail customer* should reflect the *Distribution Network Service Provider's* efficient costs of providing those services to the *retail customer*.

Application of the pricing principles

- (b) Subject to paragraph (c), a *Distribution Network Service Provider's* tariffs must comply with the pricing principles set out in paragraphs (e) to (j).
- (c) A *Distribution Network Service Provider's* tariffs may vary from tariffs which would result from complying with the pricing principles set out in paragraphs (e) to (g) only:

- (1) to the extent permitted under paragraph (h); and
 - (2) to the extent necessary to give effect to the pricing principles set out in paragraphs (i) to (j).
- (d) A *Distribution Network Service Provider* must comply with paragraph (b) in a manner that will contribute to the achievement of the *network pricing objective*.

Pricing principles

- (e) For each *tariff class*, the revenue expected to be recovered must lie on or between:
 - (1) an upper bound representing the stand alone cost of serving the *retail customers* who belong to that class; and
 - (2) a lower bound representing the avoidable cost of not serving those *retail customers*.
- (f) Each tariff must be based on the *long run marginal cost* of providing the service to which it relates to the *retail customers* assigned to that tariff with the method of calculating such cost and the manner in which that method is applied to be determined having regard to:
 - (1) the costs and benefits associated with calculating, implementing and applying that method as proposed;
 - (2) the additional costs likely to be associated with meeting demand from *retail customers* that are assigned to that tariff at times of greatest utilisation of the relevant part of the *distribution network*; and
 - (3) the location of *retail customers* that are assigned to that tariff and the extent to which costs vary between different locations in the *distribution network*.
- (g) The revenue expected to be recovered from each tariff must:
 - (1) reflect the *Distribution Network Service Provider's* total efficient costs of serving the *retail customers* that are assigned to that tariff;
 - (2) when summed with the revenue expected to be received from all other tariffs, permit the *Distribution Network Service Provider* to recover the expected revenue for the relevant services in accordance with the applicable distribution determination for the *Distribution Network Service Provider*; and
 - (3) comply with sub-paragraphs (1) and (2) in a way that minimises distortions to the price signals for efficient usage that would result from tariffs that comply with the pricing principle set out in paragraph (f).

- (h) A *Distribution Network Service Provider* must consider the impact on *retail customers* of changes in tariffs from the previous *regulatory year* and may vary tariffs from those that comply with paragraphs (e) to (g) to the extent the *Distribution Network Service Provider* considers reasonably necessary having regard to:
 - (1) the desirability for tariffs to comply with the pricing principles referred to in paragraphs (f) and (g), albeit after a reasonable period of transition (which may extend over more than one *regulatory control period*);
 - (2) the extent to which *retail customers* can choose the tariff to which they are assigned; and
 - (3) the extent to which *retail customers* are able to mitigate the impact of changes in tariffs through their usage decisions.
- (i) The structure of each tariff must be reasonably capable of being understood by *retail customers* that are assigned to that tariff, having regard to:
 - (1) the type and nature of those *retail customers*; and
 - (2) the information provided to, and the consultation undertaken with, those *retail customers*.
- (j) A tariff must comply with the *Rules* and all *applicable regulatory instruments*.

6.18.6 Side constraints on tariffs for standard control services

- (a) This clause applies only to *tariff classes* related to the provision of *standard control services*.
- (b) The expected weighted average revenue to be raised from a *tariff class* for a particular *regulatory year* of a *regulatory control period* must not exceed the corresponding expected weighted average revenue for the preceding *regulatory year* in that *regulatory control period* by more than the permissible percentage.
- (c) The permissible percentage is the greater of the following:
 - (1) the CPI-X limitation on any increase in the *Distribution Network Service Provider's* expected weighted average revenue between the two *regulatory years* plus 2%;

Note:

The calculation is of the form $(1 + \text{CPI})(1 - X)(1 + 2\%)$

- (2) CPI plus 2%.

Note:

The calculation is of the form $(1 + \text{CPI})(1 + 2\%)$

- (d) In deciding whether the permissible percentage has been exceeded in a particular *regulatory year*, the following are to be disregarded:
 - (1) the recovery of revenue to accommodate a variation to the distribution determination under rule 6.6 or 6.13;
 - (2) the recovery of revenue to accommodate pass through of *designated pricing proposal charges to retail customers*;
 - (3) the recovery of revenue to accommodate pass through of *jurisdictional scheme amounts for approved jurisdictional schemes*; and
 - (4) the recovery of revenue to accommodate any increase in the *Distribution Network Service Provider's annual revenue requirement* by virtue of an application of a formula referred to in clause 6.5.2(l).
- (e) **[Deleted]**.

6.18.7 Recovery of designated pricing proposal charges

- (a) A *pricing proposal* must provide for tariffs designed to pass on to *retail customers* the *designated pricing proposal charges* to be incurred by the *Distribution Network Service Provider*.
- (b) The amount to be passed on to *retail customers* for a particular *regulatory year* must not exceed the estimated amount of the *designated pricing proposal charges* adjusted for over or under recovery in accordance with paragraph (c).
- (c) The over and under recovery amount must be calculated in a way that:
 - (1) subject to subparagraphs (2) and (3) below, is consistent with the method determined by the *AER* in the relevant distribution determination for the *Distribution Network Service Provider*;
 - (2) ensures a *Distribution Network Service Provider* is able to recover from *retail customers* no more and no less than the *designated pricing proposal charges* it incurs; and
 - (3) adjusts for an appropriate cost of capital that is consistent with the *allowed rate of return* used in the relevant distribution determination for the relevant *regulatory year*.
- (d) Notwithstanding anything else in this clause 6.18.7, a *Distribution Network Service Provider* may not recover charges under this clause to the extent these are:

- (1) recovered through the *Distribution Network Service Provider's annual revenue requirement*;
- (2) recovered under clause 6.18.7A; or
- (3) recovered from another *Distribution Network Service Provider*.

6.18.7A Recovery of jurisdictional scheme amounts

Pricing Proposal

- (a) A *pricing proposal* must provide for tariffs designed to pass on to customers a *Distribution Network Service Provider's jurisdictional scheme amounts* for *approved jurisdictional schemes*.
- (b) The amount to be passed on to customers for a particular *regulatory year* must not exceed the estimated amount of *jurisdictional scheme amounts* for a *Distribution Network Service Provider's approved jurisdictional schemes* adjusted for over or under recovery in accordance with paragraph (c).
- (c) The over and under recovery amount must be calculated in a way that:
 - (1) subject to subparagraphs (2) and (3) below, is consistent with the method determined by the *AER* for *jurisdictional scheme amounts* in the relevant distribution determination for the *Distribution Network Service Provider*, or where no such method has been determined, with the method determined by the *AER* in the relevant distribution determination in respect of *designated pricing proposal charges*;
 - (2) ensures a *Distribution Network Service Provider* is able to recover from customers no more and no less than the *jurisdictional scheme amounts* it incurs; and
 - (3) adjusts for an appropriate cost of capital that is consistent with the *allowed rate of return* used in the relevant distribution determination for the relevant *regulatory year*.

Jurisdictional schemes

- (d) A scheme is a *jurisdictional scheme* if:
 - (1) the scheme is specified in paragraph (e); or
 - (2) the *AER* has determined under paragraph (l) that the scheme is a *jurisdictional scheme*,and the *AER* has not determined under paragraph (u) that the scheme has ceased to be a *jurisdictional scheme*.
- (e) For the purposes of paragraph (d)(1), the following schemes are *jurisdictional schemes*:

- (1) schemes established under the following laws of participating jurisdictions:
 - (i) Electricity Feed-in (Renewable Energy Premium) Act 2008 (ACT);
 - (ii) Division 3AB of the Electricity Act 1996 (SA);
 - (iii) Section 44A of the Electricity Act 1994 (Qld);
 - (iv) Electricity Industry Amendment (Premium Solar Feed-in Tariff) Act 2009 (Vic);
- (2) the Solar Bonus Scheme established under the Electricity Supply Act 1995 (NSW); and
- (3) the Climate Change Fund established under the Energy and Utilities Administration Act 1987 (NSW).

AER Requested to determine that scheme is a jurisdictional scheme

- (f) Any person may request the *AER* to determine whether a scheme is a *jurisdictional scheme*.
- (g) A request made under paragraph (f) must contain the following information:
 - (1) the name and address of the person making the request;
 - (2) details of the law of a *participating jurisdiction* under which the relevant scheme is established;
 - (3) the commencement date of the relevant scheme; and
 - (4) an explanation of how the relevant scheme meets the *jurisdictional scheme eligibility criteria*.
- (h) The *AER* must as soon as practicable after receiving the request under paragraph (f) *publish* the request.

AER may assess whether a scheme is a jurisdictional scheme

- (i) The *AER* may at any time initiate an assessment of whether a scheme is a *jurisdictional scheme*.
- (j) If the *AER* decides to initiate an assessment under paragraph (i) it must *publish* details of the scheme it is considering and the reasons for initiating the assessment.

AER to determine whether a scheme is a jurisdictional scheme

- (k) Before making a determination under paragraph (l), the *AER* may consult with the relevant *Distribution Network Service Provider* and such other

persons as the *AER* considers appropriate, on any matters arising out of the request or the assessment the *AER* considers appropriate.

- (l) The *AER* must within 20 *business days* of:
 - (1) receiving a request under paragraph (f); and
 - (2) *publishing* details of an assessment under paragraph (j),
determine in accordance with paragraph (n) if the relevant scheme is a *jurisdictional scheme* and *publish* its decision (including the reasons).
- (m) The *AER* may extend the time limit fixed in paragraph (l) if it considers that the difficulty of assessing whether a scheme is a *jurisdictional scheme*, or the complexity of the issues raised during any consultation under paragraph (k), justifies the extension.
- (n) The *AER* must only determine that a scheme is a *jurisdictional scheme* under paragraph (l) if it considers that the scheme meets the *jurisdictional scheme eligibility criteria*.

AER requested to determine that scheme should cease to be a jurisdictional scheme

- (o) Any person may request the *AER* to determine that a scheme is no longer a *jurisdictional scheme*.
- (p) A request made under paragraph (o) must contain the following information:
 - (1) the name and address of the person making the request;
 - (2) the law of a *participating jurisdiction* under which the relevant scheme is established;
 - (3) the commencement date of the relevant scheme; and
 - (4) an explanation of why the scheme no longer meets the *jurisdictional scheme eligibility criteria*.
- (q) The *AER* must as soon as practicable after receiving the request under paragraph (o) *publish* the request.

AER may assess whether a scheme should cease to a jurisdictional scheme

- (r) The *AER* may at any time consider whether a scheme should cease to be a *jurisdictional scheme*.
- (s) If the *AER* decides to initiate an assessment of whether a scheme should cease to be *jurisdictional scheme* under paragraph (r) it must *publish* details of the scheme it is considering and the reasons for initiating the assessment.

AER to determine whether a scheme should cease to be a jurisdictional scheme

- (t) Before making a determination under paragraph (u), the *AER* may consult with the relevant *Distribution Network Service Provider* and such other persons as the *AER* considers appropriate, on any matters arising out of the request or the assessment the *AER* considers appropriate.
- (u) The *AER* must within 20 *business days* of:
 - (i) receiving a request under paragraph (o); or
 - (ii) *publishing* details of an assessment under paragraph (s),determine in accordance with paragraph (w) if the relevant scheme should cease to be a *jurisdictional scheme* and *publish* its decision (including the reasons).
- (v) The *AER* may extend the time limit fixed in paragraph (u) if it considers that the difficulty of assessing whether a scheme should cease to be a *jurisdictional scheme*, or the complexity of the issues raised during any consultation under paragraph (t), justifies the extension.
- (w) The *AER* must only determine that a scheme has ceased to be a *jurisdictional scheme* under paragraph (u) if it considers that the scheme no longer meets the *jurisdictional scheme eligibility criteria*.

Jurisdictional scheme eligibility criteria

- (x) The following are the *jurisdictional scheme eligibility criteria*:
 - (1) the *jurisdictional scheme obligations* require a *Distribution Network Service Provider* to:
 - (i) pay a person;
 - (ii) pay into a fund established under an Act of a *participating jurisdiction*;
 - (iii) credit against charges payable by a person; or
 - (iv) reimburse a person,an amount specified in, or determined in accordance with, the *jurisdictional scheme obligations*;
 - (2) the *jurisdictional scheme obligations* are imposed on a *Distribution Network Service Provider* in its capacity as a *Distribution Network Service Provider*;

- (3) the amount referred to in subparagraph (1) is not in the nature of a fine, penalty or incentive payment for the *Distribution Network Service Provider*; and
- (4) except as provided in these Rules, the *Distribution Network Service Provider* has no right to recover the amount referred to in subparagraph (1) from any person.

6.18.8 Approval of pricing proposal

- (a) The *AER* must approve a *pricing proposal* if the *AER* is satisfied that:
 - (1) the proposal complies with this Part, any relevant clauses in Chapter 11 and any applicable distribution determination including any applicable *tariff structure statement*;
 - (2) each proposed tariff set out in the proposal is broadly consistent with the corresponding indicative pricing levels for that tariff for the relevant *regulatory year* as set out in any previously applicable *indicative pricing schedule*, or else any material differences between them have been explained by the *Distribution Network Service Provider*; and
 - (3) all forecasts associated with the proposal are reasonable.
- (b) If the *AER* determines that a *pricing proposal* is deficient:
 - (1) the *AER* may require the *Distribution Network Service Provider*, within 10 *business days* after receiving notice of the determination, to re-submit the proposal with the amendments necessary to correct the deficiencies identified in the determination and (unless the *AER* permits further amendment) no further amendment; or
 - (2) the *AER* may itself make the amendments necessary to correct the deficiencies.
- (c) If the *Distribution Network Service Provider* fails to comply with a requirement under paragraph (b), or the resubmitted proposal fails to correct the deficiencies in the former proposal, the *AER* may itself amend the proposal to bring it into conformity with the requirements of this Part, any applicable distribution determination and the *Distribution Network Service Provider's tariff structure statement* for the relevant *regulatory control period*.
 - (c1) For the purposes of amending a *pricing proposal* under sub-paragraph (b)(2) or paragraph (c), the *AER* may have regard to the corresponding indicative pricing levels for the relevant *regulatory year* as set out in any previously applicable *indicative pricing schedule*.
 - (c2) The *AER* must, as soon as practicable after a *Distribution Network Service Provider* has submitted an initial *pricing proposal* under sub-paragraph 6.18.2(a)(1), *publish* an *approved pricing proposal* (including any

amendments made by the *AER* under this clause 6.18.8) with respect to that initial *pricing proposal*.

- (c3) The *AER* must, within 30 *business days* from the date of submission of an annual *pricing proposal* by a *Distribution Network Service Provider* under sub-paragraph 6.18.2(a)(2), *publish an approved pricing proposal* (including any amendments made by the *AER* under this clause 6.18.8) with respect to that annual *pricing proposal*.
- (d) *An approved pricing proposal* takes effect:
 - (1) in the case of an initial *pricing proposal* – at the commencement of the first *regulatory year* of the *regulatory control period* for which the distribution determination is made; and
 - (2) in the case of an annual *pricing proposal* – at the commencement of the *regulatory year* to which the proposal relates.

Note:

The operation of this paragraph may, in some instances, be displaced or modified by clause 6.11.3(b).

6.18.9 Publication of information about tariffs and tariff classes

- (a) A *Distribution Network Service Provider* must maintain on its website:
 - (1) its current *tariff structure statement*;
 - (2) its current *indicative pricing schedule*; and
 - (3) a statement of the provider's *tariff classes* and the tariffs applicable to each class.
- (a1) A *Distribution Network Service Provider* must, within 5 *business days* from the date the *AER* publishes a distribution determination under paragraph 6.11.2(2) for that *Distribution Network Service Provider*, publish on its website the *tariff structure statement* approved or contained in that distribution determination and the accompanying *indicative pricing schedule*.
- (b) A *Distribution Network Service Provider* must publish on its website the information referred to in paragraph (a) within 5 *business days* from the date the *AER* publishes an *approved pricing proposal* under paragraphs 6.18.8(c2) or 6.18.8(c3) (as applicable) for that *Distribution Network Service Provider*.

6.19. Data Required for Distribution Service Pricing

6.19.1 Forecast use of networks by Distribution Customers and Embedded Generators

Any information required by *Distribution Network Service Providers* must be provided by *Service Applicants* as part of the *connection* and access requirements set out in Chapter 5.

6.19.2 Confidentiality of distribution network pricing information

- (a) Subject to the Law and the *Rules*, all information about a *Service Applicant* or *Distribution Network User* used by *Distribution Network Service Providers* for the purposes of *distribution service* pricing is confidential information.
- (b) No requirement in this Chapter 6 to publish information about a *tariff class* is to be construed as requiring publication of information about an individual *retail customer*.

Part J Billing and Settlements

6.20 Billing and Settlements Process

This clause describes the manner in which *Distribution Customers* and *Embedded Generators* are billed by *Distribution Network Service Providers* for *distribution services* and how payments for *distribution services* are settled.

6.20.1 Billing for distribution services

- (a) A *Distribution Network Service Provider* must bill *Distribution Network Users* for *distribution services* as follows:

- (1) *Embedded Generators*:

- (i) by applying the *entry charge* as a fixed annual charge to each *Embedded Generator*; and
 - (ii) by applying any other charge the *Distribution Network Service Provider* makes consistently with these *Rules* and the applicable distribution determination.

- (2) *Distribution Customers*:

The charges to *Distribution Customers* must be determined according to use of the *distribution network* as determined in accordance with a *metrology procedure* or, in the absence of a *metrology procedure* allowing such a determination to be made, by *meter* or by agreement between the *Distribution Customer* and the *Distribution Network Service Provider* by applying one or more of the following measures:

- (i) demand-based prices to the *Distribution Customer's* metered or agreed half-hourly demand;
 - (ii) energy-based prices to the *Distribution Customer's* metered or agreed energy;
 - (iii) the *Distribution Customer* charge determined under this clause as a fixed periodic charge to each *Distribution Customer*;
 - (iv) a fixed periodic charge, a prepayment or other charge determined by agreement with the *Distribution Customer*;
 - (v) any other measure the *Distribution Network Service Provider* is authorised to apply by the applicable distribution determination.
- (b) Subject to paragraph (c), where a *Distribution Customer* (other than a *Market Customer*) incurs *distribution service* charges, the *Distribution Network Service Provider* must bill the *Market Customer* from whom the *Distribution Customer* purchases electricity directly or indirectly for such *distribution services* in accordance with paragraph (a)(2).
- (c) If a *Distribution Customer* and the *Market Customer* from whom it purchases electricity agree, the *Distribution Network Service Provider* may bill the *Distribution Customer* directly for *distribution services* used by that *Distribution Customer* in accordance with paragraph (a)(2).
- (d) *Distribution Network Service Providers* must:
 - (1) calculate *transmission service* charges and *distribution service* charges for all *connection points* in their *distribution network*; and
 - (2) pay to *Transmission Network Service Providers* the *transmission service* charges incurred in respect of use of a *transmission network* at each *connection point* on the relevant *transmission network*.
- (e) Charges for *distribution services* based on metered kW, kWh, kVA, or kVAh for:
 - (1) *Embedded Generators* that are *Market Generators*; and
 - (2) *Market Customer*; and
 - (3) *Second-Tier Customers*;
 must be calculated by the *Distribution Network Service Provider* from:
 - (4) *settlements ready data* obtained from AEMO's *metering database*, for those *Embedded Generators*, *Market Customers* and *Second-Tier Customers* with *connection points* that have a type 1, 2, 3 or 4 *metering installation*; and

- (5) *metering data*, in accordance with a *metrology procedure* that allows the *Distribution Network Service Provider* to use *energy data* for this purpose, or otherwise *settlements ready data* obtained from AEMO's *metering database*, for those *Embedded Generators*, *Market Customers* and *Second-Tier Customers* with *connection points* that have a type 4A, 5, 6 or 7 *metering installation*.
- (f) Charges for *distribution services* based on metered kW, kWh, kVA or kVAh for:
 - (1) *Embedded Generators* that are not *Market Generators*; and
 - (2) *Non-Registered Customers*; and
 - (3) *franchise customers*,must be calculated by the *Distribution Network Service Provider* using data that is consistent with the *metering data* used by the relevant *Local Retailer* in determining *energy settlements*.
- (g) The *Distribution Network Service Provider* may bill the relevant *Local Retailer* for *distribution services* used by *Non-Registered Customers* and *franchise customers*.
- (h) Where the billing for a *Distribution Customer* for a particular *financial year* is based on quantities which are undefined until after the commencement of the *financial year*, charges must be estimated from the previous year's billing quantities with a reconciliation to be made when the actual billing quantities are known.
- (i) Where the previous year's billing quantities are unavailable or no longer suitable, nominated quantities may be used as agreed between the parties.

6.20.2 Minimum information to be provided in distribution network service bills

- (a) The following is the minimum information that must be provided with a bill for a *network coupling point* issued by a *Distribution Network Service Provider* directly to a *Registered Participant*:
 - (1) the *network coupling point* identifier; and
 - (2) the dates on which the billing period starts and ends; and
 - (3) the identifier of the *distribution service* price from which the *network coupling point* charges are calculated; and
 - (4) measured quantities, billed quantities, prices and amounts charged for each component of the total *distribution service* account.
- (b) In addition to the minimum information requirements in paragraph (a), a bill for a *network coupling point* issued by a *Distribution Network Service*

Provider directly to another *Distribution Network Service Provider* must separately identify the component of *designated pricing proposal services*, if any, to which each amount charged in the bill relates.

6.20.3 Settlement between Distribution Network Service Providers

The billing and settlement process specified in this clause must be applied to all *Distribution Customers* including other *Distribution Network Service Providers*.

6.20.4 Obligation to pay

A *Distribution Network User* must pay *distribution service* charges properly charged to it and billed in accordance with this clause by the due date specified in the bill.

Part K Prudential requirements, capital contributions and prepayments

6.21 Distribution Network Service Provider Prudential Requirements

This clause sets out the arrangements by which *Distribution Network Service Providers* may minimise financial risks associated with investment in *network assets* and provides for adoption of cost-reflective payment options in conjunction with the use of average distribution prices. The clause also prevents *Distribution Network Service Providers* from receiving income twice for the same assets through prudential requirements and *distribution service* prices.

6.21.1 Prudential requirements for distribution network service

- (a) A *Distribution Network Service Provider* may require an *Embedded Generator* or *Distribution Customer* that requires a new *connection* or a modification in service for an existing *connection* to establish prudential requirements for *connection service* and/or *distribution use of system service*.
- (b) Prudential requirements for *connection service* and/or *distribution use of system service* are a matter for negotiation between the *Distribution Network Service Provider* and the *Embedded Generator* or *Distribution Customer* and the terms agreed must be set out in the *connection agreement* between the *Distribution Network Service Provider* and the *Embedded Generator* or *Distribution Customer*.
- (c) The *connection agreement* may include one or more of the following provisions:
 - (1) the conditions under which and the time frame within which other *Distribution Network Users* who use that part of the *distribution network* contribute to refunding all or part of the payments;

- (2) the conditions under which financial arrangements may be terminated; and
 - (3) the conditions applying in the event of default by the *Distribution Customer* or *Embedded Generator*.
- (d) The prudential requirements may incorporate, but are not limited to, one or more of the following arrangements:
 - (1) financial capital contributions;
 - (2) non-cash contributions;
 - (3) *distribution service* charge prepayments;
 - (4) guaranteed minimum *distribution service* charges for an agreed period;
 - (5) guaranteed minimum *distribution service* quantities for an agreed period;
 - (6) provision for financial guarantees for *distribution service* charges.

6.21.2 Capital contributions, prepayments and financial guarantees

Despite any other provision in this Chapter, in relation to capital contributions, prepayments and financial guarantees:

- (1) the *Distribution Network Service Provider* is not entitled to recover, under a mechanism for the economic regulation of *direct control services*, any component representing asset related costs for assets provided by *Distribution Network Users*; and
- (2) the *Distribution Network Service Provider* may receive a capital contribution, prepayment and/or financial guarantee up to the provider's future revenue related to the provision of *direct control services* for any new assets installed as part of a new *connection* or modification to an existing *connection*, including any *augmentation* to the *distribution network*; and
- (3) where assets have been the subject of a contribution or prepayment, the *Distribution Network Service Provider* must amend the provider's revenue related to the provision of *direct control services*.

6.21.3 Treatment of past prepayments and capital contributions

- (a) Payments made by *Distribution Customers* and *Embedded Generators* for *distribution service* prior to 13 December 1998 must be made in accordance with any contractual arrangements with the relevant *Distribution Network Service Providers* applicable at that time.
- (b) Where contractual arrangements referred to in paragraph (a) are not in place, past *distribution service* prepayments or capital contributions may be

incorporated in the capital structure of the *Distribution Network Service Provider's* business.

- (c) The *AER* may intervene in and resolve any dispute under this clause which cannot be resolved between the relevant *Distribution Network Service Provider* and *Distribution Customer* or *Embedded Generator*.

Part L Dispute resolution

6.22 Dispute Resolution

6.22.1 Dispute Resolution by the AER

- (a) A dispute between a *Distribution Network Service Provider* and a *Service Applicant* as to the *terms and conditions of access* to a *direct control service* or to a *negotiated distribution service* is an access dispute for the purposes of Part 10 of the Law.
- (b) A dispute between a *Distribution Network Service Provider* and a *Service Applicant* about *access charges* is an access dispute for the purposes of Part 10 of the Law.
- (c) A dispute between a *Distribution Network Service Provider* and a *Connection Applicant* about matters referred to in clause 5.3AA(f) or clause 5.3AA(h) is an access dispute for the purposes of Part 10 of the Law.

6.22.2 Determination of dispute

- (a) In determining an access dispute about *terms and conditions of access* to a *direct control service*, the *AER* must apply:
 - (1) in relation to price, the *Distribution Network Service Provider's approved pricing proposal* and the *Distribution Network Service Provider's tariff structure statement* or, in respect of the *Distribution Network Service Provider's transmission standard control services* in respect of which the *AER* has made a determination under clause 6.25(b) that pricing in respect of those services should be regulated under Part J of Chapter 6A through the application of rule 6.26, the *Distribution Network Service Provider's approved pricing methodology*;
 - (2) in relation to other terms and conditions, Chapters 4, 5, this Chapter 6 and Chapter 7 and any other *applicable regulatory instrument*; and
 - (3) in relation to all *terms and conditions of access* (including price) the decisions of *AEMO* or the *AER* where those decisions relate to those terms and conditions and are made under Chapters 4, 5, this Chapter 6 and Chapter 7.
- (b) In determining an access dispute about the *terms and conditions of access* to a *direct control service*, the *AER* may:

- (1) have regard to other matters the *AER* considers relevant; and
- (2) hear evidence or receive submissions from *AEMO* about *power system security* and from *Distribution Network Users* who may be adversely affected.

Note:

Section 130 of the Law requires the *AER*, in making an access determination, to give effect to a network revenue or pricing determination applicable to the services that are the subject of the dispute even though the determination may not have been in force when the dispute arose.

- (c) In determining an access dispute about *terms and conditions of access* to a *negotiated distribution service*, the *AER* must apply:
 - (1) in relation to price (including *access charges*), the *Negotiated Distribution Service Criteria* that are applicable to the dispute in accordance with the relevant distribution determination; and
 - (2) in relation to other terms and conditions, the *Negotiated Distribution Service Criteria* that are applicable to the dispute and Chapters 4, 5, this Chapter 6 and Chapter 7 of the *Rules*; and
 - (3) in relation to all *terms and conditions of access* (including price) the decisions of *AEMO* or the *AER* where those decisions relate to those terms and conditions and are made under Chapters 4, 5, this Chapter 6 and Chapter 7 of the *Rules*;

and must have regard:

- (4) to the relevant *negotiating framework* prepared by the *Distribution Network Service Provider* and approved by the *AER*.
- (d) In determining an access dispute about the *terms and conditions of access* to a *negotiated distribution service*, the *AER* may:
 - (1) have regard to other matters the *AER* considers relevant; and
 - (2) hear evidence or receive submissions from *AEMO* and *Distribution Network Users* notified and consulted under the *Distribution Network Service Provider's negotiating framework*.
 - (e) In determining an access dispute about *access charges*, or involving *access charges*, the *AER* must give effect to the following principle:

Access charges should be based on the costs reasonably incurred by the *Distribution Network Service Provider* in providing *distribution network user access* and, where they consist of compensation referred to in clause 5.5(f)(4)(ii) and (iii), on the revenue that is likely to be foregone and the costs that are likely to be incurred by a person referred to in those provisions where an event referred to in those provisions occurs.

6.22.3 Termination of access dispute without access determination

- (a) If the *AER* considers that an access dispute could be effectively resolved by some means other than an access determination, the *AER* may give the parties to the dispute notice of the alternative means of resolving the dispute.
- (b) The giving of such a notice is a specified dispute termination circumstance for the purposes of section 131(3) of the Law.

Note:

It follows that the *AER* may exercise its power to terminate the dispute without making an access determination (See section 131(1)(d) of the Law).

Part M Separate disclosure of transmission and distribution charges

6.23 Separate disclosure of transmission and distribution charges

- (a) *A Distribution Customer:*
 - (1) with a *load* greater than 10MW or 40GWh per annum; or
 - (2) with *metering* equipment capable of capturing relevant *transmission* and *distribution system* usage data,may make a request (a **TUOS/DUOS disclosure request**) to a *Distribution Network Service Provider* to provide the *Distribution Customer* with a statement (a **TUOS/DUOS disclosure statement**) identifying the separate components of the *designated pricing proposal charges* and *distribution use of system* charges comprised in the charges for electricity supplied to the *Distribution Customer's connection points*.
- (b) Within 10 *business days* of receipt of a TUOS/DUOS disclosure request, a *Distribution Network Service Provider* must notify the *Distribution Customer* of the estimated charge (including details of how the charge is calculated) for providing the TUOS/DUOS disclosure statement. The charge must be no greater than the reasonable costs directly incurred by the *Distribution Network Service Provider* in preparing the statement for the *Distribution Customer*.
- (c) If the *Distribution Customer* advises the *Distribution Network Service Provider* within 20 *business days* of receipt of the notice referred to in paragraph (b) that it still requires the requested TUOS/DUOS disclosure statement, the *Distribution Network Service Provider* must prepare the statement and provide it to the *Distribution Customer* within 20 *business days* of being so advised. The TUOS/DUOS disclosure statement must include detailed information on the method used to determine the *distribution use of system* charges and the allocation of the *designated pricing proposal charges* to the *Distribution Customer* for electricity supplied to its *connection points*. The information must be sufficient to

allow the *Distribution Customer* to assess the impact on its *network* charges of a change in its *network* use.

- (d) The TUOS/DUOS disclosure statement must also separately identify the amounts that have been allocated to the *Distribution Customer's connection points* under Part J of Chapter 6A in respect of each of the *categories of prescribed transmission services*, where the *Distribution Customer* requests this information.
- (e) Where the *Distribution Customer* requests the information referred to in paragraph (d), the *Distribution Network Service Provider* must separately identify the component of the charge notified under paragraph (b) that relates to the provision of the additional information.
- (f) Each *Distribution Network Service Provider* must publish information annually disclosing the *designated pricing proposal charges* and *distribution use of system charges* for each of the classes of *Distribution Customers* identified for this purpose by the *Distribution Network Service Provider*, or as required by the AER.

Part N Dual Function Assets

6.24 Dual Function Assets

6.24.1 Application of this Part

This Part applies to *Distribution Network Service Providers* which own, control or operate both a *distribution system* and a *dual function asset*.

6.24.2 Dual Function Assets

Subject to rule 6.26, for the purposes of Chapters 6 and 6A:

- (a) any part of a *network* owned, operated or controlled by a *Distribution Network Service Provider* which operates between 66 kV and 220 kV and which operates in parallel, and provides support, to the higher voltage *transmission network* is deemed to be a *dual function asset*;
- (b) any service that is provided by a *Distribution Network Service Provider* by means of, or in connection with, the *Distribution Network Service Provider's dual function assets* that, but for this Part, would be a *prescribed transmission service* for the purposes of Chapter 6A is deemed to be a *standard control service*;
- (c) any service that is provided by a *Distribution Network Service Provider* by means of, or in connection with, the *Distribution Network Service Provider's dual function assets* that, but for this Part, would be a *negotiated transmission service* under Chapter 6A is deemed to be a *negotiated distribution service*; and

- (d) references to *prescribed transmission services* do not include a service provided by means of, or in connection with, a *dual function asset*.

6.25 AER determination of applicable pricing regime for Dual Function Assets

- (a) A *Distribution Network Service Provider* which owns, controls or operates *dual function assets* must advise the AER at least 32 months prior to the end of the current *regulatory control period* of the value of that *Distribution Network Service Provider's dual function assets* which provide *standard control services* that would be *prescribed transmission services* were it not for the operation of clause 6.24.2 (referred to as *transmission standard control services*). The value to be advised is the value ascribed to the relevant *dual function assets* in the relevant *Distribution Network Service Provider's* regulatory asset base as at the start of the *regulatory year* which commences 36 months prior to the end of the current *regulatory control period*.
- (b) The AER must review the information provided under paragraph (a) and determine, in accordance with clause 6.8.1, whether the value of that *Distribution Network Service Provider's dual function assets* which provide *transmission standard control services* comprise such a material proportion of that *Distribution Network Service Provider's* regulatory asset base that pricing in respect of those services should be regulated under Part J of Chapter 6A through the application of rule 6.26.
- (c) In making its determination under paragraph (b) the AER must consider:
 - (1) whether regulating the pricing of the *transmission standard control services* provided by a *Distribution Network Service Provider's dual function assets*:
 - (i) under Part I of Chapter 6 as though they were *prescribed distribution services*; rather than
 - (ii) under Part J of Chapter 6A as though they were *prescribed transmission services*,will result in materially different prices for *Distribution Customers* (including those connected directly to the relevant *dual function assets* and those connected to other *distribution networks*);
 - (2) whether the materiality of the different prices is likely to impact on future consumption, production and investment decisions by actual or potential *Network Users*; and
 - (3) any other matter that the AER considers relevant.
- (d) The AER's determination under paragraph (b), which is binding, must be included in a *framework and approach paper* that applies in respect of the distribution determination for the next *regulatory control period*.

6.26 Division of Distribution Network Service Provider's revenue

- (a) This rule 6.26 applies if the *AER* has determined under rule 6.25(b) that pricing in respect of *transmission standard control services* provided by a *Distribution Network Service Provider's dual function assets* should be regulated under Part J of Chapter 6A.
- (b) The *AER* must, for the purposes of the distribution determination for the relevant *Distribution Network Service Provider*, divide the revenue calculated under Part C of Chapter 6 into the following two portions:
 - (1) a portion relevant to the *Distribution Network Service Provider's transmission standard control services* provided by its *dual function assets*. This portion is defined as its *transmission standard control service revenue*; and
 - (2) a portion relevant to the other *standard control services* provided by the *Distribution Network Service Provider*. This portion is defined as its *distribution standard control service revenue*,

based on the *Distribution Network Service Provider's* approved *Cost Allocation Method*.

- (c) The relevant *Distribution Network Service Provider* must submit a proposed *pricing methodology* to the *AER* in respect of its *transmission standard control service revenue* as if it were a *Transmission Network Service Provider* as part of its regulatory proposal under Chapter 6, and Part E of Chapter 6A applies in respect of that *pricing methodology* (with the necessary changes).
- (d) The *AER* and the relevant *Distribution Network Service Provider* must apply and comply with all aspects of Part J of Chapter 6A instead of, and to the exclusion of, Parts I, J and K of Chapter 6 in respect of the *dual function assets* which provide *transmission standard control services*, subject to the following:
 - (1) for the purposes of Part J of Chapter 6A:
 - (i) the *dual function assets* are relevantly deemed to be *transmission network assets* which provide *prescribed transmission services*;
 - (ii) the *Distribution Network Service Provider* which owns, controls or operates the relevant *dual function assets* is relevantly deemed to be a *Transmission Network Service Provider*;
 - (2) the *maximum allowed revenue* referred to in clause 6A.22.1 is taken to be the *transmission standard control service revenue*;
 - (3) the reference in clause 6A.22.1(1) to clause 6A.3.2 is taken to be a reference to rules 6.6 and 6.13;

- (4) references to "*transmission determination*" are to be read as references to the relevant "*distribution determination*", with the *AER* being required to include in the distribution determination a decision to approve a proposed *pricing methodology* in relation to the *transmission standard control services* provided by the relevant *dual function assets*; and
 - (5) if there is no previous method to establish prices under clause 6A.24.3(b)(3), the relevant *Distribution Network Service Provider* must apply the *pricing methodology* of the largest *Transmission Network Service Provider* operating in the *participating jurisdiction* in which that *Distribution Network Service Provider* operates the relevant *dual function assets*.
- (e) The pricing rules in Part I of Chapter 6 are to be applied to the *Distribution Network Service Provider's distribution standard control service revenue*.

Part O Annual Benchmarking Report

6.27 Annual Benchmarking Report

- (a) The *AER* must prepare and *publish* a *network service provider performance report* (an *annual benchmarking report*) the purpose of which is to describe, in reasonably plain language, the relative efficiency of each *Distribution Network Service Provider* in providing *direct control services* over a 12 month period.
- (b) Clause 8.7.4 (excluding clause 8.7.4(a)) applies in respect of the preparation of an *annual benchmarking report*.
- (c) Subject to paragraphs (d) and (e), the *AER* must *publish* an *annual benchmarking report* at least every 12 months.
- (d) The first *annual benchmarking report* must be *published* by 30 September 2014.
- (e) The second *annual benchmarking report* must be *published* by 30 November 2015.

Part P Distribution Reliability Measures Guidelines

6.28 Distribution Reliability Measures Guidelines

- (a) The *AER* must in accordance with the *distribution consultation procedures* make and *publish* guidelines (the *Distribution Reliability Measures Guidelines*) that describe a set of common definitions of reliability measures that can be used to assess and compare the reliability performance of *Distribution Network Service Providers*.

- (b) There must be *Distribution Reliability Measures Guidelines* in force at all times after the date on which the AER first publishes *Distribution Reliability Measures Guidelines* under these Rules.
- (c) The AER must review the *Distribution Reliability Measures Guidelines* at least every 5 years.

Schedule 6.1 Contents of building block proposals

S6.1.1 Information and matters relating to capital expenditure

A *building block proposal* must contain at least the following information and matters relating to capital expenditure:

- (1) a forecast of the required capital expenditure that complies with the requirements of clause 6.5.7 and identifies the forecast capital expenditure by reference to well accepted categories such as:
 - (i) asset class (eg. *distribution lines, substations* etc); or
 - (ii) category driver (eg. *regulatory obligation or requirement, replacement, reliability, net market benefit, business support* etc),and identifies, in respect of proposed material assets:
 - (iii) the location of the proposed asset;
 - (iv) the anticipated or known cost of the proposed asset; and
 - (v) the categories of *distribution services* which are to be provided by the proposed asset;
- (2) the method used for developing the capital expenditure forecast;
- (3) the forecasts of load growth relied upon to derive the capital expenditure forecasts and the method used for developing those forecasts of load growth;
- (4) the key assumptions that underlie the capital expenditure forecast;
- (5) a certification of the reasonableness of the key assumptions by the directors of the *Distribution Network Service Provider*;
- (6) capital expenditure for each of the past *regulatory years* of the previous and current *regulatory control period*, and the expected capital expenditure for each of the last two *regulatory years* of the current *regulatory control period*, categorised in the same way as for the capital expenditure forecast and separately identifying for each such *regulatory year*:
 - (i) margins paid or expected to be paid by the *Distribution Network Service Provider* in circumstances where those margins are referable to arrangements that do not reflect arm's length terms; and

- (ii) expenditure that should have been treated as operating expenditure in accordance with the policy submitted under paragraph (8) for that *regulatory year*;
- (7) an explanation of any significant variations in the forecast capital expenditure from historical capital expenditure; and
- (8) the policy that the *Distribution Network Service Provider* applies in capitalising operating expenditure.

S6.1.2 Information and matters relating to operating expenditure

A *building block proposal* must contain at least the following information and matters relating to operating expenditure:

- (1) a forecast of the required operating expenditure that complies with the requirements of clause 6.5.6 and identifies the forecast operating expenditure by reference to well accepted categories such as:
 - (i) particular programs; or
 - (ii) types of operating expenditure (eg. maintenance, payroll, materials etc),and identifies in respect of each such category:
 - (iii) to what extent that forecast expenditure is on costs that are fixed and to what extent it is on costs that are variable; and
 - (iv) the categories of *distribution services* to which that forecast expenditure relates;
- (2) the method used for developing the operating expenditure forecast;
- (3) the forecasts of key variables relied upon to derive the operating expenditure forecast and the method used for developing those forecasts of key variables;
- (4) the method used for determining the cost associated with planned maintenance programs designed to improve the performance of the relevant *distribution system* for the purposes of any *service target performance incentive scheme* that is to apply to the *Distribution Network Service Provider* in respect of the relevant *regulatory control period*;
- (5) the key assumptions that underlie the operating expenditure forecast;
- (6) a certification of the reasonableness of the key assumptions by the directors of the *Distribution Network Service Provider*;
- (7) operating expenditure for each of the past *regulatory years* of the previous and current *regulatory control period*, and the expected operating expenditure for each of the last two *regulatory years* of the current

regulatory control period, categorised in the same way as for the operating expenditure forecast;

- (8) an explanation of any significant variations in the forecast operating expenditure from historical operating expenditure.

S6.1.3 Additional information and matters

A *building block proposal* must contain at least the following additional information and matters:

- (1) an identification and explanation of any significant interactions between the forecast capital expenditure and forecast operating expenditure programs;
- (2) **[Deleted]**
- (3) a description, including relevant explanatory material, of how the *Distribution Network Service Provider* proposes any *efficiency benefit sharing scheme* that has been specified in a *framework and approach paper* that applies in respect of the forthcoming distribution determination should apply to it;
- (3A) a description, including relevant explanatory material, of how the *Distribution Network Service Provider* proposes any *capital expenditure sharing scheme* that has been specified in a *framework and approach paper* that applies in respect of the forthcoming distribution determination should apply to it;
- (4) a description, including relevant explanatory material, of how the *Distribution Network Service Provider* proposes any *service target performance incentive scheme* that has been specified in a *framework and approach paper* that applies in respect of the forthcoming distribution determination should apply to it;
- (5) a description, including relevant explanatory material, of how the *Distribution Network Service Provider* proposes any *demand management incentive scheme* or *demand management innovation allowance mechanism* that has been specified in a *framework and approach paper* that applies in respect of the forthcoming distribution determination should apply to it;
- (5A) a description, including relevant explanatory material, of how the *Distribution Network Service Provider* proposes any *small-scale incentive scheme* that has been specified in a *framework and approach paper* that applies in respect of the forthcoming distribution determination should apply to it;
- (6) the *Distribution Network Service Provider's* calculation of revenues or prices for the purposes of the control mechanism proposed by the *Distribution Network Service Provider* together with:
 - (i) details of all amounts, values and inputs (including X factors) relevant to the calculation;

- (ii) an explanation of the calculation and the amounts, values and inputs involved in the calculation; and
 - (iii) a demonstration that the calculation and the amounts, values and inputs on which it is based comply with relevant requirements of the Law and the Rules;
- (7) the *Distribution Network Service Provider's* calculation of the regulatory asset base for the relevant *distribution system* for each *regulatory year* of the relevant *regulatory control period* using the *roll forward model* referred to in clause 6.5.1 , together with:
 - (i) details of all amounts, values and other inputs used by the *Distribution Network Service Provider* for that purpose;
 - (ii) a demonstration that any such amounts, values and other inputs comply with the relevant requirements of Part C of Chapter 6 ; and
 - (iii) an explanation of the calculation of the regulatory asset base for each *regulatory year* of the relevant *regulatory control period* and of the amounts, values and inputs referred to in subparagraph (i);
- (8) **[Deleted]**.
- (9) the *Distribution Network Service Provider's* calculation of the proposed return on equity, return on debt and *allowed rate of return*, for each *regulatory year* of the *regulatory control period*, in accordance with clause 6.5.2, including any departure from the methodologies set out in the *Rate of Return Guidelines* and the reasons for that departure;
- (9A) if the *Distribution Network Service Provider* proposes that the return on debt for a *regulatory year* of the *regulatory control period* is to be determined using the methodology referred to in clause 6.5.2(i)(2), the formula it proposes should be applied in accordance with clause 6.5.2(l);
- (9B) the *Distribution Network Service Provider's* proposed value of imputation credits as referred to in clause 6.5.3;
- (10) the *post-tax revenue model* completed to show its application to the *Distribution Network Service Provider* and the completed *roll-forward model*;
- (11) the *Distribution Network Service Provider's* estimate of the cost of corporate income tax for each *regulatory year* of the *regulatory control period*;
- (12) the depreciation schedules nominated by the *Distribution Network Service Provider* for the purposes of clause 6.5.5 , which categorise the relevant assets for these purposes by reference to well accepted categories such as:
 - (i) asset class (eg *distribution lines* and *substations*); or

- (ii) category driver (eg *regulatory obligation or requirement*, replacement, *reliability*, net market benefit, and business support),

together with:

- (iii) details of all amounts, values and other inputs used by the *Distribution Network Service Provider* to compile those depreciation schedules;
 - (iv) a demonstration that those depreciation schedules conform with the requirements set out in clause 6.5.5(b) ; and
 - (v) an explanation of the calculation of the amounts, values and inputs referred to in subparagraph (iii);
- (13) the commencement and length of the *regulatory control period* proposed by the *Distribution Network Service Provider*; and
- (14) if the *Distribution Network Service Provider* is seeking a determination by the AER that a *proposed contingent project* is a *contingent project* for the purposes of the relevant distribution determination:
- (i) a description of the *proposed contingent project*, including reasons why the *Distribution Network Service Provider* considers the project should be accepted as a *contingent project* for the *regulatory control period*;
 - (ii) a forecast of the capital expenditure which the *Distribution Network Service Provider* considers is reasonably required for the purpose of undertaking the *proposed contingent project*;
 - (iii) the methodology used for developing that forecast and the key assumptions that underlie it;
 - (iv) information that demonstrates that the undertaking of the *proposed contingent project* is reasonably required in order to achieve one or more of the *capital expenditure objectives*;
 - (v) information that demonstrates that the *proposed contingent capital expenditure* for the *proposed contingent project* complies with the requirements set out in clause 6.6A.1(b)(2); and
 - (vi) the *trigger events* which are proposed in relation to the *proposed contingent project* and an explanation of how each of those conditions or events addresses the matters referred to in clause 6.6A.1(c).

Schedule 6.2 Regulatory Asset Base

S6.2.1 Establishment of opening regulatory asset base for a regulatory control period

- (a) **Application of this clause**

This clause S6.2.1

- (1) applies to the establishment of the value of the regulatory asset base for a *distribution system* as at the beginning of a *regulatory control period* on the roll forward of the regulatory asset base to that *regulatory control period* from the previous *regulatory control period*; and
- (2) also applies to the establishment of the value of the regulatory asset base for a *distribution system* as at the beginning of a *regulatory control period* where the *distribution system* was not immediately before that time the subject of a *building block determination*.

(b) Roll forward model to comply with this clause

The values to be used for completing the *roll forward model* must be established in accordance with this clause and clauses S6.2.2 and S6.2.3.

(c) Distribution systems of specific providers

- (1) In the case of a *distribution system* owned, controlled or operated by one of the following *Distribution Network Service Providers* as at the commencement of this schedule, the value of the regulatory asset base for that *distribution system* as at the beginning of that first *regulatory year* must be determined by rolling forward the regulatory asset base for that *distribution system*, as set out in the table below, in accordance with this schedule:

Jurisdiction	<i>Distribution Network Service Provider</i>	Regulatory Asset Base (\$m)
Australian Capital Territory	ActewAGL	510.54 (as at 1 July 2004 in July 2004 dollars)
New South Wales	Country Energy	2,440 (as at 1 July 2004 in July 2004 dollars)
	EnergyAustralia	4,116 (as at 1 July 2004 in July 2004 dollars)
	Integral Energy	2,283 (as at 1 July 2004 in July 2004 dollars)
Queensland	ENERGEX	4,308.1 (as at 1 July 2005 in July 2005 dollars)
	Ergon Energy	4,198.2 (as at 1 July 2005 in July 2005 dollars) but, if the Queensland Competition Authority nominates a different amount in writing to the AER, the regulatory asset base is the amount so nominated.

Jurisdiction	<i>Distribution Network Service Provider</i>	Regulatory Asset Base (\$m)
South Australia	ETSA Utilities	2,466 (as at 1 July 2005 in December 2004 dollars)
Tasmania	Aurora Energy	981.108 (as at 1 January 2008 in July 2006 dollars)
Victoria	AGL Electricity	578.4 (as at 1 January 2006 in July 2004 dollars)
	Citipower	990.9 (as at 1 January 2006 in July 2004 dollars)
	Powercor	1,626.5 (as at 1 January 2006 in July 2004 dollars)
	SP AusNet	1,307.2 (as at 1 January 2006 in July 2004 dollars)
	United Energy	1,220.3 (as at 1 January 2006 in July 2004 dollars)

(2) The values in the table above are to be adjusted for the difference between:

- (i) any estimated capital expenditure that is included in those values for any part of a previous *regulatory control period*; and
- (ii) the actual capital expenditure for that part of the previous *regulatory control period*.

This adjustment must also remove any benefit or penalty associated with any difference between the estimated and actual capital expenditure.

(3) When rolling forward a regulatory asset base under subparagraph (1), the *AER* must take into account the derivation of the values in the above table from past regulatory decisions and the consequent fact that they relate only to the regulatory asset base identified in those decisions.

(d) Other distribution systems

(1) This paragraph (d) applies to a *distribution system* not referred to in paragraphs (c) when *standard control services* that are provided by means of, or in connection with, that system are to be regulated under a *building block determination*.

- (2) The value of the regulatory asset base for that *distribution system* as at the beginning of the first *regulatory year* of the first *regulatory control period* for the relevant *Distribution Network Service Provider* is the prudent and efficient value of the assets that are used by the provider to provide those *standard control services* (but only to the extent that they are used to provide such services), as determined by the *AER*. In determining this value, the *AER* must have regard to the matters referred to in clause S6.2.2.
- (3) The value of the regulatory asset base for that *distribution system* as at the beginning of the first *regulatory year* of any subsequent *regulatory control period* must be determined by rolling forward the value of the regulatory asset base for that *distribution system* as at the beginning of the first *regulatory year* of the first *regulatory control period* in accordance with this schedule.

(e) **Method of adjustment of value of regulatory asset base**

Except as otherwise provided in paragraph (c) or (d) and subject to paragraph (g), the value of the regulatory asset base for a *distribution system* as at the beginning of the first *regulatory year* of a *regulatory control period* must be calculated by adjusting the value (the **previous value**) of the regulatory asset base for that *distribution system* as at the beginning of the first *regulatory year* of the immediately preceding *regulatory control period* (the **previous control period**) as follows:

- (1) Subject to subparagraph (e)(9), the previous value of the regulatory asset base must be:
 - (i) increased by the amount of all capital expenditure incurred during the previous control period, including any capital expenditure determined for that period under clause 6.6A.2(e)(1)(i) in relation to *contingent projects* where the distribution determination has been amended by the *AER* in accordance with clause 6.6A.2(h) (regardless of whether such capital expenditure is above or below the forecast capital expenditure for the period that is adopted for the purposes of the distribution determination (if any) for that period); and
 - (ii) reduced by the amount of any capital expenditure that has been recovered by way of a pass through under clause 6.6.1 where the amount of that capital expenditure would otherwise have been included in the value of the regulatory asset base.
- (2) The previous value of the regulatory asset base must be increased by the amount of the estimated capital expenditure approved by the *AER* for any part of the previous control period for which actual capital expenditure is not available, including any capital expenditure in relation to *contingent projects* where the *total revenue requirement* has been amended by the *AER* in accordance with clause 6.6A.2(h).

- (3) The previous value of the regulatory asset base must be adjusted for the difference between:
- (i) the estimated capital expenditure for any part of a previous *regulatory control period* where that estimated capital expenditure has been included in that value; and
 - (ii) the actual capital expenditure for that part of the previous *regulatory control period*.

This adjustment must also remove any benefit or penalty associated with any difference between the estimated and actual capital expenditure.

- (4) The previous value of the regulatory asset base must only be increased by actual or estimated capital expenditure to the extent that all such capital expenditure is properly allocated to the provision of *standard control services* in accordance with the *Cost Allocation Method* for the relevant *Distribution Network Service Provider*.
- (5) The previous value of the regulatory asset base must be reduced by the amount of depreciation of the regulatory asset base during the previous *regulatory control period*, calculated in accordance with the distribution determination for that period.
- (6) The previous value of the regulatory asset base must be reduced by the disposal value of any asset where that asset has been disposed of during the previous *regulatory control period*.
- (7) The previous value of the regulatory asset base must be reduced by the value of an asset where the asset was previously used to provide *standard control services* (or their equivalent under the previous regulatory system) but, as a result of a change to the classification of a particular service under Part B, is not to be used for that purpose for the relevant *regulatory control period*.
- (8) Subject to subparagraph (e)(9), the previous value of the regulatory asset base may be increased by the value of an asset to which this subparagraph applies to the extent that:
- (i) the *AER* considers the asset to be reasonably required to achieve one or more of the *capital expenditure objectives*; and
 - (ii) the value of the asset has not been otherwise recovered.

This subparagraph applies to an asset that:

- (i) was not used to provide *standard control services* (or their equivalent under the previous regulatory system) in the previous *regulatory control period* but, as a result of a change to the classification of a particular service under Part B, is to be used for that purpose for the relevant *regulatory control period*; or

- (ii) was never previously used to provide *standard control services* (or their equivalent under the previous regulatory system) but is to be used for that purpose for the relevant *regulatory control period*.
- (9) The previous value of the regulatory asset base must not be increased by the value of *expenditure for a restricted asset* incurred during the relevant *regulatory control period*, unless the capital expenditure for that asset or that class of asset for that *regulatory control period* was the subject of an *asset exemption* granted by the AER under clause 6.4B.1(a).
- (f) An increase or reduction in the value of the regulatory asset base under subparagraph (7) or (8) of paragraph (e) is to be based on the portion of the value of the asset properly allocated, or formerly properly allocated, to *standard control services* in accordance with the principles and policies set out in the *Cost Allocation Method* for the relevant *Distribution Network Service Provider*. The value of the relevant asset is taken to be its value as shown in independently audited and published accounts.
- (g) The previous value of the regulatory asset base must be reduced by any amount determined by the AER in accordance with clause S6.2.2A(f), (i) or (j).

S6.2.2 Prudency and efficiency of capital expenditure

In determining the prudency or efficiency of capital expenditure under clause S6.2.1(d)(2), the AER must have regard to the following:

- (1) the need to provide a reasonable opportunity for the relevant *Distribution Network Service Provider* to recover the efficient costs of complying with all applicable *regulatory obligations or requirements* associated with the provision of *standard control services*;
- (2) the need to provide effective incentives to the *Distribution Network Service Provider* to promote economic efficiency in the provision of *standard control services*;
- (3) whether the relevant project in respect of which capital expenditure was made was evaluated against, and satisfied, the *regulatory investment test for transmission* or the *regulatory investment test for distribution* (as the case may be);
- (4) whether the *Distribution Network Service Provider* undertook the capital expenditure in a manner consistent with good business practice and so as to practicably achieve the lowest sustainable cost of delivering the *standard control services* to be provided as a consequence of that capital expenditure;
- (5) the desirability of minimising investment uncertainty for the *Distribution Network Service Provider*;

- (6) the need to provide incentives to the *Distribution Network Service Provider* to avoid undertaking inefficient capital expenditure;
- (7) the value of the relevant asset as shown in independently audited and published accounts.

In determining the prudence or efficiency of capital expenditure the *AER* must only take into account information and analysis that the *Distribution Network Service Provider* could reasonably be expected to have considered or undertaken at the time that it undertook the relevant capital expenditure.

S6.2.2A Reduction for inefficient past capital expenditure

- (a) Prior to making a decision on the regulatory asset base for a *distribution system* as required by clause 6.12.1(6), the *AER* may determine under this clause S6.2.2A that the amount of capital expenditure as a result of which the previous value of the regulatory asset base would otherwise be increased in accordance with clause S6.2.1(e) should be reduced.
 - (a1) for the purposes of this clause S6.2.2A, "**review period**" means:
 - (1) the previous control period (excluding the last two *regulatory years* of that previous control period); and
 - (2) the last two *regulatory years* of the *regulatory control period* preceding the previous control period.
- (b) The *AER* may only make a determination under paragraph (a) if any of the following requirements is satisfied:
 - (1) the requirement set out in paragraph (c) (the *overspending requirement*);
 - (2) the requirement set out in paragraph (d) (the *margin requirement*); or
 - (3) the requirement set out in paragraph (e) (the *capitalisation requirement*).
- (c) The *overspending requirement* is satisfied where the sum of all capital expenditure incurred during the review period exceeds the sum of:
 - (1) the forecast capital expenditure accepted or substituted by the *AER* for the review period as such forecast capital expenditure has been adjusted in accordance with clauses 6.6.5(f) and 6.6A.2(h); and
 - (2) any capital expenditure that is recovered by way of such part of an *approved pass through amount* as is permitted to be passed through to *Distribution Network Users* during the review period less any capital expenditure that is included in a *negative pass through amount* that is required to be passed through to *Distribution Network Users* during the review period.

- (d) The *margin requirement* is satisfied where the amount of the capital expenditure as a result of which the previous value of the regulatory asset base would otherwise be increased in accordance with clause S6.2.1(e) includes capital expenditure that represents a margin paid by the *Distribution Network Service Provider* in circumstances where the margin is referable to arrangements that, in the opinion of the *AER*, do not reflect arm's length terms.
- (e) The *capitalisation requirement* is satisfied where the amount of the capital expenditure as a result of which the previous value of the regulatory asset base would otherwise be increased in accordance with clause S6.2.1(e) includes expenditure that, under the *Distribution Network Service Provider's* applicable capitalisation policy submitted to the *AER* as part of a *regulatory proposal*, should have been treated as operating expenditure.
- (f) Where the *overspending requirement* is satisfied, and subject to paragraphs (g) and (h), the *AER* may determine that the amount of the capital expenditure as a result of which the previous value of the regulatory asset base would otherwise be increased in accordance with clause S6.2.1(e) should be reduced by such amount as the *AER* is satisfied corresponds to capital expenditure incurred during the review period that does not reasonably reflect the *capital expenditure criteria*.
- (g) The amount determined by the *AER* under paragraph (f):
 - (1) must not be greater than the amount calculated in accordance with paragraph (c);
 - (2) must be determined in a manner that is consistent with the *capital expenditure incentive objective*; and
 - (3) must be determined taking into account the *Capital Expenditure Incentive Guidelines*.
- (h) In making a determination under paragraph (f), the *AER* must:
 - (1) have regard to the *capital expenditure factors*; and
 - (2) only take into account information and analysis that the *Distribution Network Service Provider* could reasonably be expected to have considered or undertaken at the time that it undertook the relevant capital expenditure.
- (i) Where the *margin requirement* is satisfied, and subject to paragraph (k), the *AER* may determine that the amount of the capital expenditure as a result of which the previous value of the regulatory asset base would otherwise be increased in accordance with clause S6.2.1(e) should be reduced by such of the margin referred to in paragraph (d) as the *AER* is reasonably satisfied would not have been paid if the arrangements to which the margin is referable had been on arm's length terms.

- (j) Where the *capitalisation requirement* is satisfied, and subject to paragraph (k), the *AER* may determine that the amount of the capital expenditure as a result of which the previous value of the regulatory asset base would otherwise be increased in accordance with clause S6.2.1(e) should be reduced by any or all of the amount of expenditure referred to in paragraph (e) which should have been treated as operating expenditure .
- (k) A determination made under paragraph (i) or (j) must be consistent with the *capital expenditure incentive objective* and, in making such a determination, the *AER* must take into account the *Capital Expenditure Incentive Guidelines*.
- (l) Nothing in this clause S6.2.2A is to be taken to preclude the *AER* from:
 - (1) requiring a *Distribution Network Service Provider* to provide such information; or
 - (2) undertaking such analysis,as the *AER* considers appropriate to enable it to make a statement, with supporting reasons, as referred to in clause 6.12.2(b).

S6.2.2B Depreciation

- (a) Pursuant to clause 6.12.1(18), the *AER* must decide, for a distribution determination, whether depreciation for establishing the regulatory asset base for a *distribution system* as at the commencement of the following *regulatory control period* is to be based on actual or forecast capital expenditure.
- (b) The decision referred to in paragraph (a) must be consistent with the *capital expenditure incentive objective*.
- (c) In making the decision referred to in paragraph (a), the *AER* must have regard to:
 - (1) the incentives that the *Distribution Network Service Provider* has in relation to undertaking efficient capital expenditure, including as a result of the application of any incentive scheme or any other incentives under the *Rules*;
 - (2) the substitution possibilities between assets with relatively short economic lives and assets with relatively long economic lives and the relative benefits of such asset types;
 - (3) the extent to which any capital expenditure incurred by the *Distribution Network Service Provider* has exceeded the corresponding amount of forecast capital expenditure accepted or substituted by the *AER* and the amount of that excess expenditure which is not efficient;
 - (4) the *Capital Expenditure Incentive Guidelines*; and

- (5) the *capital expenditure factors*.

S6.2.3 Roll forward of regulatory asset base within the same regulatory control period

(a) **Application of this clause**

This clause applies to the establishment of the value of the regulatory asset base for a *distribution system* as at the beginning of one *regulatory year* in a *regulatory control period* on the roll forward of the regulatory asset base to that *regulatory year* from the immediately preceding *regulatory year* (if any) in that *regulatory control period*.

(b) **Roll forward model to comply with this clause**

The *roll forward model* referred to in clause 6.5.1 must provide for that value to be established in accordance with the requirements of this clause.

(c) **Method of adjustment of value of regulatory asset base**

The value of the regulatory asset base for a *distribution system* as at the beginning of the second or a subsequent year (**the later year**) in a *regulatory control period* must be calculated by adjusting the value (**the previous value**) of the regulatory asset base for that *distribution system* as at the beginning of the immediately preceding *regulatory year* (**the previous year**) in that *regulatory control period* as follows:

- (1) The previous value of the regulatory asset base must be increased by the amount of forecast capital expenditure accepted or substituted by the *AER* for the previous year in accordance with clause 6.5.7(c) or clause 6.12.1(3) and (3A) (as the case may be).
- (2) The previous value of the regulatory asset base must be reduced by the amount of depreciation included in the *Distribution Network Service Provider's annual revenue requirement* for the previous year.
- (3) The previous value of the regulatory asset base must be reduced by the disposal value of any asset included in that value where the asset is forecast to be disposed of during the previous year.
- (4) The previous value of the regulatory asset base must be increased by an amount necessary to maintain the real value of the regulatory asset base as at the beginning of the later year by adjusting that value for inflation.

(d) **Allowance for working capital**

If the *AER* determines that it is appropriate to do so, it may include an allowance for working capital in the regulatory asset base for a *distribution system* which is rolled forward in accordance with this clause.

CHAPTER 6A

6A. Economic Regulation of Transmission Services

Part A Introduction

6A.1 Introduction to Chapter 6A

6A.1.1 Economic regulation of transmission services generally

- (a) Part B of this Chapter 6A states the general obligation of the AER to make *transmission determinations* for *Transmission Network Service Providers* in respect of:

- (1) *prescribed transmission services*; and
- (2) **[Deleted]**

Note

Access and connection to negotiated transmission services is governed by Chapter 5 of the Rules.

- (b) Part C of this Chapter 6A regulates the revenues that may be earned by *Transmission Network Service Providers* from the provision by them of *transmission services* that are the subject of *transmission determinations*.
- (c) **[Deleted]**
- (d) Part E of this Chapter 6A sets out the procedure and approach for the making of a *transmission determination* by the AER.
- (e) Part F of this Chapter 6A contains provisions regarding the disclosure, use and protection of information.
- (f) Part G of this Chapter 6A contains provisions regarding cost allocation.
- (g) Part H of this Chapter 6A contains provisions regarding the *transmission consultation procedures*.
- (h) Part I of this Chapter 6A contains provisions regarding *Transmission Ring-Fencing Guidelines*.
- (i) Part J of this Chapter 6A regulates the prices that may be charged by *Transmission Network Service Providers* for the provision of *prescribed transmission services* and establishes principles to be applied by providers in setting prices that allow those providers to earn the whole of the *aggregate annual revenue requirement*.
- (j) **[Deleted]**
- (k) Other transmission services provided by *Transmission Network Service Providers* (*non-regulated transmission services*) are not subject to regulation under this Chapter 6A.

- (l) Services provided by *dual function assets* are not subject to regulation under this Chapter 6A except to the extent provided in Part N of Chapter 6.
- (m) Part L sets out the requirements to prepare *annual benchmarking reports*.

6A.1.2 [Deleted]

6A.1.3 [Deleted]

6A.1.4 National regulatory arrangements

- (a) The *AER* is, in accordance with this Chapter 6A, responsible for the economic regulation of *prescribed transmission services* provided by *Transmission Network Service Providers* by means of, or in connection with, *transmission systems* that form part of the *national grid*.
- (b) Subject to any contrary determination by the *AER*, those parts of a *transmission network* operating at nominal *voltages* between 66kV and 220kV that:
 - (1) do not operate in parallel to; and
 - (2) do not provide support to,the higher *voltage transmission network* may be deemed by the relevant *Transmission Network Service Provider* to be subject to the regulatory arrangements for *distribution service* pricing set out in Chapter 6.

6A.1.5 Application of Chapter 6A to Market Network Service Providers

- (a) Notwithstanding anything contained in this Chapter 6A:
 - (1) Parts B, C, and J do not regulate the revenues that may be earned by *Market Network Service Providers* from, or the prices that may be charged by *Market Network Service Providers* for, the provision by them of *market network services*; and
 - (2) Part E does not apply to *Market Network Service Providers*.
- (b) **[Deleted]**
- (c) **[Deleted]**
- (d) Rule 5.5 does not apply to disputes relating to the terms and conditions of access for *network services* referred to under this clause 6A.1.5.

6A.1.6 Application of Chapter 6A to AEMO and declared transmission system operators

- (a) This Chapter 6A applies to *AEMO* in respect of the provision of *shared transmission services* by means of, or in connection with, a *declared shared*

network subject to the exclusions, qualifications and modifications set out in Schedule 6A.4.

- (b) This Chapter 6A does not apply to *AEMO* as provider of *electricity network services* in any other capacity.
- (c) This Chapter 6A applies to *declared transmission system operators* subject to the exclusions, qualifications and modifications set out in Schedule 6A.4 that expressly apply to them.

Part B Transmission Determinations Generally

6A.2 Transmission determinations

6A.2.1 Duty of AER to make transmission determinations

The *AER* must make *transmission determinations* for *Transmission Network Service Providers* in accordance with this Chapter 6A in respect of:

- (1) *prescribed transmission services*; and
- (2) **[Deleted]**

6A.2.2 Components of transmission determinations

A *transmission determination* for a *Transmission Network Service Provider* consists of:

- (1) a *revenue determination* for the provider in respect of the provision by the *Transmission Network Service Provider* of *prescribed transmission services*; and
- (2) **[Deleted]**
- (3) **[Deleted]**
- (4) a determination that specifies the *pricing methodology* that applies to the *Transmission Network Service Provider*.

6A.2.3 Guidelines

- (a) The *AER*:
 - (1) must make and *publish* the *Shared Asset Guidelines*, the *Capital Expenditure Incentive Guidelines*, the *Rate of Return Guidelines*, the *Expenditure Forecast Assessment Guidelines*, the *Transmission Confidentiality Guidelines*, the *Cost Allocation Guidelines*, the *information guidelines* and the *pricing methodology guidelines* in accordance with these Rules; and

- (2) may, in accordance with the *transmission consultation procedures*, make and publish guidelines as to any other matters relevant to this Chapter.
- (b) A guideline may relate to a specified *Transmission Network Service Provider* or *Transmission Network Service Providers* of a specified class.
- (c) Except as otherwise provided in this Chapter, a guideline is not mandatory (and so does not bind the *AER* or anyone else) but, if the *AER* makes a *transmission determination* that is not in accordance with the guideline, the *AER* must state, in its reasons for the *transmission determination*, the reasons for departing from the guideline.
- (d) If a guideline indicates that there may be a change of regulatory approach in future *transmission determinations*, the guideline should also (if practicable) indicate how transitional issues are to be dealt with.
- (e) Subject to paragraph (f), the *AER* may, from time to time and in accordance with the *transmission consultation procedures*, amend or replace a guideline.
- (f) The *AER* may make administrative or minor amendments to any guideline without complying with the *transmission consultation procedures*.
- (g) This clause 6A.2.3 does not apply to the *Transmission Ring-Fencing Guidelines*.

Part C Regulation of Revenue - Prescribed Transmission Services

6A.3 Allowed revenue from prescribed transmission services

6A.3.1 Allowed revenue for regulatory year

The revenue that a *Transmission Network Service Provider* may earn in any *regulatory year* of a *regulatory control period* from the provision of *prescribed transmission services* is the *maximum allowed revenue* subject to any adjustments referred to in clause 6A.3.2, and is to be determined in accordance with:

- (1) the *revenue determination* forming part of the applicable *transmission determination*; and
- (2) the provisions of this Part C.

6A.3.2 Adjustment of maximum allowed revenue

The *maximum allowed revenue* that a *Transmission Network Service Provider* may earn in any *regulatory year* of a *regulatory control period* from the provision of *prescribed transmission services* is subject to adjustment in accordance with rules 6A.7, 6A.8 or 6A.15.

6A.4 Revenue determinations

6A.4.1 Introduction

- (a) The procedure and approach for the making of a *revenue determination* for a *Transmission Network Service Provider* is contained in Part E of this Chapter 6A, and involves the submission to the AER of a *Revenue Proposal* by the *Transmission Network Service Provider*.
- (b) Such a *Revenue Proposal* must comply with the requirements of this Chapter 6A, and in particular must:
 - (1) be prepared using the *post-tax revenue model* referred to in rule 6A.5;
 - (2) comply with the requirements of, and contain or be accompanied by the information required by, any relevant *regulatory information instrument*; and
 - (3) contain the information and matters specified in Schedule 6A.1.

6A.4.2 Contents of revenue determination

- (a) A *revenue determination* for a *Transmission Network Service Provider* is to specify, for a *regulatory control period*, the following matters:
 - (1) the amount of the estimated *total revenue cap* for the *regulatory control period* or the method of calculating that amount;
 - (2) the *annual building block revenue requirement* for each *regulatory year* of the *regulatory control period*;
 - (3) the amount of the *maximum allowed revenue* for each *regulatory year* of the *regulatory control period* or the method of calculating that amount;
 - (3A) the regulatory asset base as at the commencement of the *regulatory control period*;
 - (4) appropriate methodologies for the indexation of the regulatory asset base;
 - (5) the values that are to be attributed to the *performance incentive scheme parameters* for the purposes of the application to the *Transmission Network Service Provider* of any *service target performance incentive scheme* that applies in respect of the *regulatory control period*;
 - (6) the values that are to be attributed to the *efficiency benefit sharing scheme parameters* for the purposes of the application to the *Transmission Network Service Provider* of any *efficiency benefit sharing scheme* that applies in respect of the *regulatory control period*;

- (6A) how any *capital expenditure sharing scheme* or *small-scale incentive scheme* is to apply to the *Transmission Network Service Provider*; and
- (7) the commencement and length of the *regulatory control period*.
- (8) **[Deleted]**
- (a1) A *revenue determination* for a *Transmission Network Service Provider* is also to specify whether depreciation for establishing the regulatory asset base as at the commencement of the following *regulatory control period* is to be based on actual or forecast capital expenditure.
- (b) Unless otherwise determined by the *AER*:
 - (1) the *total revenue cap* may not relate to more than one *transmission system* that is owned, controlled or operated by a *Transmission Network Service Provider*; and
 - (2) there is to be a separate *total revenue cap* for each such *transmission system*.
- (c) A *regulatory control period* in respect of a *Transmission Network Service Provider* must be not less than 5 *regulatory years*.

6A.5 Post-tax revenue model

6A.5.1 Introduction

- (a) The process of preparing a *revenue determination* for a *Transmission Network Service Provider* involves the submission of a *Revenue Proposal* to the *AER* by the provider under clause 6A.10.1. The provider is required to prepare the *Revenue Proposal* using a *post-tax revenue model* in relation to that proposal, in accordance with the requirements of this Chapter 6A.
- (b) The principal purpose of the *post-tax revenue model* is to calculate the *maximum allowed revenue* under the *revenue determination*.
- (c) The *post-tax revenue model*, together with the *Revenue Proposal*, form the basis on which the *AER* assesses a *Revenue Proposal* and makes a *revenue determination*.

6A.5.2 Preparation, publication and amendment of post-tax revenue model

- (a) The *AER* must, in accordance with the *transmission consultation procedures*, prepare and *publish* a *post-tax revenue model*.
- (b) The *AER* may, from time to time and in accordance with the *transmission consultation procedures*, amend or replace the *post-tax revenue model*.
- (c) The *AER* must develop and *publish* the first *post-tax revenue model* by 28 September 2007, and there must be such a model in force at all times after that date.

6A.5.3 Contents of post-tax revenue model

- (a) The *post-tax revenue model* must set out the manner in which the following matters, referable only to the provision of *prescribed transmission services*, are to be calculated in respect of a *Transmission Network Service Provider* for a *regulatory control period*:
 - (1) the *total revenue cap* for the provider for the period;
 - (2) the *maximum allowed revenue* for the provider for each *regulatory year* of the period; and
 - (3) the *annual building block revenue requirement* for the provider for each *regulatory year*, determined in accordance with clause 6A.5.4.
- (b) The *post-tax revenue model* must specify:
 - (1) a methodology that the *AER* determines is likely to result in the best estimates of expected inflation;
 - (2) the timing assumptions and associated discount rates that are to apply in relation to the calculation of the building blocks referred to in clause 6A.5.4;
 - (3) the manner (if any) in which working capital is to be treated;
 - (4) the manner in which the estimated cost of corporate income tax is to be calculated; and
 - (5) the CPI - X methodology that is to be applied in escalating the *maximum allowed revenue* for the provider for each *regulatory year* (other than the first *regulatory year*) of a *regulatory control period*.
- (c) The *post-tax revenue model* must be such that:
 - (1) the net present value of the expected *maximum allowed revenue* for the provider for each *regulatory year* of the *regulatory control period* is equal to the net present value of the *annual building block revenue requirement* for the provider for each *regulatory year*;
 - (2) the *maximum allowed revenue* for the provider for the first *regulatory year* is expressed as a dollar amount;
 - (3) the *maximum allowed revenue* for the provider for each *regulatory year* (other than the first *regulatory year*) is calculated by escalating the *maximum allowed revenue* for the provider for the previous *regulatory year* using a CPI - X methodology; and
 - (4) the *total revenue cap* for the provider for a *regulatory control period* is calculated as the sum of the *maximum allowed revenues* for the provider for each *regulatory year*.

- (d) For the purposes of this clause 6A.5.3, the X factor is that determined in accordance with clause 6A.6.8.

6A.5.4 Building blocks approach

(a) Building blocks generally

The *annual building block revenue requirement* for a *Transmission Network Service Provider* for each *regulatory year* of a *regulatory control period* must be determined using a building blocks approach, under which the building blocks are:

- (1) indexation of the regulatory asset base - see paragraph (b)(1);
- (2) a return on capital for that year - see paragraph (b)(2);
- (3) the depreciation for that year - see paragraph (b)(3);
- (4) the estimated cost of corporate income tax of the *Transmission Network Service Provider* for that year - see paragraph (b)(4);
- (5) the revenue increments or decrements (if any) for that year arising from the application of any *efficiency benefit sharing scheme*, *capital expenditure sharing scheme*, *service target performance incentive scheme* or *small-scale incentive scheme* - see paragraph (b)(5);
- (5A) the revenue decrements (if any) arising from the use of assets that provide *prescribed transmission services* to provide certain other services – see paragraph (b)(5A);
- (6) the forecast operating expenditure accepted or substituted by the *AER* for that year – see paragraph (b)(6); and
- (7) compensation for other risks - see paragraph (b)(7).

(b) Details about the building blocks

For the purposes of paragraph (a):

- (1) for indexation of the regulatory asset base:
 - (i) the regulatory asset base is calculated in accordance with clause 6A.6.1 and schedule 6A.2; and
 - (ii) the building block comprises a negative adjustment equal to the amount referred to in clause S6A.2.4(c)(4) for that year;
- (2) the return on capital is calculated in accordance with clause 6A.6.2;
- (3) the depreciation is calculated in accordance with clause 6A.6.3;
- (4) the estimated cost of corporate income tax is determined in accordance with clause 6A.6.4;

- (5) the revenue increment or decrements referred to in subparagraph (a)(5) are those that arise as a result of the operation of any applicable *efficiency benefit sharing scheme, capital expenditure sharing scheme, service target performance incentive scheme or small-scale incentive scheme*, as referred to in clauses 6A.6.5, 6A.6.5A, 6A.7.4 or 6A.7.5;
- (5A) the revenue decrements (if any) referred to in paragraph (a)(5A) are those that are determined by the AER under clause 6A.5.5 as a result of assets that provide *prescribed transmission services* being used to provide:
 - (i) *non-regulated transmission services*; or
 - (ii) services that are not *transmission services*.
- (6) the forecast operating expenditure is accepted or substituted by the AER in accordance with clause 6A.6.6(c), clause 6A.6.6(c1) or clause 6A.13.2(b)(3) and (5) (as the case may be); and
- (7) the compensation for other risks is such amounts as the AER determines are necessary for that year to compensate a *Transmission Network Service Provider* for risks that are not otherwise compensated for in the return on capital, including the risk referred to in clause S6A.2.3(b) of schedule 6A.2.

6A.5.5 Shared assets

- (a) Where an asset is used to provide both *prescribed transmission services* and either:
 - (1) *non-regulated transmission services*; or
 - (2) services that are not *transmission services*,the AER may, in a *revenue determination* for a *regulatory control period*, reduce the *annual building block revenue requirement* for the *Transmission Network Service Provider* for a *regulatory year* within that *regulatory control period* by such amount as it considers reasonable to reflect such part of the costs of that asset as the *Transmission Network Service Provider* is recovering through charging for the provision of a service referred to in subparagraph (1) or (2).
- (b) In making a decision under paragraph (a), the AER must have regard to the *shared asset principles* and the *Shared Asset Guidelines*.
- (c) The *shared asset principles* are as follows:
 - (1) the *Transmission Network Service Provider* should be encouraged to use assets that provide *prescribed transmission services* for the provision of other kinds of services where that use is efficient and does not materially prejudice the provision of those services;

- (2) a shared asset cost reduction should not be dependent on the *Transmission Network Service Provider* deriving a positive commercial outcome from the use of the asset other than for those services;
 - (3) a shared asset cost reduction should be applied where the use of the asset other than for *prescribed transmission services* is material;
 - (4) regard should be had to the manner in which costs have been recovered or revenues reduced in respect of the relevant asset in the past and the reasons for adopting that manner of recovery or reduction;
 - (5) a shared asset cost reduction should be compatible with the *Cost Allocation Principles* and *Cost Allocation Method*; and
 - (6) any reduction effected under paragraph (a) should be compatible with other incentives provided under the *Rules*’.
- (d) The *AER* must, in accordance with the *transmission consultation procedures*, make and *publish* guidelines (the *Shared Asset Guidelines*) that set out the approach the *AER* proposes to take in applying the *shared asset principles* (which may include a methodology that the *AER* proposes to use to determine reductions for the purposes of paragraph (a)).
- (e) There must be *Shared Asset Guidelines* in force at all times after the date on which the *AER* first *publishes* the *Shared Asset Guidelines* under these *Rules*.

6A.5.6 Expenditure Forecast Assessment Guidelines

- (a) The *AER* must, in accordance with the *transmission consultation procedures*, develop and *publish* guidelines (the *Expenditure Forecast Assessment Guidelines*) that specify the approach the *AER* proposes to use to assess the forecasts of operating expenditure and capital expenditure that form part of *Transmission Network Service Providers' Revenue Proposals* and the information the *AER* requires for the purposes of that assessment.
- (b) There must be *Expenditure Forecast Assessment Guidelines* in force at all times after the date on which the *AER* first *publishes* the *Expenditure Forecast Assessment Guidelines* under these *Rules*.

6A.5A Capital expenditure incentive mechanisms

- (a) The *capital expenditure incentive objective* is to ensure that, where the value of a regulatory asset base is subject to adjustment in accordance with the *Rules*, then the only capital expenditure that is included in an adjustment that increases the value of that regulatory asset base is capital expenditure that reasonably reflects the *capital expenditure criteria*.

- (b) The *AER* must, in accordance with the *transmission consultation procedures*, make and *publish* guidelines (the *Capital Expenditure Incentive Guidelines*) that set out:
 - (1) any *capital expenditure sharing schemes* developed by the *AER* in accordance with clause 6A.6.5A, and how the *AER* has taken into account the *capital expenditure sharing scheme principles* in developing those schemes;
 - (2) the manner in which it proposes to make determinations under clause S6A.2.2A(a) if the *overspending requirement* is satisfied;
 - (3) the manner in which it proposes to determine whether depreciation for establishing a regulatory asset base as at the commencement of a *regulatory control period* is to be based on actual or forecast capital expenditure;
 - (4) the manner in which it proposed to make determinations under clause S6A.2.2A(i) if the *margin requirement* is satisfied;
 - (5) the manner in which it proposes to make determinations under clause S6A.2.2A(j) if the *capitalisation requirement* is satisfied; and
 - (6) how each scheme and proposal referred to in subparagraphs (1) to (5), and all of them taken together, are consistent with the *capital expenditure incentive objective*.
- (c) There must be *Capital Expenditure Incentive Guidelines* in force at all times after the date on which the *AER* first *publishes* the *Capital Expenditure Incentive Guidelines* under these Rules.

6A.6 Matters relevant to the making of revenue determinations

6A.6.1 Regulatory asset base

Nature of regulatory asset base

- (a) The regulatory asset base for a *transmission system* owned, controlled or operated by a *Transmission Network Service Provider* is the value of those assets that are used by the *Transmission Network Service Provider* to provide *prescribed transmission services*, but only to the extent that they are used to provide such services.

Preparation, publication and amendment of model for rolling forward regulatory asset base

- (b) The *AER* must, in accordance with the *transmission consultation procedures*, develop and *publish* a model for the roll forward of the regulatory asset base for *transmission systems*, referred to as the *roll forward model*.

- (c) The *AER* may, from time to time and in accordance with the *transmission consultation procedures*, amend or replace the *roll forward model*.
- (d) The *AER* must develop and *publish* the first *roll forward model* by 28 September 2007, and there must be such a model available at all times after that date.

Contents of roll forward model

- (e) The *roll forward model* must set out the method for determining the roll forward of the regulatory asset base for *transmission systems*:
 - (1) from the immediately preceding *regulatory control period* to the beginning of the first year of the subsequent *regulatory control period*, so as to establish the value of the regulatory asset base as at the beginning of the first *regulatory year* of that subsequent *regulatory control period*; and
 - (2) from one *regulatory year* in a *regulatory control period* to a subsequent *regulatory year* in that same *regulatory control period*, so as to establish the value of the regulatory asset base as at the beginning of the subsequent *regulatory year* of that *regulatory control period*;

under which:

- (3) the roll forward of the regulatory asset base from the immediately preceding *regulatory control period* to the beginning of the first *regulatory year* of a subsequent *regulatory control period* entails the value of the first mentioned regulatory asset base being adjusted for outturn inflation, consistent with the methodology that was used in the *transmission determination* (if any) for the first mentioned *regulatory control period* for the indexation of the *maximum allowed revenue* during that *regulatory control period*.

Other provisions relating to regulatory asset base

- (f) Other provisions relating to regulatory asset bases are set out in schedule 6A.2.

6A.6.2 Return on capital

Calculation of return on capital

- (a) The return on capital for each *regulatory year* must be calculated by applying a rate of return for the relevant *Transmission Network Service Provider* for that *regulatory year* that is determined in accordance with this clause 6A.6.2 (the *allowed rate of return*) to the value of the regulatory asset base for the relevant *transmission system* as at the beginning of that *regulatory year* (as established in accordance with clause 6A.6.1 and schedule 6A.2).

Allowed rate of return

- (b) The *allowed rate of return* is to be determined such that it achieves the *allowed rate of return objective*.
- (c) The *allowed rate of return objective* is that the rate of return for a *Transmission Network Service Provider* is to be commensurate with the efficient financing costs of a benchmark efficient entity with a similar degree of risk as that which applies to the *Transmission Network Service Provider* in respect of the provision of *prescribed transmission services* (the *allowed rate of return objective*).
- (d) Subject to paragraph (b), the *allowed rate of return* for a *regulatory year* must be:
 - (1) a weighted average of the return on equity for the *regulatory control period* in which that *regulatory year* occurs (as estimated under paragraph (f)) and the return on debt for that *regulatory year* (as estimated under paragraph (h)); and
 - (2) determined on a nominal vanilla basis that is consistent with the estimate of the value of imputation credits referred to in clause 6A.6.4.
- (e) In determining the *allowed rate of return*, regard must be had to:
 - (1) relevant estimation methods, financial models, market data and other evidence;
 - (2) the desirability of using an approach that leads to the consistent application of any estimates of financial parameters that are relevant to the estimates of, and that are common to, the return on equity and the return on debt; and
 - (3) any interrelationships between estimates of financial parameters that are relevant to the estimates of the return on equity and the return on debt.

Return on equity

- (f) The return on equity for a *regulatory control period* must be estimated such that it contributes to the achievement of the *allowed rate of return objective*.
- (g) In estimating the return on equity under paragraph (f), regard must be had to the prevailing conditions in the market for equity funds.

Return on debt

- (h) The return on debt for a *regulatory year* must be estimated such that it contributes to the achievement of the *allowed rate of return objective*.
- (i) The return on debt may be estimated using a methodology which results in either:

- (1) the return on debt for each *regulatory year* in the *regulatory control period* being the same; or
 - (2) the return on debt (and consequently the *allowed rate of return*) being, or potentially being, different for different *regulatory years* in the *regulatory control period*.
- (j) Subject to paragraph (h), the methodology adopted to estimate the return on debt may, without limitation, be designed to result in the return on debt reflecting:
 - (1) the return that would be required by debt investors in a benchmark efficient entity if it raised debt at the time or shortly before the making of the *revenue determination* for the *regulatory control period*;
 - (2) the average return that would have been required by debt investors in a benchmark efficient entity if it raised debt over an historical period prior to the commencement of a regulatory year in the regulatory control period; or
 - (3) some combination of the returns referred to in subparagraphs (1) and (2).
- (k) In estimating the return on debt under paragraph (h), regard must be had to the following factors:
 - (1) the desirability of minimising any difference between the return on debt and the return on debt of a benchmark efficient entity referred to in the *allowed rate of return objective*;
 - (2) the interrelationship between the return on equity and the return on debt;
 - (3) the incentives that the return on debt may provide in relation to capital expenditure over the *regulatory control period*, including as to the timing of any capital expenditure; and
 - (4) any impacts (including in relation to the costs of servicing debt across *regulatory control periods*) on a benchmark efficient entity referred to in the *allowed rate of return objective* that could arise as a result of changing the methodology that is used to estimate the return on debt from one *regulatory control period* to the next.
- (l) If the return on debt is to be estimated using a methodology of the type referred to in paragraph (i)(2) then a resulting change to the *Transmission Network Service Provider's annual building block revenue requirement* must be effected through the automatic application of a formula that is specified in the *revenue determination*.

Rate of Return Guidelines

- (m) The *AER* must, in accordance with the *transmission consultation procedures*, make and *publish* guidelines (the *Rate of Return Guidelines*).
- (n) The *Rate of Return Guidelines* must set out:
 - (1) the methodologies that the *AER* proposes to use in estimating the *allowed rate of return*, including how those methodologies are proposed to result in the determination of a return on equity and a return on debt in a way that is consistent the *allowed rate of return objective*; and
 - (2) the estimation methods, financial models, market data and other evidence the *AER* proposes to take into account in estimating the return on equity, the return on debt and the value of imputation credits referred to in clause 6A.6.4.
- (o) There must be *Rate of Return Guidelines* in force at all times after the date on which the *AER* first *publishes* the *Rate of Return Guidelines* under these *Rules*.
- (p) The *AER* must, in accordance with the *transmission consultation procedures*, review the *Rate of Return Guidelines*:
 - (1) at intervals not exceeding five years for the first interval and three years for all subsequent intervals, with the first interval starting from the date that the first *Rate of Return Guidelines* are published under these *Rules*; and
 - (2) at the same time as it reviews the *Rate of Return Guidelines* made under clause 6.5.2.
- (q) For the avoidance of doubt, nothing prevents the *AER* from *publishing* the *Rate of Return Guidelines* made under this clause 6A.6.2 in the same document as the *Rate of Return Guidelines* made under clause 6.5.2.

6A.6.3 Depreciation

- (a) The depreciation for each *regulatory year*:
 - (1) must be calculated on the value of the assets as included in the regulatory asset base, as at the beginning of that *regulatory year*, for the relevant *transmission system*; and
 - (2) must be calculated:
 - (i) providing such depreciation schedules conform with the requirements set out in paragraph (b), using the depreciation schedules for each asset or category of assets that are nominated in the relevant *Transmission Network Service Provider's Revenue Proposal*; or

- (ii) to the extent the depreciation schedules nominated in the provider's Revenue Proposal do not so conform, using the depreciation schedules determined for that purpose by the *AER* in its final decision on the *Transmission Network Service Provider's* Revenue Proposal.
- (b) The depreciation schedules referred to in paragraph (a) must conform to the following requirements:
 - (1) except as provided in paragraph (c), the schedules must depreciate using a profile that reflects the nature of the assets or category of assets over the economic life of that asset or category of assets;
 - (2) the sum of the real value of the depreciation that is attributable to any asset or category of assets over the economic life of that asset or category of assets (such real value being calculated as at the time the value of that asset or category of assets was first included in the regulatory asset base for the relevant *transmission system*) must be equivalent to the value at which that asset or category of assets was first included in the regulatory asset base for the relevant *transmission system*; and
 - (3) the economic life of the relevant assets and the depreciation methodologies and rates underpinning the calculation of depreciation for a given *regulatory control period* must be consistent with those determined for the same assets on a prospective basis in the *transmission determination* for that period.
- (c) To the extent that:
 - (1) an asset (or group of assets) the value of which forms part of the regulatory asset base for a *transmission system* is dedicated to one *Transmission Network User* (not being a *Distribution Network Service Provider*) or a small group of *Transmission Network Users*; and
 - (2) the value of the assets (or group of assets), as included in the value of that regulatory asset base as at the beginning of the first *regulatory year* of the current *regulatory control period*, exceeds the *indexed amount*, as at the commencement of that *regulatory control period*, of \$20 million,

that asset (or group of assets) must be depreciated on a straight line basis over the life at which that asset (or group of assets) was first included in the regulatory asset base for that *transmission system*.

6A.6.4 Estimated cost of corporate income tax

The estimated cost of corporate income tax of a *Transmission Network Service Provider* for each *regulatory year* (*ETC_t*) must be estimated in accordance with the following formula:

$$ETC_t = (ETI_t \times r_t) (1 - \gamma)$$

where:

ETI_t is an estimate of the taxable income for that *regulatory year* that would be earned by a benchmark efficient entity as a result of the provision of *prescribed transmission services* if such an entity, rather than the *Transmission Network Service Provider*, operated the business of the *Transmission Network Service Provider*, such estimate being determined in accordance with the *post-tax revenue model*;

r_t is the expected statutory income tax rate for that *regulatory year* as determined by the *AER*; and

γ is the value of imputation credits.

6A.6.5 Efficiency benefit sharing scheme

(a) The *AER* must, in accordance with the *transmission consultation procedures*, develop and *publish* an incentive scheme or schemes (*efficiency benefit sharing scheme*) that provide for a fair sharing between *Transmission Network Service Providers* and *Transmission Network Users* of:

- (1) the efficiency gains derived from the operating expenditure of *Transmission Network Service Providers* for a *regulatory control period* being less than; and
- (2) the efficiency losses derived from the operating expenditure of *Transmission Network Service Providers* for a *regulatory control period* being more than,

the forecast operating expenditure accepted or substituted by the *AER* for that *regulatory control period* in accordance with clause 6A.6.6(c), clause 6A.6.6(c1) or clause 6A.13.2(b)(3) and (5) (as the case may be).

(b) In developing and implementing an *efficiency benefit sharing scheme*, the *AER* must have regard to:

- (1) the need to provide *Transmission Network Service Providers* with a continuous incentive (that is equal in each year of any *regulatory control period*) to reduce operating expenditure;
- (2) the desirability of both rewarding *Transmission Network Service Providers* for efficiency gains and penalising *Transmission Network Service Providers* for efficiency losses;
- (3) any incentives that *Transmission Network Service Providers* may have to inappropriately capitalise operating expenditure; and
- (4) the possible effects of the scheme on incentives for the implementation of *non-network options*.

- (c) At the same time as it *publishes* an *efficiency benefit sharing scheme* under this clause 6A.6.5, the AER must also *publish* parameters (the *efficiency benefit sharing scheme parameters*) for the scheme. For the avoidance of doubt, unless the AER provides otherwise in that scheme, such values may differ as between *Transmission Network Service Providers* and over time.
- (d) The AER must set out in each *efficiency benefit sharing scheme* any requirements with which the values attributed to the *efficiency benefit sharing scheme parameters* must comply, but such requirements must not be inconsistent with those factors to which the AER must have regard under paragraph (b).
- (e) The AER must develop and *publish* the first *efficiency benefit sharing scheme* by 28 September 2007, and there must be an *efficiency benefit sharing scheme* in force at all times after that date.
- (f) The AER may, from time to time and in accordance with the *transmission consultation procedures*, amend or replace an *efficiency benefit sharing scheme*, except that no such amendment or replacement may change the application of the scheme to a *Transmission Network Service Provider* in respect of a *regulatory control period* that has commenced before, or that will commence within 15 months of, the amendment or replacement coming into operation.
- (g) **[Deleted]**
- (h) **[Deleted]**

6A.6.5A Capital expenditure sharing scheme

- (a) A *capital expenditure sharing scheme* is a scheme that provides *Transmission Network Service Providers* with an incentive to undertake efficient capital expenditure during a *regulatory control period*.
- (b) If the AER develops a *capital expenditure sharing scheme* in accordance with this clause, the *capital expenditure sharing scheme* must be consistent with the *capital expenditure incentive objective*.
- (c) In developing a *capital expenditure sharing scheme*, the AER must take into account the following principles (the *capital expenditure sharing scheme principles*):
 - (1) *Transmission Network Service Providers* should be rewarded or penalised for improvements or declines in efficiency of capital expenditure; and
 - (2) the rewards and penalties should be commensurate with the efficiencies or inefficiencies in capital expenditure, but a reward for efficient capital expenditure need not correspond in amount to a penalty for the same amount of inefficient capital expenditure.

- (d) In developing a *capital expenditure sharing scheme*, the AER must also take into account:
 - (1) the interaction of the scheme with other incentives that *Transmission Network Service Providers* may have in relation to undertaking efficient operating or capital expenditure; and
 - (2) the *capital expenditure objectives* and, if relevant, the *operating expenditure objectives*.
- (e) In deciding:
 - (1) whether to apply a *capital expenditure sharing scheme* to a *Transmission Network Service Provider* for a *regulatory control period*; and
 - (2) the nature and details of any *capital expenditure sharing scheme* that is to apply to a *Transmission Network Service Provider* for a *regulatory control period*,the AER must:
 - (3) make that decision in a manner that contributes to the achievement of the *capital expenditure incentive objective*; and
 - (4) take into account:
 - (i) both the *capital expenditure sharing scheme principles*, and the matters referred to in paragraph (d), as they apply to the *Transmission Network Service Provider*; and
 - (ii) the circumstances of the *Transmission Network Service Provider*.

6A.6.6 Forecast operating expenditure

- (a) A *Revenue Proposal* must include the total forecast operating expenditure for the relevant *regulatory control period* which the *Transmission Network Service Provider* considers is required in order to achieve each of the following (the *operating expenditure objectives*):
 - (1) meet or manage the expected demand for *prescribed transmission services* over that period;
 - (2) comply with all applicable *regulatory obligations or requirements* associated with the provision of *prescribed transmission services*;
 - (3) to the extent that there is no applicable *regulatory obligation or requirement* in relation to:
 - (i) the quality, reliability or security of supply of *prescribed transmission services*; or

- (ii) the reliability or security of the *transmission system* through the supply of *prescribed transmission services*,
to the relevant extent:
 - (iii) maintain the quality, reliability and security of supply of *prescribed transmission services*; and
 - (iv) maintain the reliability and security of the *transmission system* through the supply of *prescribed transmission services*;
- (4) maintain the safety of the *transmission system* through the supply of *prescribed transmission services*.
- (b) The forecast of required operating expenditure of a *Transmission Network Service Provider* that is included in a *Revenue Proposal* must:
 - (1) comply with the requirements of any relevant *regulatory information instrument*;
 - (2) be for expenditure that is properly allocated to *prescribed transmission services* in accordance with the principles and policies set out in the *Cost Allocation Methodology* for the *Transmission Network Service Provider*; and
 - (3) include both:
 - (i) the total of the forecast operating expenditure for the relevant *regulatory control period*; and
 - (ii) the forecast operating expenditure for each *regulatory year* of the relevant *regulatory control period*.
- (c) Subject to paragraph (c1), the *AER* must accept the forecast of required operating expenditure of a *Transmission Network Service Provider* that is included in a *Revenue Proposal* if the *AER* is satisfied that the total of the forecast operating expenditure for the *regulatory control period* reasonably reflects each of the following (the *operating expenditure criteria*):
 - (1) the efficient costs of achieving the *operating expenditure objectives*;
 - (2) the costs that a prudent operator would require to achieve the *operating expenditure objectives*; and
 - (3) a realistic expectation of the demand forecast and cost inputs required to achieve the *operating expenditure objectives*.
- (c1) If:
 - (1) a *Transmission Network Service Provider* made *network support payments* in accordance with a relevant agreement for *network support services* in the previous *regulatory control period*; and

- (2) the *Transmission Network Service Provider* must continue to make *network support payments* to fulfil obligations under the relevant agreement for *network support services* in the relevant *regulatory control period*,

the *AER* must accept the forecast of required operating expenditure of the *Transmission Network Service Provider* included in a *Revenue Proposal* in relation to the remainder of costs required to meet obligations under the relevant agreement for *network support services* in the relevant *regulatory control period*.

- (d) Subject to paragraph (c1), if the *AER* is not satisfied as referred to in paragraph (c), it must not accept the forecast of required operating expenditure of a *Transmission Network Service Provider* that is included in a *Revenue Proposal*.
- (e) In deciding whether or not the *AER* is satisfied as referred to in paragraph (c), the *AER* must have regard to the following (the *operating expenditure factors*):

- (1) **[Deleted]**

- (2) **[Deleted]**

- (3) **[Deleted]**

- (4) the most recent *annual benchmarking report* that has been published under clause 6A.31 and the benchmark operating expenditure that would be incurred by an efficient *Transmission Network Service Provider* over the relevant *regulatory control period*;

- (5) the actual and expected operating expenditure of the *Transmission Network Service Provider* during any preceding *regulatory control periods*;

- (5A) the extent to which the operating expenditure forecast includes expenditure to address the concerns of electricity consumers as identified by the *Transmission Network Service Provider* in the course of its engagement with electricity consumers;

- (6) the relative prices of operating and capital inputs;

- (7) the substitution possibilities between operating and capital expenditure;

- (8) whether the operating expenditure forecast is consistent with any incentive scheme or schemes that apply to the *Transmission Network Service Provider* under clauses 6A.6.5, 6A.7.4 or 6A.7.5;

- (9) the extent the operating expenditure forecast is referable to arrangements with a person other than the *Transmission Network*

Service Provider that, in the opinion of the *AER*, do not reflect arm's length terms;

- (10) whether the operating expenditure forecast includes an amount relating to a project that should more appropriately be included as a *contingent project* under clause 6A.8.1(b);
- (11) the most recent *NTNDP* and any submissions made by *AEMO*, in accordance with the *Rules*, on the forecast of the *Transmission Network Service Provider's* required operating expenditure;
- (12) the extent to which the *Transmission Network Service Provider* has considered and made provision for efficient and prudent *non-network options*;
- (13) any relevant *project assessment conclusions report* required under 5.16.4 ; and
- (14) any other factor the *AER* considers relevant and which the *AER* has notified the *Transmission Network Service Provider* in writing, prior to the submission of its revised *Revenue Proposal* under clause 6A.12.3, is an *operating expenditure factor*.

(f) [Deleted]

6A.6.7 Forecast capital expenditure

- (a) A *Revenue Proposal* must include the total forecast capital expenditure for the relevant *regulatory control period* which the *Transmission Network Service Provider* considers is required in order to achieve each of the following (the *capital expenditure objectives*):
 - (1) meet or manage the expected demand for *prescribed transmission services* over that period;
 - (2) comply with all applicable *regulatory obligations or requirements* associated with the provision of *prescribed transmission services*;
 - (3) to the extent that there is no applicable *regulatory obligation or requirement* in relation to:
 - (i) the quality, reliability or security of supply of *prescribed transmission services*; or
 - (ii) the reliability or security of the *transmission system* through the supply of *prescribed transmission services*,to the relevant extent:
 - (iii) maintain the quality, reliability and security of supply of *prescribed transmission services*; and

- (iv) maintain the reliability and security of the *transmission system* through the supply of *prescribed transmission services*; and
- (4) maintain the safety of the *transmission system* through the supply of *prescribed transmission services*.
- (b) The forecast of required capital expenditure of a *Transmission Network Service Provider* that is included in a *Revenue Proposal* must:
 - (1) comply with the requirements of any relevant *regulatory information instrument*;
 - (2) be for expenditure that is properly allocated to *prescribed transmission services* in accordance with the principles and policies set out in the *Cost Allocation Methodology* for the *Transmission Network Service Provider*;
 - (3) include both:
 - (i) the total of the forecast capital expenditure for the relevant *regulatory control period*; and
 - (ii) the forecast capital expenditure for each *regulatory year* of the relevant *regulatory control period*; and
 - (4) identify any forecast capital expenditure:
 - (i) that is for a *reliability augmentation*; or
 - (ii) that is for an option that has satisfied the *regulatory investment test for distribution* or *regulatory investment test for transmission* (as the case may be).
- (c) The *AER* must accept the forecast of required capital expenditure of a *Transmission Network Service Provider* that is included in a *Revenue Proposal* if the *AER* is satisfied that the total of the forecast capital expenditure for the *regulatory control period* reasonably reflects each of the following (*capital expenditure criteria*):
 - (1) the efficient costs of achieving the *capital expenditure objectives*;
 - (2) the costs that a prudent operator would require to achieve the *capital expenditure objectives*; and
 - (3) a realistic expectation of the demand forecast and cost inputs required to achieve the *capital expenditure objectives*.
- (d) If the *AER* is not satisfied as referred to in paragraph (c), it must not accept the forecast of required capital expenditure of a *Transmission Network Service Provider*.

- (e) In deciding whether or not the *AER* is satisfied as referred to in paragraph (c), the *AER* must have regard to the following (the *capital expenditure factors*):
- (1) **[Deleted]**
 - (2) **[Deleted]**
 - (3) **[Deleted]**
 - (4) the most recent *annual benchmarking report* that has been *published* under clause 6A.31 and benchmark capital expenditure that would be incurred by an efficient *Transmission Network Service Provider* over the relevant *regulatory control period*;
 - (5) the actual and expected capital expenditure of the *Transmission Network Service Provider* during any preceding *regulatory control periods*;
 - (5A) the extent to which the capital expenditure forecast includes expenditure to address the concerns of electricity consumers as identified by the *Transmission Network Service Provider* in the course of its engagement with electricity consumers;
 - (6) the relative prices of operating and capital inputs;
 - (7) the substitution possibilities between operating and capital expenditure;
 - (8) whether the capital expenditure forecast is consistent with any incentive scheme or schemes that apply to the *Transmission Network Service Provider* under clauses 6A.6.5A, 6A.7.4 or 6A.7.5;
 - (9) the extent to which the capital expenditure forecast is referable to arrangements with a person other than the *Transmission Network Service Provider* that, in the opinion of the *AER*, do not reflect arm's length terms;
 - (10) whether the capital expenditure forecast includes an amount relating to a project that should more appropriately be included as a *contingent project* under clause 6A.8.1(b);
 - (11) the most recent *NTNDP*, and any submissions made by *AEMO*, in accordance with the *Rules*, on the forecast of the *Transmission Network Service Provider's* required capital expenditure;
 - (12) the extent to which the *Transmission Network Service Provider* has considered and made provision for efficient and prudent *non-network options* ;
 - (13) any relevant *project assessment conclusions report* required under clause 5.16.4; and

- (14) any other factor the *AER* considers relevant and which the *AER* has notified the *Transmission Network Service Provider* in writing, prior to the submission of its revised *Revenue Proposal* under clause 6A.12.3, is a *capital expenditure factor*.

(f) **[Deleted]**

Forecast capital expenditure and contingent projects

- (g) Paragraphs (h) - (k) apply where:

- (1) in a *regulatory control period* (the **first regulatory control period**) the *AER* determines under clause 6A.8.2(e)(1)(iii) that the likely completion date for a *contingent project* is a date which occurs in the immediately following *regulatory control period* (the **second regulatory control period**); and
- (2) there is an unspent amount of capital expenditure for that *contingent project* under paragraph (h).

- (h) A *Transmission Network Service Provider's Revenue Proposal* for the second *regulatory control period*, must include in the forecast of required capital expenditure referred to in paragraph (a) an amount of any unspent capital expenditure for each *contingent project* as described in paragraph (g)(2), that equals the difference (if any) between:

- (1) the total capital expenditure for that *contingent project*, as determined by the *AER* in the first *regulatory control period* under clause 6A.8.2(e)(1)(ii); and
- (2) the total of the capital expenditure actually incurred (or estimated capital expenditure for any part of the first *regulatory control period* for which actual capital expenditure is not available) in the first *regulatory control period* for that *contingent project*.

- (i) The *AER* must include in any forecast capital expenditure for the second *regulatory control period* which is accepted in accordance with paragraph (c), estimated in accordance with clause 6A.14.1(2)(ii) or substituted in accordance with clause 6A.13.2(b)(4) and (5) (as the case may be), the amount of any unspent capital expenditure calculated in accordance with paragraph (h).

- (j) Without limiting the requirement in paragraph (i), in deciding whether or not to accept the forecast of required capital expenditure of a *Transmission Network Service Provider* for the second *regulatory control period* in accordance with this clause 6A.6.7, the *AER* must not:

- (1) assess the reasonableness of the amount of unspent capital expenditure for a *contingent project* referred to in paragraph (h) or the remaining period to which the *contingent project* applies;

- (2) assess the reasonableness of the timing of the unspent capital expenditure within the remaining period for a *contingent project* referred to in paragraph (h) except as part of the assessment of the total forecast capital expenditure under paragraph (c); or
- (3) take into account any amount which represents for a *contingent project* referred to in paragraph (h) the difference between:
 - (i) the amount representing the sum of the forecast capital expenditure for that *contingent project* for each year of the immediately preceding *regulatory control period* referred to in clause 6A.8.2(e)(1)(i); and
 - (ii) the total capital expenditure actually incurred (or estimated capital expenditure for any part of the preceding *regulatory control period* for which actual capital expenditure is not available) in the immediately preceding *regulatory control period* for that *contingent project*.
- (k) A *Revenue Proposal* in respect of the second *regulatory control period* must not include in the forecast of required capital expenditure referred to in paragraph (a) any capital expenditure for a *contingent project* for the first *regulatory control period*:
 - (1) to the extent that the capital expenditure was included in the amount of capital expenditure for that *contingent project* as determined in the first *regulatory control period* under clause 6A.8.2(e)(1)(i); and
 - (2) the capital expenditure actually incurred (or estimated capital expenditure for any part of the first *regulatory control period* for which actual capital expenditure is not available) in the first *regulatory control period* for that *contingent project* exceeded the capital expenditure referred to in subparagraph (1).

6A.6.8 The X factor

- (a) A *revenue determination* is to include the X factor for each *regulatory year* for a *Transmission Network Service Provider*.
- (b) The X factors for each *regulatory year* must be:
 - (1) providing they comply with the requirements set out in paragraph (c), the X factors for those *regulatory years* that are nominated in the *Transmission Network Service Provider's Revenue Proposal*; or
 - (2) to the extent that the X factors nominated in the *Transmission Network Service Provider's Revenue Proposal* do not so comply, the X factors determined for that purpose by the AER in its final decision on the *Transmission Network Service Provider's Revenue Proposal*.
- (c) The X factor for each *regulatory year* must be such that:

- (1) the net present value of the expected *maximum allowed revenue* for the relevant *Transmission Network Service Provider* for each *regulatory year* (as calculated in accordance with the *post-tax revenue model*) is equal to the net present value of the *annual building block revenue requirement* for the provider for each *regulatory year* (as calculated in accordance with the *post-tax revenue model*); and
 - (2) the expected *maximum allowed revenue* for the provider for the last *regulatory year* (as calculated in accordance with the *post-tax revenue model*) is as close as reasonably possible to the *annual building block revenue requirement* for the provider for that *regulatory year* (as calculated in accordance with the *post-tax revenue model*).
- (d) For the avoidance of doubt, there may be a different X factor that applies for different *regulatory years* of the *regulatory control period*.

6A.6.9 Pass through events

- (a) A *Revenue Proposal* may include a proposal as to the events that should be defined as *pass through events* under clause 6A.7.3(a1)(5) having regard to the *nominated pass through event considerations*.
- (b) In determining whether to accept the pass through events nominated by a *Transmission Network Service Provider* in its *Revenue Proposal* under paragraph(a), the *AER* must take into account the *nominated pass through event considerations*.

6A.7 Matters relevant to the adjustment of revenue cap after making of revenue determination

6A.7.1 Reopening of revenue determination for capital expenditure

- (a) Subject to paragraph (b), a *Transmission Network Service Provider* may, during a *regulatory control period*, apply to the *AER* to revoke and substitute a *revenue determination* that applies to it where:
 - (1) an event that is beyond the reasonable control of the *Transmission Network Service Provider* has occurred during that *regulatory control period* and the occurrence of that event during that period (or of an event of a similar kind) could not reasonably have been foreseen by the provider at the time of the making of the *revenue determination* ('the **event**');
 - (2) no forecast capital expenditure was accepted or substituted by the *AER* for that period under clause 6A.6.7(c) or clause 6A.13.2(b)(4) and (5) (as the case may be) in relation to the event that has occurred;
 - (3) the *Transmission Network Service Provider* proposes to undertake capital expenditure to rectify the adverse consequences of the event;

- (4) the total of the capital expenditure required during the *regulatory control period* to rectify the adverse consequences of the event:
 - (i) exceeds 5% of the value of the regulatory asset base for the relevant *Transmission Network Service Provider* for the first year of the relevant *regulatory control period*;
 - (ii) is such that, if undertaken, it is reasonably likely (in the absence of any other reduction in capital expenditure) to result in the total actual capital expenditure for that *regulatory control period* exceeding the total of the forecast capital expenditure for that *regulatory control period* as accepted or substituted by the AER in accordance with clause 6A.6.7(c) or clauses 6A.13.2(b)(4) and (5) (as the case may be); and
- (5) the *Transmission Network Service Provider* can demonstrate that it is not able to reduce capital expenditure in other areas to avoid the consequence referred to in clause 6A.7.1(a)(4)(ii) without materially adversely affecting the *reliability* and security of the relevant *transmission system*;
- (6) a failure to rectify the adverse consequences of the event would be likely to materially adversely affect the *reliability* and security of the relevant *transmission system*; and
- (7) the event is not a *pass through event* or a *contingent project*.

In this paragraph (a), a reference to an event includes a series of events or a state of affairs, which may include a greater than anticipated increase in demand.

- (b) An application referred to in paragraph (a) must not be made within 90 *business days* prior to the end of a *regulatory year*.
- (c) Following its receipt of an application made in accordance with paragraphs (a) and (b), the AER must:
 - (1) consult with the *Transmission Network Service Provider* and such other persons as it considers appropriate in relation to the application; and
 - (2) make its decision on the application within 40 *business days* from the later of the date the AER receives the application and the date the AER receives any information required by the AER under paragraph (f1).
- (d) The AER must, and must only, revoke a *revenue determination* following an application made in accordance with paragraphs (a) and (b) if the AER is satisfied of each of the matters referred to in paragraph (a).
- (e) If the AER revokes a *revenue determination* under paragraph (d), the AER must make a new *revenue determination* in substitution for the revoked

determination to apply for the remainder of the *regulatory control period* for which the revoked determination was to apply.

- (f) The substituted *revenue determination* must only vary from the revoked *revenue determination* to the extent necessary:
 - (1) to adjust the forecast capital expenditure for that *regulatory control period* to accommodate the amount of such additional capital expenditure as the *AER* determines is appropriate (in which case the amount of that adjustment will be taken to be accepted by the *AER* under clause 6A.6.7(c)); and
 - (2) to reflect the effect of any resultant increase in forecast capital expenditure on:
 - (i) the forecast operating expenditure for the remainder of the *regulatory control period*;
 - (ii) the *maximum allowed revenue* for each *regulatory year* in the remainder of the *regulatory control period*; and
 - (iii) the *X factor* for each of the remaining *regulatory years* of the *regulatory control period*.
- (f1) A *Transmission Network Service Provider* must provide the *AER* with such additional information as the *AER* requires for the purpose of making a decision on an application made by that *Transmission Network Service Provider* under paragraph (a) within the time specified by the *AER* in a notice provided to the *Transmission Network Service Provider* by the *AER* for that purpose.

Extension of time limit

- (g) If the *AER* is satisfied that the revocation and substitution of a revenue determination under paragraphs (d) and (e) involves issues of such complexity or difficulty that the time limit fixed in subparagraph (c)(2) should be extended, the *AER* may extend that time limit by a further period of up to 60 *business days*, provided that it gives written notice to the *Transmission Network Service Provider* of that extension not later than 10 *business days* before the expiry of that time limit.
- (h) If the *AER* extends the time limit under paragraph (g), it must make available on its website a notice of that extension as soon as is reasonably practicable.
- (i) Subject to paragraph (i3), if the *AER* gives a written notice to the *Transmission Network Service Provider* stating that it requires information from an *Authority* in order to make a decision on an application made by the *Transmission Network Service Provider* under paragraph (a) then, for the purpose of calculating elapsed time, the period between when the *AER* gives that notice to the *Transmission Network Service Provider* and when the *AER* receives that information from that *Authority* is to be disregarded.

- (i1) Subject to paragraph (i3), if the *AER* gives a written notice to the *Transmission Network Service Provider* stating that, in order to make a decision on an application made by the *Transmission Network Service Provider* under paragraph (a), it requires information that it anticipates will be made publicly available by a judicial body or royal commission then, for the purpose of calculating elapsed time, the period between when the *AER* gives that notice to the *Transmission Network Service Provider* and when that information is made publicly available is to be disregarded
- (i2) Where the *AER* gives a notice to the *Transmission Network Service Provider* under paragraph (i) or (i1), it must:
 - (1) as soon as is reasonably practicable make available on its website a notice stating when the period referred to in paragraph (i) or (i1), as the case may be, has commenced;
 - (2) as soon as is reasonably practicable make available on its website a notice stating when the period referred to in paragraph (i) or (i1), as the case may be, has ended; and
 - (3) if the information specified in that notice is required from an *Authority*, promptly request that information from the relevant *Authority*.
- (i3) Paragraphs (i) and (i1) do not apply if the *AER* gives the notice specified in those paragraphs to the *Transmission Network Service Provider* later than 10 *business days* before the expiry of the time limit fixed in subparagraph (c)(2).

Revocation and substitution of revenue determination

- (j) If the *AER* revokes and substitutes a *revenue determination* under paragraph (e), that revocation and substitution must take effect from the commencement of the next *regulatory year*.

6A.7.2 Network support pass through

- (a) This clause applies where a *network support event* occurs with respect to a *regulatory year* ('the **previous regulatory year**').
- (b) If a *network support event* occurs, a *Transmission Network Service Provider* must seek a determination by the *AER* to pass through to *Transmission Network Users* a *network support pass through amount*.
- (c) Where a *Transmission Network Service Provider* seeks a determination as referred to in paragraph (b), the provider must, within 60 *business days* of the end of the previous *regulatory year*, submit to the *AER* a written statement which specifies:
 - (1) the details of the *network support event* including whether the event was a *negative network support event* or a *positive network support event*;

- (2) the amount that the provider proposes should be passed through to *Transmission Network Users* in the *regulatory year* following the previous *regulatory year* as a result of the *network support event*;
- (3) evidence:
 - (i) of the actual increase in the amount of *network support payments*, including certification by an independent and appropriately qualified expert; and
 - (ii) that such amounts occur solely as a consequence of the positive *network support event*; and
- (4) such other information as may be required pursuant to the any relevant *regulatory information instrument* .
- (d) If the *AER* determines that a *positive network support event* has occurred in respect of a statement under paragraph (c), the *AER* must determine the *network support pass through amount*, taking into account the matters referred to in paragraph (i).
- (e) If the *AER* does not make the determination referred to in paragraph (d) within 60 *business days* from the date it receives the *Transmission Network Service Provider's* statement and accompanying evidence under paragraph (c), then, on the expiry of that period, the *AER* is taken to have determined that the amount as proposed in the *Transmission Network Service Provider's* statement under paragraph (c) is the *network support pass through amount*.
- (f) If a *negative network support event* occurs (whether or not the occurrence of that event is notified by the provider to the *AER* under paragraph (c)) and the *AER* determines to impose a requirement on the *Transmission Network Service Provider* in relation to that *negative network support event*, the *AER* must determine the *network support pass through amount* taking into account the matters referred to in paragraph (i).
- (g) A *Transmission Network Service Provider* must provide the *AER* with such information as the *AER* requires for the purpose of making a determination under paragraph (f) within the time specified by the *AER* in a notice provided to the provider by the *AER* for that purpose.

Consultation

- (h) Before making a determination under paragraph (d) or (f), the *AER* may consult with the relevant *Transmission Network Service Provider* and such other persons as the *AER* considers appropriate, on any matters arising out of the relevant *network support event* as the *AER* considers appropriate.

Relevant factors

- (i) In making a determination under paragraph (d) or (f), the *AER* must take into account:

- (1) the matters and proposals set out in any statement given to the *AER* by the *Transmission Network Service Provider* under paragraph (c);
- (2) in the case of a *positive network support event*, the increase in costs in the provision of *prescribed transmission services* that the provider has incurred in the preceding *regulatory year* as a result of the *positive network support event*;
- (3) in the case of a *positive network support event*, the efficiency of the *Transmission Network Service Provider's* decisions and actions in relation to the risk of the event, including whether the provider has failed to take any action that could reasonably be taken to reduce the magnitude of the *positive network support event* and whether the provider has taken or omitted to take any action where such action or omission has increased the magnitude of the amount in respect of that event;
- (4) the time cost of money based on the *allowed rate of return* for the provider for the relevant *regulatory control period*;
- (5) the need to ensure that the provider only recovers any actual increment in costs under this paragraph (i) to the extent that such increment is solely as a consequence of a *network support event*; and
- (6) any other factors the *AER* considers relevant.

6A.7.3 Cost pass through

- (a1) Any of the following is a *pass through event* for a *transmission determination*:
 - (1) a *regulatory change event*;
 - (2) a *service standard event*;
 - (3) a *tax change event*;
 - (4) an *insurance event*;
 - (5) any other event specified in a *transmission determination* as a *pass through event* for the determination;
 - (6) an *inertia shortfall event*; and
 - (7) a *fault level shortfall event*.
- (a) If a *positive change event* occurs, a *Transmission Network Service Provider* may seek the approval of the *AER* to pass through to *Transmission Network Users* a *positive pass through amount*.
- (b) If a *negative change event* occurs, the *AER* may require the *Transmission Network Service Provider* to pass through to *Transmission Network Users* a

negative pass through amount as determined by the AER under paragraph (g).

Positive pass through

- (c) To seek the approval of the AER to pass through a *positive pass through amount*, a *Transmission Network Service Provider* must submit to the AER, within 90 *business days* of the relevant *positive change event* occurring, a written statement which specifies:
- (1) the details of the *positive change event*;
 - (2) the date on which the *positive change event* occurred;
 - (3) the *eligible pass through amount* in respect of that *positive change event*;
 - (4) the *positive pass through amount* the *Transmission Network Service Provider* proposes in relation to the *positive change event*;
 - (5) the amount of the *positive pass through amount* that the *Transmission Network Service Provider* proposes should be passed through to *Transmission Network Users* in the *regulatory year* in which, and each *regulatory year* after that in which, the *positive change event* occurred;
 - (6) evidence:
 - (i) of the actual and likely increase in costs referred to in subparagraph (3); and
 - (ii) that such costs occur solely as a consequence of the *positive change event*; and
 - (7) such other information as may be required pursuant to any relevant *regulatory information instrument*.
- (d) If the AER determines that a *positive change event* has occurred in respect of a statement under paragraph (c), the AER must determine:
- (1) the *approved pass through amount*; and
 - (2) the amount of that *approved pass through amount* that should be passed through to *Transmission Network Users* in the *regulatory year* in which, and each *regulatory year* after that in which, the *positive change event* occurred,
- taking into account the matters referred to in paragraph (j).
- (e) Subject to paragraph (l), the AER does not make the determinations referred to in paragraph (d) within 40 *business days* from the later of the date it receives the *Transmission Network Service Provider's* statement and

accompanying evidence under paragraph (c), and the date it receives any additional information required under paragraph (e1), then, on the expiry of that period, the AER is taken to have determined that:

- (1) the *positive pass through amount* as proposed in the *Transmission Network Service Provider's* statement under paragraph (c) is the *approved pass through amount* in respect of that *positive change event*; and
 - (2) the amount of that *positive pass through amount* that the provider proposes in its statement under paragraph(c) should be passed through to *Transmission Network Users* in the *regulatory year* in which, and each *regulatory year* after that in which, the *positive change event* occurred, is the amount that should be so passed through in each such *regulatory year*.
- (e1) A *Transmission Network Service Provider* must provide the AER with such additional information as the AER requires for the purpose of making a determination under paragraph (d) within the time specified by the AER in a notice provided to the *Transmission Network Service Provider* by the AER for that purpose.

Negative pass through

- (f) A *Transmission Network Service Provider* must submit to the AER, within 90*business days* of becoming aware of the occurrence of a *negative change event* for the *Transmission Network Service Provider*, a written statement which specifies:
- (1) the details of the *negative change event* concerned;
 - (2) the date the *negative change event* occurred;
 - (3) the costs in the provision of *prescribed transmission services* that the *Transmission Network Service Provider* has saved and is likely to save as a result of the *negative change event* until:
 - (i) unless sub paragraph(ii) applies – the end of the *regulatory control period* in which the *negative change event* occurred; or
 - (ii) if the *transmission determination* for the *regulatory control period* following that in which the *negative change event* occurred does not make any allowance for the pass through of the cost savings - the end of the *regulatory control period* following that in which the *negative change event* occurred;
 - (4) the aggregate amount of those saved costs that the *Transmission Network Service Provider* proposes should be passed through to *Transmission Network Users*;
 - (5) the amount of the costs referred to in subparagraph(4) the *Transmission Network Service Provider* proposes should be passed

through to *Transmission Network Users* in the *regulatory year* in which, and each *regulatory year* after that in which, the *negative change event* occurred; and

- (6) such other information as may be required pursuant to any relevant *regulatory information instrument*.
- (f1) If the occurrence of the *negative change event* is not notified by the *Transmission Network Service Provider* to the *AER* under paragraph (f) then, as soon as is reasonably practicable and before making a determination referred to in paragraph (g), the *AER* must notify the *Transmission Network Service Provider* of the occurrence of that *negative change event*.
- (g) If a *negative change event* occurs (whether or not the occurrence of that *negative change event* is notified by the provider to the *AER* under paragraph (f)) and the *AER* determines to impose a requirement on the *Transmission Network Service Provider* in relation to that *negative change event* as described in paragraph (b), the *AER* must determine:
 - (1) the *required pass through amount*; and
 - (2) taking into account the matters referred to in paragraph (j):
 - (i) how much of that *required pass through amount* should be passed through to *Transmission Network Users* (the *negative pass through amount*); and
 - (ii) the amount of that *negative pass through amount* that should be passed through to *Transmission Network Users* in the *regulatory year* in which, and each *regulatory year* after that in which, the *negative change event* occurred.
- (g1) Subject to paragraph (l), if the *AER* does not make the determinations referred to in paragraph (g) within 40 *business days* from:
 - (1) where the *Transmission Network Service Provider* notifies the *AER* of the occurrence of the negative change event under paragraph (f) - the later of the date the *AER* receives the *Transmission Network Service Provider's* statement under paragraph (f) and the date the *AER* receives any information required by the *AER* under paragraph (h); or
 - (2) where the *Transmission Network Service Provider* does not notify the *AER* of the occurrence of the negative change event under paragraph (f) – the later of the date the *AER* notifies the *Transmission Network Service Provider* under paragraph (g1) and the date the *AER* receives any information required by the *AER* under paragraph (h),

then the *AER* is taken to have determined that the required pass through amount is zero.

- (h) A *Transmission Network Service Provider* must provide the *AER* with such information as the *AER* requires for the purpose of making a determination

under paragraph (g) within the time specified by the *AER* in a notice provided to the *Transmission Network Service Provider* by the *AER* for that purpose.

Consultation

- (i) Before making a determination under paragraph (d) or (g), the *AER* may consult with the relevant *Transmission Network Service Provider* and such other persons as the *AER* considers appropriate, on any matters arising out of the relevant *pass through event* as the *AER* considers appropriate.

Relevant factors

- (j) In making a determination under paragraph (d) or (g) in respect of a *Transmission Network Service Provider*, the *AER* must take into account:
 - (1) the matters and proposals set out in any statement given to the *AER* by the *Transmission Network Service Provider* under paragraphs (c) or (f) (as the case may be);
 - (2) in the case of a *positive change event*, the increase in costs in the provision of *prescribed transmission services* that, as a result of the *positive change event*, the *Transmission Network Service Provider* has incurred and is likely to incur until:
 - (i) unless subparagraph(ii) applies – the end of the *regulatory control period* in which the *positive change event* occurred; or
 - (ii) if the *transmission determination* for the *regulatory control period* following that in which the *positive change event* occurred does not make any allowance for the recovery of that increase in costs – the end of the *regulatory control period* following that in which the *positive change event* occurred;
 - (2A) in the case of a *negative change event*, the costs in the provision of *prescribed transmission services* that, as a result of the *negative change event*, the *Transmission Network Service Provider* has saved and is likely to save until:
 - (i) unless subparagraph(ii) applies – the end of the *regulatory control period* in which the *negative change event* occurred; or
 - (ii) if the *transmission determination* for the *regulatory control period* following that in which the *negative change event* occurred does not make any allowance for the pass through of those cost savings to *Transmission Network Users* – the end of the *regulatory control period* following that in which the *negative change event* occurred;
 - (3) in the case of a *positive change event*, the efficiency of the provider's decisions and actions in relation to the risk of the *positive change event*, including whether the provider has failed to take any action that

could reasonably be taken to reduce the magnitude of the *eligible pass through amount* in respect of that *positive change event* and whether the provider has taken or omitted to take any action where such action or omission has increased the magnitude of the amount in respect of that *positive change event*;

- (4) the time cost of money based on the *allowed rate of return* for the *Transmission Network Service Provider* for the *regulatory control period* in which the *pass through event* occurred;
- (5) the need to ensure that the *Transmission Network Service Provider* only recovers any actual or likely increment in costs under this paragraph (j) to the extent that such increment is solely as a consequence of a *pass through event*;
- (6) in the case of a *tax change event*, any change in the way another *tax* is calculated, or the removal or imposition of another *tax*, which, in the *AER's* opinion, is complementary to the *tax change event* concerned;
- (6A) whether the costs of the *pass through event* have already been factored into the calculation of the provider's *maximum allowed revenues* for the *regulatory control period* in which the *pass through event* occurred or will be factored into the calculation of the provider's *maximum allowed revenues* for a subsequent *regulatory control period*;
- (6B) the extent to which the costs that the *Transmission Network Service Provider* has incurred and is likely to incur are the subject of a previous determination made by the *AER* under this clause 6A.7.3; and
- (7) any other factors the *AER* considers relevant

Extension of time limits

- (k) The *AER* must, by written notice to a *Transmission Network Service Provider*, extend a time limit fixed in paragraph (c) or (f) if the *AER* is satisfied that the difficulty of assessing or quantifying the effect of the relevant *pass through event* justifies the extension.
- (l) If the *AER* is satisfied that the making of a determination under paragraph (d) or (g) involves issues of such complexity or difficulty that the time limit fixed in paragraph (e) or (g1) should be extended, the *AER* may extend that time limit by a further period of up to 60 *business days*, provided that it gives written notice to the *Transmission Network Service Provider* of that extension not later than 10 *business days* before the expiry of that time limit.
- (m) If the *AER* extends a time limit under paragraph (l), it must make available on its website a notice of that extension as soon as is reasonably practicable.
- (n) Subject to paragraph (q), if the *AER* gives a written notice to the *Transmission Network Service Provider* stating that it requires information

from an *Authority* in order to make a determination under paragraph (d) or (g) then, for the purpose of calculating elapsed time, the period between when the *AER* gives that notice to the *Transmission Network Service Provider* and when the *AER* receives that information from that *Authority* is to be disregarded.

- (o) Subject to paragraph (q), if the *AER* gives a written notice to the *Transmission Network Service Provider* stating that, in order to make a determination under paragraph (d) or (g), it requires information that it anticipates will be made publicly available by a judicial body or royal commission then, for the purpose of calculating elapsed time, the period between when the *AER* gives that notice to the *Transmission Network Service Provider* and when that information is made publicly available is to be disregarded.
- (p) Where the *AER* gives a notice to the *Transmission Network Service Provider* under paragraph (n) or (o), it must:
 - (1) as soon as reasonably practicable make available on its website a notice stating when the period referred to in paragraph (n) or (o), as the case may be, has commenced;
 - (2) as soon as is reasonably practicable make available on its website a notice stating when the period referred to in paragraph (n) or (o), as the case may be, has ended; and
 - (3) if the information specified in that notice is required from an *Authority*, promptly request that information from the relevant *Authority*.
- (q) Paragraphs (n) and (o) do not apply if the *AER* gives the notice specified in those paragraphs to the *Transmission Network Service Provider* later than 10 *business days* before the expiry of the time limit fixed in paragraphs (e) or (g1).

6A.7.4 Service target performance incentive scheme

- (a) The *AER* must, in accordance with the *transmission consultation procedures*, develop and *publish* an incentive scheme or schemes (*service target performance incentive scheme*) that comply with the principles in paragraph (b).
- (b) The principles are that the *service target performance incentive scheme* should:
 - (1) provide incentives for each *Transmission Network Service Provider* to:
 - (i) provide greater *reliability* of the *transmission system* that is owned, controlled or operated by it at all times when

Transmission Network Users place greatest value on the *reliability* of the *transmission system*; and

- (ii) improve and maintain the *reliability* of those elements of the *transmission system* that are most important to determining *spot prices*;
- (2) result in a potential adjustment to the revenue that the *Transmission Network Service Provider* may earn, from the provision of *prescribed transmission services*, in each *regulatory year* in respect of which the *service target performance incentive scheme* applies;
- (3) ensure that the maximum revenue increment or decrement as a result of the operation of the *service target performance incentive scheme* will fall within a range that is between 1% and 5% of the *maximum allowed revenue* for the relevant *regulatory year*;
- (4) take into account the *regulatory obligations or requirements* with which *Transmission Network Service Providers* must comply;
- (5) take into account any other incentives provided for in the *Rules* that *Transmission Network Service Providers* have to minimise capital or operating expenditure; and
- (6) take into account the age and ratings of the assets comprising the relevant *transmission system*.
- (c) At the same time as it *publishes* a *service target performance incentive scheme*, the *AER* must also *publish* parameters (the *performance incentive scheme parameters*) for the scheme. For the avoidance of doubt, the parameters may differ as between *Transmission Network Service Providers* and over time.
- (d) The *AER* must set out in each *service target performance incentive scheme* any requirements with which the values attributed to the *performance incentive scheme parameters* must comply, and those requirements must be consistent with the principles set out in paragraph (b).
- (e) The *AER* must develop and *publish* the first *service target performance incentive scheme* under the *Rules* by 28 September 2007 and there must be a *service target performance incentive scheme* in force at all times after that date.
- (f) **[Deleted]**
- (g) **[Deleted]**
- (h) **[Deleted]**

6A.7.5 Small-scale incentive scheme

- (a) The AER may, in accordance with the *transmission consultation procedures*, develop and *publish* an incentive scheme or schemes (*small-scale incentive scheme*) that provides *Transmission Network Service Providers* with incentives to provide *prescribed transmission services* in a manner that contributes to the achievement of the *national electricity objective*.
- (b) In developing and applying a *small-scale incentive scheme*, the AER must have regard to the following matters:
 - (1) *Transmission Network Service Providers* should be rewarded or penalised for efficiency gains or losses in respect of their *transmission systems*;
 - (2) the rewards and penalties should be commensurate with the efficiency gains or efficiency losses in respect of a *transmission system*, but a reward for efficiency gains need not correspond in amount to a penalty for efficiency losses;
 - (3) the benefits to electricity consumers that are likely to result from efficiency gains in respect of a *transmission system* should warrant the rewards provided under the scheme, and the detriments to electricity consumers that are likely to result from efficiency losses in respect of a *transmission system* should warrant the penalties provided under the scheme;
 - (4) the interaction of the scheme with other incentives that *Transmission Network Service Providers* may have under the *Rules*; and
 - (5) the *capital expenditure objectives* and the *operating expenditure objectives*.
- (c) The AER may, from time to time and in accordance with the *transmission consultation procedures*, amend or replace any *small-scale incentive scheme*.
- (d) Where the AER applies a *small-scale incentive scheme* to a *Transmission Network Service Provider* for a *regulatory control period*:
 - (1) the aggregate rewards or penalties for a *regulatory year* in that *regulatory period* that are provided or imposed under that scheme and any other *small-scale incentive schemes* that apply to that *Transmission Network Service Provider* must not exceed 0.5% of the *maximum allowed revenue* for the *Transmission Network Service Provider* for that *regulatory year* unless the *Transmission Network Service Provider* consents to the contrary, in which case that aggregate must not exceed 1% of the *maximum allowed revenue* for the *Transmission Network Service Provider* for that *regulatory year*; and

- (2) *small-scale incentive scheme* must cease to provide rewards or impose penalties in respect of a *regulatory year* after the expiry of such a period as is determined by the *AER*, being a period that is not more than two *regulatory control periods* after the commencement of that scheme.
- (e) Notwithstanding anything else contained in this clause, the *AER* may require a *Transmission Network Service Provider* to participate in a trial of a small-scale incentive scheme under which, for the duration of that trial, the *Transmission Network Service Provider* is not required to bear any penalty and is not entitled to earn any reward.

6A.8 Contingent Projects

6A.8.1 Acceptance of a Contingent Project in a revenue determination

- (a) A *Revenue Proposal* may include *proposed contingent capital expenditure*, which the *Transmission Network Service Provider* considers is reasonably required for the purpose of undertaking a *proposed contingent project*.
- (b) The *AER* must determine that a *proposed contingent project* is a *contingent project* if the *AER* is satisfied that:
 - (1) the *proposed contingent project* is reasonably required to be undertaken in order to achieve any of the *capital expenditure objectives*;
 - (2) the *proposed contingent capital expenditure*:
 - (i) is not otherwise provided for (either in part or in whole) in the total of the forecast capital expenditure for the relevant *regulatory control period* which is accepted in accordance with clause 6A.6.7(c) or substituted in accordance with clauses 6A.13.2(b)(4) and (5) (as the case may be);
 - (ii) reasonably reflects the *capital expenditure criteria*, taking into account the *capital expenditure factors*, in the context of the *proposed contingent project* as described in the *Revenue Proposal*; and
 - (iii) exceeds either \$30 million or 5% of the value of the *maximum allowed revenue* for the relevant *Transmission Network Service Provider* for the first year of the relevant *regulatory control period* whichever is the larger amount;
 - (3) the *proposed contingent project* and the *proposed contingent capital expenditure*, as described or set out in the *Revenue Proposal*, and the information provided in relation to these matters, complies with the requirements of any relevant *regulatory information instrument*; and

- (4) the *trigger events* in relation to the *proposed contingent project* which are proposed by the *Transmission Network Service Provider* in its *Revenue Proposal* are appropriate.
- (c) In determining whether a *trigger event* in relation to a *proposed contingent project* is appropriate for the purposes of subparagraph (b)(4), the *AER* must have regard to the need for a *trigger event*:
 - (1) to be reasonably specific and capable of objective verification;
 - (2) to be a condition or event, which, if it occurs, makes the undertaking of the *proposed contingent project* reasonably necessary in order to achieve any of the *capital expenditure objectives*;
 - (3) to be a condition or event that generates increased costs or categories of costs that relate to a specific location rather than a condition or event that affects the *transmission network* as a whole;
 - (4) to be described in such terms that the occurrence of that event or condition is all that is required for the *revenue determination* to be amended under clause 6A.8.2; and
 - (5) to be an event or condition, the occurrence of which is probable during the *regulatory control period*, but the inclusion of capital expenditure in relation to it under clause 6A.6.7 is not appropriate because:
 - (i) it is not sufficiently certain that the event or condition will occur during the *regulatory control period* or if it may occur after that *regulatory control period* or not at all; or
 - (ii) subject to the requirement to satisfy clause 6A.8.1(b)(2)(iii), the costs associated with the event or condition are not sufficiently certain.

6A.8.2 Amendment of revenue determination for contingent project

- (a) Subject to paragraph (b), a *Transmission Network Service Provider* may, during a *regulatory control period*, apply to the *AER* to amend a *revenue determination* that applies to that *Transmission Network Service Provider* where a *trigger event* for a *contingent project* in relation to that *revenue determination* has occurred.
- (b) An application referred to in paragraph (a):
 - (1) must not be made within 90 *business days* prior to the end of a *regulatory year*;
 - (2) subject to subparagraph (1), must be made as soon as practicable after the occurrence of the *trigger event*;
 - (3) must contain the following information:

- (i) an explanation that substantiates the occurrence of the *trigger event*;
 - (ii) a forecast of the total capital expenditure for the *contingent project*;
 - (iii) a forecast of the capital and incremental operating expenditure, for each remaining *regulatory year* which the *Transmission Network Service Provider* considers is reasonably required for the purpose of undertaking the *contingent project*;
 - (iv) how the forecast of the total capital expenditure for the *contingent project* meets the threshold as referred to in clause 6A.8.1(b)(2)(iii);
 - (v) the intended date for commencing the *contingent project* (which must be during the *regulatory control period*);
 - (vi) the anticipated date for completing the *contingent project* (which may be after the end of the *regulatory control period*); and
 - (vii) an estimate of the incremental revenue which the *Transmission Network Service Provider* considers is likely to be required to be earned in each remaining *regulatory year* of the *regulatory control period* as a result of the *contingent project* being undertaken as described in clause 6A.8.2(b)(3)(iii); and
- (4) the estimate referred to in clause 6A.8.2(b)(3)(vii) must be calculated:
 - (i) in accordance with the requirement of the *post-tax revenue model* referred to in clause 6A.5.2;
 - (ii) in accordance with the requirements of the *roll forward model* referred to in clause 6A.6.1(b);
 - (iii) using the *allowed rate of return* for that *Transmission Network Service Provider* for the *regulatory control period* as determined in accordance with clause 6A.6.2;
 - (iv) in accordance with the requirements for depreciation referred to in clause 6A.6.3; and
 - (v) on the basis of the capital expenditure and incremental operating expenditure referred to in subparagraph 6A.8.2(b)(3)(iii).
- (c) As soon as practicable after its receipt of an application made in accordance with paragraphs (a) and (b), the *AER* must *publish* the application, together with an invitation for written submissions on the application.
- (d) The *AER* must consider any written submissions made under paragraph (c) and must make its decision on the application within 40 *business days* from

the later of the date the *AER* receives the application and the date the *AER* receives any information required by the *AER* under paragraph (h1). In doing so the *AER* may also take into account such other information as it considers appropriate, including any analysis (such as benchmarking) that is undertaken by it for that purpose.

- (e) If the *AER* is satisfied that the *trigger event* has occurred, and that the forecast of the total capital expenditure for the *contingent project* meets the threshold as referred to in clause 6A.8.1(b)(2)(iii), it must:
 - (1) determine:
 - (i) the amount of capital and incremental operating expenditure, for each remaining *regulatory year* which the *AER* considers is reasonably required for the purpose of undertaking the *contingent project*;
 - (ii) the total capital expenditure which the *AER* considers is reasonably required for the purpose of undertaking the *contingent project*;
 - (iii) the likely commencement and completion dates for the *contingent project*; and
 - (iv) the incremental revenue which is likely to be required by the *Transmission Network Service Provider* in each remaining *regulatory year* as a result of the *contingent project* being undertaken as described in clause 6A.8.2(e)(1)(i) and (ii), such estimate being calculated in accordance with subparagraph (2);
 - (2) calculate the estimate referred to in clause 6A.8.2(e)(1)(iv):
 - (i) on the basis of the capital expenditure referred to in clause 6A.8.2(e)(1)(i);
 - (ii) to include the incremental operating expenditure referred to in clause 6A.8.2(e)(1)(i); and
 - (iii) otherwise in accordance with subparagraph (b)(4); and
 - (3) amend the *revenue determination* in accordance with paragraph (h).
- (f) In making the determinations referred to in subparagraph (e)(1), the *AER* must accept the relevant amounts and dates, contained in the *Transmission Network Service Provider's* application, as referred to in clauses 6A.8.2(b)(3)(ii) – (vii), if the *AER* is satisfied that:
 - (1) the forecast of the total capital expenditure for the *contingent project* meets the threshold as referred to in clause 6A.8.1(b)(2)(iii);
 - (2) the amounts of forecast capital expenditure and incremental operating expenditure reasonably reflect the *capital expenditure criteria* and the

- operating expenditure criteria*, taking into account the *capital expenditure factors* and the *operating expenditure factors* respectively, in the context of the *contingent project*;
- (3) the estimates of incremental revenue are reasonable; and
 - (4) the dates are reasonable.
- (g) In making the determinations referred to in paragraphs (e)(1) and (f), the *AER* must have regard to:
- (1) the information included in or accompanying the application;
 - (2) submissions received in the course of consulting on the application;
 - (3) such analysis as is undertaken by or for the *AER*;
 - (4) the expenditure that would be incurred in respect of a *contingent project* by an efficient and prudent operator in the circumstances of the *Transmission Network Service Provider*;
 - (5) the actual and expected capital expenditure of the *Transmission Network Service Provider* for *contingent projects* during any preceding *regulatory control periods*;
 - (6) the extent to which the forecast capital expenditure for the *contingent project* is referable to arrangements with a person other than the *Transmission Network Service Provider* that, in the opinion of the *AER*, do not reflect arm's length terms;
 - (7) the relative prices of operating and capital inputs in relation to the *contingent project*;
 - (8) the substitution possibilities between operating and capital expenditure in relation to the *contingent project*; and
 - (9) whether the capital and operating expenditure forecasts for the *contingent project* are consistent with any incentive scheme or schemes that apply to the *Transmission Network Service Provider* under clauses 6A.6.5, 6A.6.5A, 6A.7.4 or 6A.7.5.
- (h) Amendments to a *revenue determination* referred to in paragraph (e)(3) must only vary the determination to the extent necessary:
- (1) to adjust the forecast capital expenditure for that *regulatory control period* to accommodate the amount of capital expenditure determined under clause 6A.8.2(e)(1)(i) (in which case the amount of that adjustment will be taken to be accepted by the *AER* under clause 6A.6.7(c));
 - (2) to adjust the forecast operating expenditure for that *regulatory control period* to accommodate the amount of incremental operating

- expenditure determined under clause 6A.8.2(e)(1)(i) (in which case the amount of that adjustment will be taken to be accepted by the AER under clause 6A.6.6(c)); and
- (3) to reflect the effect of any resultant increase in forecast capital and operating expenditure on:
- (i) the *maximum allowed revenue* for each *regulatory year* in the remainder of the *regulatory control period*; and
 - (ii) the X factor for each *regulatory year* in the remainder of the *regulatory control period*.
- (h1) A *Transmission Network Service Provider* must provide the AER with such additional information as the AER requires for the purpose of making a decision on an application made by that *Transmission Network Service Provider* under paragraph (a) within the time specified by the AER in a notice provided to the *Transmission Network Service Provider* by the AER for that purpose.

Extension of time limit

- (i) If the AER is satisfied that amending a *revenue determination* under subparagraphs (e)(3) and paragraph (h) involves issues of such complexity or difficulty that the time limit fixed in paragraph (d) should be extended, the AER may extend that time limit by a further period of up to 60 *business days*, provided that it gives written notice to the *Transmission Network Service Provider* of that extension no later than 10 *business days* before the expiry of that time limit.
- (j) If the AER extends the time limit under paragraph (i), it must make available on its website a notice of that extension as soon as is reasonably practicable.
- (k) Subject to paragraph (k3), if the AER gives a written notice to the *Transmission Network Service Provider* stating that it requires information from an *Authority* in order to make a decision on an application made by the *Transmission Network Service Provider* under paragraph (a) then, for the purpose of calculating elapsed time, the period between when the AER gives that notice to the *Transmission Network Service Provider* and when the AER receives that information from that *Authority* is to be disregarded.
- (k1) Subject to paragraph (k3), if the AER gives a written notice to the *Transmission Network Service Provider* stating that, in order to make a decision on an application made by the *Transmission Network Service Provider* under paragraph (a), it requires information from a judicial body or royal commission then, for the purpose of calculating elapsed time, the period between when the AER gives that notice to the *Transmission Network Service Provider* and when that information is made publicly available is to be disregarded.
- (k2) Where the AER gives a notice to the *Transmission Network Service Provider* under paragraph (k) or (k1), it must:

- (1) as soon as is reasonably practicable make available on its website a notice stating when the period referred to in paragraph (k) or (k1), as the case may be, has commenced;
 - (2) as soon as is reasonably practicable make available on its website a notice stating when the period referred to in paragraph (k) or (k1), as the case may be, has ended; and
 - (3) if the information specified in that notice is required from an *Authority*, promptly request that information from the relevant *Authority*.
- (k3) Paragraphs (k) and (k1) do not apply if the *AER* gives the notice specified in those paragraphs to the *Transmission Network Service Provider* later than 10 *business days* before the expiry of the time limit fixed in paragraph (d).

Amendment of revenue determination

- (l) Amendments to a *revenue determination* take effect from the commencement of the next *regulatory year*.

Part D [Deleted]

Part E Procedure - Revenue determinations and pricing methodologies

6A.10 Revenue Proposal and proposed pricing methodology

6A.10.1A AER's framework and approach paper

- (a) The *AER* must make and publish a document (a *framework and approach paper*) that applies in respect of a *revenue determination* for a matter listed in paragraph (b) in accordance with this clause if:
 - (1) there is no *framework and approach paper* that applies in respect of that *revenue determination* for that matter; or
 - (2) there is a *framework and approach paper* that would apply in respect of that *revenue determination* for that matter, but the *AER* has *published* a notice under paragraph (c)(3) stating that it will make an amended or replacement *framework and approach paper* with respect to that matter.
- (b) A *framework and approach paper* that applies in respect of a *revenue determination* must set out the *AER*'s proposed approach (together with its reasons for the proposed approach), in the forthcoming *revenue determination*, to the following matters:
 - (1) the application to the *Transmission Network Service Provider* of any *service target performance incentive scheme*;

- (2) the application to the *Transmission Network Service Provider* of any *efficiency benefit sharing scheme*;
 - (3) the application to the *Transmission Network Service Provider* of any *capital expenditure sharing scheme*;
 - (4) the application to the *Transmission Network Service Provider* of any *small-scale incentive scheme*;
 - (5) the application to the *Transmission Network Service Provider* of the *Expenditure Forecast Assessment Guidelines*; and
 - (6) whether depreciation for establishing the regulatory asset base for the relevant *transmission system* as at the commencement of the following *regulatory control period* is to be based on actual or forecast capital expenditure in accordance with clause S6A.2.2B.
- (c) If there is a *framework and approach paper* that would apply in respect of the *revenue determination* for a matter listed in paragraph (b) then:
- (1) no later than 32 months before the end of the *regulatory control period* that precedes that for which the *revenue determination* is to be made, the *Transmission Network Service Provider* may request the *AER* in writing to make an amended or replacement *framework and approach paper* in respect of a matter. The request must specify the *Transmission Network Service Provider's* reasons for making that request;
 - (2) no later than 31 months before the end of the *regulatory control period* that precedes that for which the *revenue determination* is to be made, the *AER* must *publish* a notice inviting submissions on whether it is necessary or desirable to amend or replace that *framework and approach paper* in so far as it relates to a matter (other than any matter specified in a request from the *Transmission Network Service Provider* under subparagraph (1)); and
 - (3) no later than 30 months before the end of the *regulatory control period* that precedes that for which the *revenue determination* is to be made, the *AER* must make and *publish* a notice that:
 - (i) states that it will make an amended or replacement *framework and approach paper* in respect of the matters specified in a request from the *Transmission Network Service Provider* under subparagraph (1) (if any);
 - (ii) if subparagraph (i) applies, is accompanied by a copy of the request from the *Transmission Network Service Provider* under subparagraph (1); and
 - (iii) states whether it will make an amended or replacement *framework and approach paper* in respect of any matter other than any matters referred to in subparagraph (i) above and, if so,

the reasons why it considers that it is necessary or desirable to make an amended or replacement *framework and approach paper* in respect of that matter.

- (d) In making the decision referred to in paragraph (c)(3)(iii), the *AER* must have regard to any submissions made in response to the invitation under paragraph (c)(2).
- (e) Where paragraph (a) applies then, at least 23 months before the end of the current *regulatory control period*, the *AER* must, after consulting with the relevant *Transmission Network Service Provider* and such other persons as the *AER* considers appropriate, make, amend or replace the *framework and approach paper*, as the case may be, and:
 - (1) give a copy of it to the relevant *Transmission Network Service Provider*; and
 - (2) *publish* it,as soon as is reasonably practicable.
- (f) A *framework and approach paper* is not binding on the *AER* or a *Transmission Network Service Provider*.
- (g) The *AER* may make and *publish* a *framework and approach paper* that applies in respect of a *revenue determination* for a matter that is not listed in paragraph (b) and, if it does so, this clause 6A.10.1A applies as if that matter were listed in paragraph (b).

6A.10.1B Notification of approach to forecasting expenditure

- (a) A *Transmission Network Service Provider* must inform the *AER* of the methodology it proposes to use to prepare the forecasts of operating expenditure and capital expenditure that form part of its *Revenue Proposal*.
- (b) A *Transmission Network Service Provider* must submit the information referred to in paragraph (a):
 - (1) at least 24 months before the expiry of a *revenue determination* that applies to the *Transmission Network Service Provider*; or
 - (2) if no *revenue determination* applies to the *Transmission Network Service Provider*, within 3 months after being required to do so by the *AER*.

6A.10.1 Submission of proposal, pricing methodology and information

- (a) A *Transmission Network Service Provider* must submit to the *AER* a *Revenue Proposal* and a proposed *pricing methodology* relating to the *prescribed transmission services* that are provided by means of, or in connection with, a *transmission system* that is owned, controlled or operated by that *Transmission Network Service Provider*:

- (1) if any of those *prescribed transmission services* are subject to a *transmission determination*, 17 months before the expiry of the period in respect of which that *transmission determination* applies; or
 - (2) if any of those *prescribed transmission services* are not subject to a *transmission determination*, 3 months after being required to do so by the *AER*.
- (b) **[Deleted]**
- (c) The *Revenue Proposal* must comply with the requirements of, and must contain or be accompanied by such information as is required by, any *relevant regulatory information instrument*.
- (d) **[Deleted]**
- (e) A proposed *pricing methodology* must:
 - (1) give effect to and be consistent with the *Pricing Principles for Prescribed Transmission Services*; and
 - (2) comply with the requirements of, and contain or be accompanied by such information as is required by, the *pricing methodology guidelines* made for that purpose under rule 6A.25.
- (f) The *Revenue Proposal* must also:
 - (1) include a statement of whether it is consistent with the most recent *NTNDP* and, if it is inconsistent, identify and give reasons for the inconsistency; and
 - (2) identify any parts of the *Revenue Proposal* or the proposed pricing methodology the *Transmission Network Service Provider* claims to be confidential and wants suppressed from publication on that ground in accordance with the *Transmission Confidentiality Guidelines*.
- (g) The *Revenue Proposal* must be accompanied by an overview paper which includes each of the following matters:
 - (1) a summary of the *Revenue Proposal* the purpose of which is to explain the *Revenue Proposal* in reasonably plain language to electricity consumers;
 - (2) a description of how the *Transmission Network Service Provider* has engaged with electricity consumers and has sought to address any relevant concerns identified as a result of that engagement;
 - (3) a description of the key risks and benefits of the *Revenue Proposal* for electricity consumers; and

- (4) a comparison of the *Transmission Network Service Provider's* proposed total revenue cap with its total revenue cap for the current *regulatory control period*.
- (h) The *Revenue Proposal* must be accompanied by information required by the *Expenditure Forecast Assessment Guidelines* as set out in the *framework and approach paper*.

6A.10.2 [Deleted]

6A.11 Preliminary examination and consultation

6A.11.1 Preliminary examination and determination of non-compliance with relevant requirements

- (a) If the *AER* determines that:
 - (1) a *Revenue Proposal* submitted by a *Transmission Network Service Provider*;
 - (2) **[Deleted]**
 - (3) a proposed *pricing methodology* submitted by the *Transmission Network Service Provider*; or
 - (4) information contained in or accompanying such a *Revenue Proposal* or *proposed pricing methodology*,

under clause 6A.10.1 does not comply with the requirements of:

- (5) any relevant regulatory information instrument; or
 - (6) **[Deleted]**
 - (7) **[Deleted]**
 - (8) the Law or the *Rules*,
- the *AER* must notify the provider of that determination as soon as practicable after receiving that *Revenue Proposal*, proposed *pricing methodology* or information (as the case may be).
- (b) A determination referred to in paragraph (a) must be accompanied by written reasons that set out:
 - (1) the respects in which the *Revenue Proposal*, proposed *pricing methodology* or information does not comply with the relevant requirements of any relevant *regulatory information instrument* or clause 6A.10.1(e) (as the case may be) and the requirements that have not been complied with; and

- (2) in the case of information which does not comply with those requirements, the reason that the submission of information in accordance with those requirements would assist the *AER* in assessing the *Revenue Proposal* or proposed *pricing methodology*.

6A.11.2 Resubmission of proposal, framework, pricing methodology or information

- (a) If the *AER* notifies a *Transmission Network Service Provider* of a determination under clause 6A.11.1, the *Transmission Network Service Provider* must, within 1 month of that notice, resubmit its *Revenue Proposal*, proposed *pricing methodology* or the required information (as the case may be) in a form that complies with the relevant requirements set out in that determination.
- (b) A *Transmission Network Service Provider* may only make changes to its *Revenue Proposal*, proposed *pricing methodology* or the required information for the purposes of paragraph (a) to address the matters raised in the determination under clause 6A.11.1.

6A.11.2A Confidential information

If the *Transmission Network Service Provider* has identified any part of the *Revenue Proposal* or the proposed *pricing methodology* as submitted or resubmitted to the *AER* (as the case may be) under this Part to be confidential, the *AER* must, as soon as is reasonably practicable, make available on its website a notice that sets out:

- (a) the fact that the *Revenue Proposal* or the proposed *pricing methodology* contains information over which a claim of confidentiality has been made;
- (b) the proportion of material in the *Revenue Proposal* or the proposed *pricing methodology* that is subject to any claim of confidentiality compared to that which is not subject to any such claim; and
- (c) the comparative proportion of material in the *Revenue Proposal* or the proposed *pricing methodology* that is subject to any claim of confidentiality compared to that which is subject to claims of confidentiality in the *Revenue Proposals* proposed *pricing methodologies* of other *Transmission Network Service Providers*.

6A.11.3 Consultation

- (a) Subject to the provisions of the Law, the *Rules* and any *pricing methodology guidelines* about the disclosure of confidential information, the *AER* must publish:
 - (1) the *Revenue Proposal*;
 - (2) **[Deleted]**

- (3) the proposed *pricing methodology*; and
- (4) the information,

submitted or resubmitted to it (as the case may be) by the *Transmission Network Service Provider* under rule 6A.10 or this rule 6A.11, together with an invitation for written submissions on the documents and information referred to in subparagraphs (1)-(4), as soon as practicable after the *AER* determines that the *Revenue Proposal*, proposed *pricing methodology* and information comply with the requirements of any *relevant regulatory information instrument* or clause 6A.10.1(e) (as applicable).

(b) The *AER* must *publish*:

- (1) an issues paper not more than 40 *business days* after the submission, under clause 6A.10.1, of the documents, but not any resubmitted documents, referred to in paragraph (a);
- (2) an invitation for written submission on the issues paper; and
- (3) an invitation to attend a public forum on the issues paper.

(b1) The issues paper referred to in paragraph (b) must identify preliminary issues, whether or not arising out of the documents referred to in paragraph (a), that the *AER* considers are likely to be relevant to its assessment of those documents (however, nothing in this clause is to be taken as precluding the *AER* from considering other issues in making a *transmission determination* for the *Transmission Network Service Provider*).

(b2) The *AER* must hold a public forum on the issues paper not more than 10 *business days* after the *publication* of the issues paper.

(c) Any person may make a written submission to the *AER* on the *Revenue Proposal*, the proposed *pricing methodology* or the issues paper within the times specified in the invitations referred to in paragraph (a) and paragraph (b), which in each case must be not earlier than 30 *business days* after the *publication* of the issues paper.

6A.12 Draft decision and further consultation

6A.12.1 Making of draft decision

- (a) The *AER* must make a draft decision in relation to the *Transmission Network Service Provider*.
- (a1) In making a draft decision in relation to the *Transmission Network Service Provider*, and subject to clause 6A.16, the *AER* must have regard to each of the following:
 - (1) the information contained in or accompanying the *Revenue Proposal*, and proposed *pricing methodology*;

- (2) written submissions on the issues paper received under clause 6A.11.3 and the documents referred to in subparagraph (1); and
 - (3) any analysis undertaken by or for the *AER* that is *published* prior to the making of the draft decision in relation to the *Transmission Network Service Provider* or as part of that draft decision.
- (b) The *AER's* draft decision must be made in accordance with, and must comply with, the relevant requirements of rule 6A.14.
- (c) If the *AER* refuses to approve any of the amounts or values referred to in clause 6A.14.1(1), the *AER's* draft decision must include details of the changes required or matters to be addressed before the *AER* will approve those amounts or values.
- (d) **[Deleted]**
- (e) If the *AER* refuses to approve any aspect of a proposed *pricing methodology*, the *AER's* draft decision must include details of the changes required or matters to be addressed before the *AER* will approve the proposed methodology.

6A.12.2 Publication of draft decision and consultation

- (a) The *AER* must, as soon as practicable after the relevant date referred to in clause 6A.10.1(a), *publish*:
 - (1) its draft decision and reasons under clause 6A.12.1 and rule 6A.14;
 - (2) notice of the making of the draft decision;
 - (3) notice of a predetermination conference; and
 - (4) an invitation for written submissions on its draft decision.
- (b) The *AER* must hold the predetermination conference at the time, date and place specified in the notice under subparagraph (a)(3) for the purpose of explaining its draft decision.
- (c) Any person may make a written submission to the *AER* on the draft decision within the time specified in the invitation referred to in subparagraph (a)(4), which must be not earlier than 45 *business days* after the making of the draft decision.

6A.12.3 Submission of revised proposal or pricing methodology

- (a) In addition to making such other written submissions as it considers appropriate, the *Transmission Network Service Provider* may, not more than 45 *business days* after the publication of the draft decision, submit to the *AER*:
 - (1) a revised *Revenue Proposal*; or

- (2) **[Deleted]**
- (3) a revised proposed *pricing methodology*.
- (b) A *Transmission Network Service Provider* may only make the revisions referred to in paragraph (a) so as to incorporate the substance of any changes required by, or to address matters raised in, the draft decision.
- (c) A revised *Revenue Proposal* must comply with the requirements of, and must contain or be accompanied by such information as is required by, any relevant *regulatory information instrument* or the *Rules*.
- (d) **[Deleted]**
- (e) A revised proposed *pricing methodology* must:
 - (1) give effect to and be consistent with the *Pricing Principles* for *Prescribed Transmission Services*; and
 - (2) comply with the requirements of, and must contain or be accompanied by such information as is required by, the *pricing methodology guidelines*.
- (e1) If the *Transmission Network Service Provider* has identified any part of the revised *Revenue Proposal* or the revised proposed *pricing methodology* to the AER under this Part to be confidential, the AER must, as soon as is reasonably practicable, make available on its website a notice that sets out:
 - (1) the fact that the revised *Revenue Proposal* or the revised proposed *pricing methodology* contains information over which a claim of confidentiality has been made;
 - (2) the proportion of material in the revised *Revenue Proposal* or the revised proposed *pricing methodology* that is subject to any claim of confidentiality compared to that which is not subject to any such claim; and
 - (3) the comparative proportion of material in the revised *Revenue Proposal* or the revised proposed *pricing methodology* that is subject to any claim of confidentiality compared to that which is subject to claims of confidentiality in revised *Revenue Proposals* or the revised proposed *pricing methodologies* of other *Transmission Network Service Providers*.
- (f) Subject to the provisions of the Law and the *Rules* about the disclosure of confidential information, the AER must *publish*:
 - (1) any revised *Revenue Proposal*;
 - (2) **[Deleted]**
 - (3) any revised proposed *pricing methodology*,

(as the case may be), that is submitted by the *Transmission Network Service Provider* under paragraph (a), together with the accompanying information, as soon as practicable after receipt by the *AER*.

- (g) The *AER* may invite written submissions on the revised *Revenue Proposal*, revised proposed *negotiating framework* or revised proposed *pricing methodology*.

6A.12.4 Submissions on specified matters

If the *AER* invites further submissions on a revised *Revenue Proposal* or revised proposed *pricing methodology* under clause 6A.12.3(g), the *AER* may invite further written submissions on the submissions received under clause 6A.12.2(c) or 6A.12.3(g) by *publishing* an invitation which specifies:

- (a) the matters in respect of which submissions are invited; and
- (b) the time for making submissions, which must not be earlier than 15 *business days* after the date on which the invitation was *published*.

6A.13 Final decision

6A.13.1 Making of final decision

- (a) The *AER* must make a final decision in relation to the *Transmission Network Service Provider*.
- (a1) In making a final decision in relation to the *Transmission Network Service Provider*, and subject to clause 6A.16, the *AER* must have regard to each of the following:
 - (1) the information contained in or accompanying the *Revenue Proposal* and proposed *pricing methodology*;
 - (2) written submissions received under this Part E; and
 - (3) any analysis undertaken by or for the *AER* that is *published* prior to the making of the final decision or as part of the final decision.
- (a2) The *AER* must use its best endeavours to *publish*, a reasonable time prior to the making of the final decision, any analysis undertaken by or for it on which it proposes to rely, or to which it proposes to refer, for the purposes of that decision.
- (b) The *AER's* final decision must be made in accordance with, and must comply with, the relevant requirements of rule 6A.14.

6A.13.2 Refusal to approve amounts, values, framework or pricing methodology

- (a) **[Deleted]**

- (b) If the *AER's* final decision is to refuse to approve an amount or value referred to in clause 6A.14.1(1) for the reason that, or a reason which includes the reason that, the *AER* is not satisfied that:

- (1) the total of the forecast operating expenditure for the *regulatory control period* reasonably reflects the *operating expenditure criteria*, taking into account the *operating expenditure factors*; or
- (2) the total of the forecast capital expenditure for the *regulatory control period* reasonably reflects the *capital expenditure criteria*, taking into account the *capital expenditure factors*,

the *AER* must:

- (3) where subparagraph (1) applies, include in its final decision (in addition to the estimate referred to in clause 6A.14.1(3)(ii)) the forecast operating expenditure for each *regulatory year* which the *AER* is satisfied reasonably reflects the *operating expenditure criteria*, taking into account the *operating expenditure factors*, subject only to the requirement that the total of such forecasts must equate to the estimate referred to in clause 6A.14.1(3)(ii);
- (4) where subparagraph (2) applies, include in its final decision (in addition to the estimate referred to in clause 6A.14.1(2)(ii)) the forecast capital expenditure for each *regulatory year* which the *AER* is satisfied reasonably reflects the *capital expenditure criteria*, taking into account the *capital expenditure factors*, subject only to the requirement that the total of such forecasts must equate to the estimate referred to in clause 6A.14.1(2)(ii); and
- (5) use each such amount (and its components) in place of the forecast of required operating or capital expenditure that is included in the current *Revenue Proposal* for the purposes of calculating the amount or value that it has refused to approve in its final decision.

- (c) **[Deleted]**

- (d) If the *AER's* final decision is to refuse to approve the proposed *pricing methodology*, the *AER* must include in its final decision an amended *pricing methodology* which is:

- (1) determined on the basis of the current proposed *pricing methodology*; and
- (2) amended from that basis only to the extent necessary to enable it to be approved in accordance with the *Rules*.

6A.13.2A Out of scope revised documents or late submissions

On or before making a final decision in relation to the *Transmission Network Service Provider*, the *AER* must include on its website:

- (a) a summary of any revisions to the relevant *Revenue Proposal* or proposed *pricing methodology* that have been made in a revised *Revenue Proposal* or revised proposed *pricing methodology* that do not comply with clause 6A.12.3(b), together with an indication of the amount of that information;
- (b) a summary of any submissions on the draft decision in relation to the *Transmission Network Service Provider* or the revised *Revenue Proposal* or revised proposed *pricing methodology* that were made by the *Transmission Network Service Provider* and that contain information that the *Transmission Network Service Provider* was entitled to incorporate in the revised *Revenue Proposal* or revised proposed *pricing methodology* under clause 6A.12.3(b), together with an indication of the amount of that information;
- (c) a summary of any submissions that purport to be made by the *Transmission Network Service Provider* under clause 6A.12.4 but are in respect of matters other than those specified by the *AER* under that clause, together with an indication of the length of those submissions; and
- (d) a summary of any submissions on the draft decision in relation to the *Transmission Network Service Provider* or the revised *Revenue Proposal* or revised proposed *pricing methodology* that were made by the *Transmission Network Service Provider* after the time for making the submissions has expired, together with an indication of the length of those submissions.

For the purpose of this clause 6A.13.2A, revisions or submissions may be summarised by cross-referencing to the relevant *Revenue Proposal*, proposed *pricing methodology* or submissions.

6A.13.3 Notice of final decision

The *AER* must as soon as practicable, but not later than 2 months before the commencement of the relevant *regulatory control period*, publish:

- (1) notice of the making of the final decision; and
- (2) the final decision, including the reasons required to be included in it.

6A.13.4 Making of transmission determination

The *AER* must, as soon as practicable after making its final decision, make the *transmission determination* to which the final decision relates.

6A.14 Requirements relating to draft and final decisions

6A.14.1 Contents of decisions

A draft decision under rule 6A.12 or a final decision under rule 6A.13 is a decision by the *AER*:

- (1) on the *Transmission Network Service Provider's* current *Revenue Proposal* in which the *AER* either approves or refuses to approve:
 - (i) the *total revenue cap* for the provider for the *regulatory control period*;
 - (ii) the *maximum allowed revenue* for the provider for each *regulatory year* of the *regulatory control period*;
 - (iii) the values that are to be attributed to the *performance incentive scheme parameters* for any *service target performance incentive scheme* that is to apply to the provider in respect of the *regulatory control period*;
 - (iv) the values that are to be attributed to the *efficiency benefit sharing scheme parameters* for any *efficiency benefit sharing scheme* that is to apply to the provider in respect of the *regulatory control period*; and
 - (v) the commencement and length of the *regulatory control period* that has been proposed by the provider,as set out in the *Revenue Proposal*, setting out the reasons for the decision;
- (2) in which the *AER* either:
 - (i) acting in accordance with clause 6A.6.7(c), accepts the total of the forecast capital expenditure for the *regulatory control period* that is included in the current *Revenue Proposal*; or
 - (ii) acting in accordance with clause 6A.6.7(d), does not accept the total of the forecast capital expenditure for the *regulatory control period* that is included in the current *Revenue Proposal*, in which case the *AER* must set out its reasons for that decision and an estimate of the total of the *Transmission Network Service Provider's* required capital expenditure for the *regulatory control period* that the *AER* is satisfied reasonably reflects the *capital expenditure criteria*, taking into account the *capital expenditure factors*;
- (3) in which the *AER* either:
 - (i) acting in accordance with clause 6A.6.6(c) or clause 6A.6.6(c1), accepts the total of the forecast operating expenditure for the *regulatory control period* that is included in the current *Revenue Proposal*; or
 - (ii) acting in accordance with clause 6A.6.6(d), does not accept the total of the forecast operating expenditure for the *regulatory control period* that is included in the current *Revenue Proposal*, in which case the *AER* must set out its reasons for that decision and an estimate of the total of the *Transmission Network Service Provider's* required operating expenditure for the *regulatory control period* that the *AER* is

satisfied reasonably reflects the *operating expenditure criteria*, taking into account the *operating expenditure factors*;

- (4) in which the *AER* determines:
- (i) whether each of the *proposed contingent projects* (if any) described in the current *Revenue Proposal* are *contingent projects* for the purposes of the *revenue determination* in which case the decision must clearly identify each of those *contingent projects*;
 - (ii) the capital expenditure that it is satisfied reasonably reflects the *capital expenditure criteria*, taking into account the *capital expenditure factors*, in the context of each *contingent project* as described in the current *Revenue Proposal*;
 - (iii) the *trigger events* in relation to each *contingent project* (in which case the decision must clearly specify those *trigger events*); and
 - (iv) if the *AER* determines that such a *proposed contingent project* is not a *contingent project* for the purposes of the *revenue determination*, its reasons for that conclusion, having regard to the requirements of clause 6A.8.1(b);
- (5) **[Deleted]**
- (5A) in which the *AER* determines how any applicable *capital expenditure sharing scheme* or *small-scale incentive scheme* is to apply to the *Transmission Network Service Provider*;
- (5B) on the *allowed rate of return* for each *regulatory year* of the *regulatory control period* in accordance with clause 6A.6.2;
- (5C) on whether the return on debt is to be estimated using a methodology referred to in clause 6A.6.2(i)(2) and, if that is the case, the formula that is to be applied in accordance with clause 6A.6.2(l);
- (5D) on the value of imputation credits as referred to in clause 6A.6.4,
- (5E) on the regulatory asset base as at the commencement of the *regulatory control period* in accordance with clause 6A.6.1 and Schedule 6A.2;
- (5F) on whether depreciation for establishing the regulatory asset base as at the commencement of the following *regulatory control period* is to be based on actual or forecast capital expenditure;

Note:

See clause S6A.2.2B.

- (6) **[Deleted]**
- (7) **[Deleted]**

- (8) on the *Transmission Network Service Provider's* current proposed *pricing methodology*, in which the *AER* either approves or refuses to approve that methodology and sets out reasons for its decision; and
- (9) on the additional *pass through events* that are to apply for the *regulatory control period* in accordance with clause 6A.6.9.

6A.14.2 Reasons for decisions

- (a) The reasons given by the *AER* for a draft decision under rule 6A.12 or a final decision under rule 6A.13 must set out the basis and rationale of the decision, including:
 - (1) details of the qualitative and quantitative methodologies applied in any calculations and formulae made or used by the *AER* for the purposes of its decision;
 - (2) the values adopted by the *AER* for each of the input variables in any calculations and formulae, including:
 - (i) whether those values have been taken or derived from the *Transmission Network Service Provider's* current *Revenue Proposal*; and
 - (ii) if not, the rationale for the adoption of those values;
 - (3) details of any assumptions made by the *AER* in undertaking any material qualitative and quantitative analyses for the purposes of the decision; and
 - (4) reasons for the making of any decisions, the giving or withholding of any approvals, and the exercise of any discretion, as referred to in this Chapter, for the purposes of the decision, such reasons being expressed by reference to the requirements relating to such decisions, approvals or discretions as are contained in this Chapter.
- (b) The *AER* must include in its reasons for a draft decision under rule 6A.12 or a final decision under rule 6A.13 a statement, with supporting reasons, as to the extent to which the roll forward of the regulatory asset base from the previous *regulatory control period* to the commencement of the *regulatory control period* contributes to the achievement of the *capital expenditure incentive objective*.

6A.14.3 Circumstances in which matters must be approved or accepted

- (a) This clause set out the circumstances in which the *AER* must approve or accept certain matters for the purposes of a draft decision under rule 6A.12 or a final decision under rule 6A.13. Subject to any provision of this Chapter 6A, if the *AER* is not required to approve or accept such a matter in accordance with this clause, it may, but is not required to, refuse to approve or accept that matter.

- (b) The *AER* must approve:
- (1) the *total revenue cap* for a *Transmission Network Service Provider* for a *regulatory control period*; and
 - (2) the *maximum allowed revenue* for the *Transmission Network Service Provider* for each *regulatory year* of the *regulatory control period*,
- as set out in the current *Revenue Proposal*, if the *AER* is satisfied that:
- (3) those amounts have been properly calculated using the *post-tax revenue model*; and
 - (4) those amounts, and any amount required to be calculated, determined or forecast for the purposes of calculating those amounts, have otherwise been calculated, determined or forecast in accordance with the requirements of Part C of this Chapter 6A, (for these purposes, the *AER* is taken to be so satisfied in respect of a particular amount if another provision of this Chapter 6A requires the *AER* to approve or accept that amount)

Nothing in this paragraph (b) is to be taken to require the *AER* to accept the *Transmission Network Service Provider's allowed rate of return* or is to be taken to constrain the *AER* in substituting its forecast or estimate of capital expenditure or operating expenditure in accordance with clauses 6A.13.2(b) or 6A.14.1(2) or (3).

- (c) If a *Transmission Network Service Provider's* revised *Revenue Proposal* submitted under clause 6A.12.3(a) includes:
- (1) an amount of total forecast capital expenditure for the *regulatory control period* that is the same as that accepted or estimated (as the case may be) by the *AER* in a draft decision under rule 6A.12; or
 - (2) an amount of total forecast operating expenditure for the *regulatory control period* that is the same as that accepted or estimated (as the case may be) by the *AER* in a draft decision under rule 6A.12,

then, except to the extent that:

- (3) either or both of the following apply:
 - (i) other changes have been made in the revised *Revenue Proposal*; or
 - (ii) the information contained in or accompanying the revised *Revenue Proposal* differs from that contained in or accompanying the previous *Revenue Proposal*; and
- (4) the changes are such that the *AER* is not satisfied as referred to in clauses 6A.6.6(c) or 6A.6.7(c) (as the case may be),

the *AER*, in its final decision, must accept the forecast of required operating expenditure or of required capital expenditure (as the case may be) that is included in the revised *Revenue Proposal*.

(d) The *AER* must approve:

- (1) the values that are to be attributed to the *performance incentive scheme parameters* for the *service target performance incentive scheme* that is to apply to a *Transmission Network Service Provider* in respect of a *regulatory control period*; and
- (2) the values that are to be attributed to the *efficiency benefit sharing scheme parameters* for the *efficiency benefit sharing scheme* that is to apply to a *Transmission Network Service Provider* in respect of a *regulatory control period*,

as set out in the current *Revenue Proposal*, if the *AER* is satisfied that those values comply with the requirements relating to them set out in the *service target performance incentive scheme* or the *efficiency benefit sharing scheme* (as the case may be).

(e) The *AER* must approve the commencement and length of the *regulatory control period* as proposed by a *Transmission Network Service Provider* in the provider's current *Revenue Proposal* if the length of the *regulatory control period* as so proposed is 5 *regulatory years*.

(f) **[Deleted]**

(g) The *AER* must approve a *Transmission Network Service Provider's* current proposed *pricing methodology* if the *AER* is satisfied that the methodology:

- (1) gives effect to and is consistent with the *Pricing Principles for Prescribed Transmission Services*; and
- (2) complies with the requirements of the *pricing methodology guidelines*.

(h) If a *Transmission Network Service Provider's* revised *Revenue Proposal* or revised proposed *pricing methodology* (as the case may be) submitted under clause 6A.12.3(a):

- (1) contains the changes required under clause 6A.12.1; or
- (2) does not contain those changes but otherwise (in the *AER's* view), adequately addresses the matters which prompted the *AER* to require those changes,

then, except to the extent that:

- (3) either or both of the following apply:

- (i) other changes have been made in the revised *Revenue Proposal* or the revised proposed *pricing methodology*, by the *Transmission Network Service Provider*; or
 - (ii) the information contained in or accompanying the revised *Revenue Proposal* or revised proposed *pricing methodology* differs from that contained in or accompanying the previous *Revenue Proposal* or proposed *pricing methodology* submitted or resubmitted; and
- (4) the changes would justify the *AER*, in its final decision, in refusing to approve the amounts or values referred to in clause 6A.14.1(5) or the proposed *pricing methodology* referred to in clause 6A.13.2(d),

the *AER*'s final decision must be to approve those amounts or values or that proposed *pricing methodology*.

- (i) [Deleted]

6A.15 Revocation of revenue determination or amendment of pricing methodology for wrong information or error

- (a) The *AER* may (but is not required to) revoke a *revenue determination* or amend an existing *pricing methodology* during a *regulatory control period* if it appears to the *AER* that the *revenue determination* or *pricing methodology* is affected by a material error or deficiency of one or more of the following kinds:
 - (1) a clerical error or an accidental slip or omission;
 - (2) a miscalculation or misdescription;
 - (3) a defect in form; or
 - (4) a deficiency resulting from the provision of false or materially misleading information to the *AER*.
- (b) If the *AER* revokes a *revenue determination* under paragraph (a), the *AER* must make a new *revenue determination* in substitution for the revoked *revenue determination* to apply for the remainder of the *regulatory control period* for which the revoked *revenue determination* was to apply.
- (c) If the *AER* revokes and substitutes a *revenue determination* under paragraphs (a) and (b), the substituted *revenue determination* must only vary from the revoked *revenue determination* to the extent necessary to correct the relevant error or deficiency.
- (d) If the *AER* amends a *pricing methodology* under paragraph (a), the amended methodology applies to the setting of prices for the next *financial year* and for the remainder of the relevant *regulatory control period*.

- (e) If the *AER* amends a *pricing methodology* under paragraph (a), the amended methodology must only vary from the existing *pricing methodology* to the extent necessary to correct the relevant error or deficiency.
- (f) The *AER* may only revoke and substitute a *revenue determination* or amend a *pricing methodology* under this rule 6A.15, if it has first consulted with the relevant *Transmission Network Service Provider* and such other persons as it considers appropriate.

6A.16 Miscellaneous

- (a) The *AER* may, but is not required to, consider any submission made pursuant to an invitation for submissions after the time for making the submission has expired.
- (b) Nothing in this Part E is to be construed as precluding the *AER* from *publishing* any issues, consultation and discussion papers, or holding any conferences and information sessions, that the *AER* considers appropriate.
- (c) Subject to paragraph (d), as soon as practicable after the *AER* receives a submission in response to an invitation for submissions that is made under this Chapter (whether or not the submission was made before the time for making it has expired), the *AER* must *publish* that submission.
- (d) The *AER* must not *publish* a submission referred to in paragraph (c) to the extent it contains information which has been clearly identified as confidential by the person making the submission.
- (e) The *AER* may give such weight to confidential information identified in accordance with paragraph (d) in a submission as it considers appropriate, having regard to the fact that such information has not been made publicly available.
- (f) Paragraph (d) does not apply to the extent that any other provision of the Law or the *Rules* permits or requires such information to be publicly released by the *AER*.

6A.16A Transmission Confidentiality Guidelines

- (a) The *AER* must, in accordance with the *transmission consultation procedures*, make and *publish* guidelines (*Transmission Confidentiality Guidelines*).
- (b) The *Transmission Confidentiality Guidelines* must specify the manner in which the *Transmission Network Service Provider* may make confidentiality claims in its *Revenue Proposal* and proposed *pricing methodology*, which may include categories of confidential information by reference to which *Transmission Network Service Providers* must classify any claims of confidentiality in their *Revenue Proposals* and proposed *pricing methodologies*.

- (c) There must be *Transmission Confidentiality Guidelines* in force at all times after the date on which the AER first publishes the *Transmission Confidentiality Guidelines* under these Rules.
- (d) The *Transmission Confidentiality Guidelines* are binding on the AER and each *Transmission Network Service Provider* to which they apply.

Part F Information Disclosure

6A.17 Information disclosure by Transmission Network Service Providers

6A.17.1 Information to be provided to AER

- (a) In this rule 6A.17, '**certified annual statement**' means an annual statement provided by a *Transmission Network Service Provider* under this rule 6A.17 and certified in accordance with the *information guidelines*.
- (b) A *Transmission Network Service Provider* must submit to the AER, in the manner and form set out in the *information guidelines*, annual statements that:
 - (1) provide a true and fair statement of the financial and operating performance of the *Transmission Network Service Provider*;
 - (2) are certified in accordance with the *information guidelines*; and
 - (3) otherwise comply with the requirements of this clause and the *information guidelines*.
- (c) In addition to the certified annual statements, the AER may require a *Transmission Network Service Provider* to provide, by a date and in the form and manner specified by the AER, any additional information the AER reasonably requires for a purpose set out in paragraph (d).
- (d) The certified annual statements and additional information provided by a *Transmission Network Service Provider* to the AER under this rule 6A.17 may be used by the AER only for the following purposes:
 - (1) to monitor, report on and enforce the compliance of the *Transmission Network Service Provider* with the *total revenue cap* for the *Transmission Network Service Provider* for a *regulatory control period*, the *maximum allowed revenue* for the *Transmission Network Service Provider* for each *regulatory year*, and any requirements that are imposed on the *Transmission Network Service Provider* under a *transmission determination*;
 - (2) to monitor, report on and enforce compliance with the provider's *Cost Allocation Methodology*;

- (3) as an input regarding the financial, economic and operational performance of the *Transmission Network Service Provider*, to inform the *AER*'s decision-making for the making of *revenue determinations* or other regulatory controls to apply in future *regulatory control periods*;
 - (4) to monitor and report on the performance of the *Transmission Network Service Provider* under any incentive scheme that applies to the *Transmission Network Service Provider* under clauses 6A.6.5, 6A.6.5A, 6A.7.4 or 6A.7.5; and
 - (5) for the preparation of a *network service provider performance report*.
- (e) The *AER* may request or undertake verification or independent audit of any information sought by it, or provided to it, under this rule 6A.17.

6A.17.2 Information Guidelines

Preparation, publication and amendment of Information Guidelines

- (a) The *AER* must, in accordance with the *transmission consultation procedures*, make and *publish* guidelines (*information guidelines*) that comply with this clause 6A.17.2.
- (b) **[Deleted]**
- (c) The *AER* must *publish* the first *information guidelines* by 28 September 2007, and there must be *information guidelines* in force at all times after that date.

Contents of information guidelines

- (d) The *information guidelines* must provide for the manner and form in which *Transmission Network Service Providers* must submit certified annual statements to the *AER*, including the date each year by which those statements must be submitted to the *AER*.
- (e) The *information guidelines* may only require the inclusion in the certified annual statements of:
 - (1) such information as the *AER* reasonably requires for a purpose set out in clause 6A.17.1(d);
 - (2) information on the amount of each instance, during the relevant reporting period, of a reduction under clause 6A.26.1(c) in the prices payable by a *Transmission Customer* for *prescribed TUOS services* or *prescribed common transmission services* provided by the *Transmission Network Service Provider*;
 - (3) information on each instance, during the relevant reporting period, of a reduction in the prices payable by a *Transmission Customer* for *prescribed TUOS services* or *prescribed common transmission*

services (or both) that were recovered under rule 6A.26 from other Transmission Customers for prescribed TUOS services or prescribed common transmission services; and

- (4) information to substantiate any claim by the *Transmission Network Service Provider* that the information provided to the AER with respect to reductions in the prices payable by a *Transmission Customer* for the relevant *prescribed transmission services* under subparagraph (2) or (3) is confidential information.
- (f) **[Deleted]**.
- (g) The *information guidelines* may specify the information that must be submitted with any application made under clause 6A.26.2(b), including:
 - (1) details of the circumstances in which a discount amount has arisen and of the calculation of the proposed recovery amount; and
 - (2) the information necessary to substantiate how the requirements of clause 6A.26.1(f) are satisfied.
- (h) The *information guidelines* may provide, for the purposes of rule 6A.27, rule 6A.28 and rule 6A.29, for:
 - (1) the information that each *Transmission Network Service Provider* must supply to a *Co-ordinating Network Service Provider* and other *Transmission Network Service Providers* for the purposes of cost allocation under the provider's *pricing methodology*, including:
 - (i) electrical parameters for each optimised element of the *network* and the *network* configuration;
 - (ii) hourly *load* data for each exit point for the *survey period*;
 - (iii) hourly *generation* data for each entry point for the *survey period*;
 - (iv) *voltage* control arrangements and *voltage* profile; and
 - (v) the *ASRR* for the categories of *prescribed TUOS services* and *prescribed common transmission services*.
 - (2) the derivation of hourly *load* data from *metering data* by the aggregation of the *energy meter* reading figures in respect of each hour.
- (i) The *information guidelines* are binding on the AER and each *Transmission Network Service Provider* to which they apply.

6A.18 [Deleted]

Part G Cost Allocation

6A.19 Cost allocation

6A.19.1 Duty to comply with Cost Allocation Methodology

A Transmission Network Service Provider must comply with the Cost Allocation Methodology that has been approved in respect of that Transmission Network Service Provider from time to time by the AER under this rule 6A.19.

6A.19.2 Cost Allocation Principles

The following principles constitute the *Cost Allocation Principles*:

- (1) the detailed principles and policies used by a *Transmission Network Service Provider* to allocate costs between different categories of *transmission services* must be described in sufficient detail to enable the *AER* to replicate reported outcomes through the application of those principles and policies;
- (2) the allocation of costs must be determined according to the substance of a transaction or event rather than its legal form;
- (3) only the following costs may be allocated to a particular category of *transmission services*:
 - (i) costs which are directly attributable to the provision of those services; and
 - (ii) costs which are not directly attributable to the provision of those services but which are incurred in providing those services, in which case such costs must be allocated to the provision of those services using an appropriate allocator which should:
 - (A) except to the extent the cost is immaterial or a causal based method of allocation cannot be established without undue cost and effort, be causation based; and
 - (B) to the extent the cost is immaterial or a causal based method of allocation cannot be established without undue cost and effort, be an allocator that accords with a well accepted *Cost Allocation Methodology*;
- (4) any *Cost Allocation Methodology* which is used, the reasons for using that methodology and the numeric quantity (if any) of the chosen allocator must be clearly described;
- (5) the same cost must not be allocated more than once;

- (6) the principles, policies and approach used to allocate costs must be consistent with the *Transmission Ring-Fencing Guidelines*;
- (7) costs which have been allocated to *prescribed transmission services* must not be reallocated to *negotiated transmission services*; and
- (8) costs which have been allocated to *negotiated transmission services* may be reallocated to *prescribed transmission services* to the extent they satisfy the principle referred to in subparagraph (3).

Note:

The *Cost Allocation Guidelines* are required by clause 6A.19.3 to give effect to and be consistent with, the *Cost Allocation Principles*.

6A.19.3 Cost Allocation Guidelines

- (a) The *AER* must, in accordance with the *transmission consultation procedures*, make and *publish* guidelines (the *Cost Allocation Guidelines*) relating to the preparation by a *Transmission Network Service Provider* of its *Cost Allocation Methodology*.
- (b) The *Cost Allocation Guidelines* must give effect to and be consistent with the *Cost Allocation Principles*.
- (c) Without limiting the generality of paragraph (b), the *Cost Allocation Guidelines* may specify:
 - (1) the format of a *Cost Allocation Methodology*;
 - (2) the detailed information that is to be included in a *Cost Allocation Methodology*;
 - (3) the categories of *transmission services* which are to be separately addressed in a *Cost Allocation Methodology*, such categories being determined by reference to the nature of those services, the persons to whom those services are provided or such other factors as the *AER* considers appropriate; and
 - (4) the allocation methodologies which are acceptable and the supporting information that is to be included in relation to such methodologies in a *Cost Allocation Methodology*.
- (d) The *Cost Allocation Guidelines* are binding on the *AER* and each *Transmission Network Service Provider* to which they apply.
- (e) The *AER* must *publish* the first *Cost Allocation Guidelines* by 28 September 2007, and there must be *Cost Allocation Guidelines* in force at all times after that date.

6A.19.4 Cost Allocation Methodology

- (a) Each *Transmission Network Service Provider* must submit to the *AER* for its approval a document setting out its proposed *Cost Allocation Methodology*:
 - (1) by no later than 28 March 2008; or
 - (2) in the case of an entity that is not a *Transmission Network Service Provider* as at 28 September 2007, within 6 months of being required to do so by the *AER*.
- (b) The *Cost Allocation Methodology* proposed by a *Transmission Network Service Provider* must give effect to and be consistent with the *Cost Allocation Guidelines*.
- (c) The *AER* may approve or refuse to approve a *Cost Allocation Methodology* submitted under paragraph (a).
- (d) The *AER* must notify the relevant *Transmission Network Service Provider* of its decision to approve or refuse to approve the *Cost Allocation Methodology* submitted to it under paragraph (a) within 6 months of its submission, failing which the *AER* will be taken to have approved it.
- (e) As part of giving any approval referred to in paragraph (c), the *AER* may, after consulting with the relevant *Transmission Network Service Provider*, amend the *Cost Allocation Methodology* submitted to it, in which case the *Cost Allocation Methodology* as so amended will be taken to be approved by the *AER*.
- (f) A *Transmission Network Service Provider* may amend its *Cost Allocation Methodology* from time to time but the amendment only comes into effect:
 - (1) 6 months after the submission of the amendment, together with detailed reasons for the amendment, to the *AER* (unless the *AER* approves that amendment earlier, in which case it will come into effect when that earlier approval is given); and
 - (2) subject to such changes to the *Cost Allocation Methodology* (including the proposed amendment) as the *AER* notifies to the *Transmission Network Service Provider* within that period, being changes that the *AER* reasonably considers are necessary or desirable as a result of that amendment.
- (g) A *Transmission Network Service Provider* must amend its *Cost Allocation Methodology* where the amendment is required by the *AER* to take into account any change to the *Cost Allocation Guidelines*, but the amendment only comes into effect:
 - (1) on the date that the *AER* approves that amendment, or 3 months after the submission of the amendment, whichever is the earlier; and

- (2) subject to such changes to the *Cost Allocation Methodology* (including the proposed amendment) as the *AER* notifies to the *Transmission Network Service Provider* within that period, being changes that the *AER* reasonably considers are necessary or desirable as a result of that amendment.
- (h) A *Transmission Network Service Provider* must maintain a current copy of its *Cost Allocation Methodology* on its website.

Part H Transmission Consultation Procedures

6A.20 Transmission consultation procedures

- (a) This rule 6A.20 applies wherever the *AER* or the *AEMC* is required to comply with the *transmission consultation procedures*. For the avoidance of doubt, the *transmission consultation procedures*:
 - (1) are separate from, and do not apply to, the process for changing the *Rules* under Part 7 of the *National Electricity Law*; and
 - (2) are separate from, and (where they are required to be complied with) apply to the exclusion of, the *Rules consultation procedures* under rule 8.9.
- (b) If the *AER* or the *AEMC* is required to comply with the *transmission consultation procedures* in preparing, making, developing, reviewing, amending or replacing any guidelines, methodologies, models, schemes, tests or values, it must *publish*:
 - (1) the proposed guideline, methodology, model, scheme, test, value or amendment;
 - (2) an explanatory statement that sets out the provision of the *Rules* under or for the purposes of which the guideline, methodology, model, scheme, test, value or amendment is proposed to be prepared, made or developed or is required to be reviewed, and the reasons for the proposed guideline, methodology, model, scheme, test, value or amendment; and
 - (3) an invitation for written submissions on the proposed guideline, model, scheme, test, value or, or the review, as the case may be.
- (c) The invitation must allow no less than 30 *business days* for the making of submissions, and the *AER* or the *AEMC* is not required to consider any submission made pursuant to that invitation after this time period has expired.
- (d) The *AER* or the *AEMC* may publish such issues, consultation and discussion papers, and hold such conferences and information sessions, in relation to the proposed guideline, methodology, model, scheme, test, value or amendment, or the review, as it considers appropriate.

- (e) Within 80 *business days* of *publishing* the documents referred to in paragraph (b), the *AER* or the *AEMC* must *publish*:
 - (1) its final decision on the guideline, methodology model, scheme, test, value, amendment or review that sets out:
 - (i) the guideline, model, methodology, scheme, test, value or amendment (if any);
 - (ii) the provision of the *Rules* under which or for the purposes of which the guideline, methodology, model, scheme, test, value or amendment is being prepared, made or developed or is being reviewed;
 - (iii) the reasons for the guideline, model, methodology, scheme, test, value or amendment; and
 - (iv) the reasons for the outcome of any review; and
 - (2) notice of the making of the final decision on the guideline, methodology, model, scheme, test, value, amendment or review.
- (f) Subject to paragraph (c), the *AER* or the *AEMC* must, in making its final decision referred to in paragraph (e)(1), consider any submissions made pursuant to the invitation for submissions referred to in paragraph (b)(3), and the reasons referred to in paragraph (e)(1)(iii) or (iv) must include:
 - (1) a summary of each issue raised in those submissions that the *AER* or the *AEMC* reasonably considers to be material; and
 - (2) the *AER*'s or the *AEMC*'s response to each such issue.
- (g) The *AER* or the *AEMC* may extend the time within which it is required to *publish* its final decision if:
 - (1) the consultation involves issues of unusual complexity or difficulty; or
 - (2) the extension of time has become necessary because of circumstances beyond the control of the *AER* or the *AEMC*.

Part I Ring-Fencing Arrangements for Transmission Network Service Providers

6A.21 Transmission Ring-Fencing Guidelines

6A.21.1 Compliance with Transmission Ring-Fencing Guidelines

All *Transmission Network Service Providers* including *Market Network Service Providers*, must comply with the *Transmission Ring-Fencing Guidelines* prepared in accordance with clause 6A.21.2 as from the time that any *jurisdictional*

derogation from this rule 6A.21 ceases to apply in respect of the *participating jurisdiction* in which the *Transmission Network Service Provider* is located.

6A.21.2 Development of Transmission Ring-Fencing Guidelines

- (a) Transmission ring-fencing guidelines must be developed by the *AER* in consultation with each *participating jurisdiction* for the accounting and functional separation of the provision of *prescribed transmission services* by *Transmission Network Service Providers* from the provision of other services by *Transmission Network Service Providers* (the *Transmission Ring-Fencing Guidelines*).
- (b) The *Transmission Ring-Fencing Guidelines* may include, but are not limited to:
 - (1) provisions defining the need for and extent of:
 - (i) legal separation of the entity through which a *Transmission Network Service Provider* provides *network services* from any other entity through which it conducts business;
 - (ii) the establishment and maintenance of consolidated and separate accounts for *prescribed transmission services* and other services provided by the *Transmission Network Service Provider*;
 - (iii) allocation of costs between *prescribed transmission services* and other services provided by the *Transmission Network Service Provider*;
 - (iv) limitations on the flow of information between the *Transmission Network Service Provider* and any other person; and
 - (v) limitations on the flow of information where there is the potential for a competitive disadvantage between those parts of the *Transmission Network Service Provider's* business which provide *prescribed transmission services* and parts of the provider's business which provide any other services; and
 - (2) provisions allowing the *AER* to add to or to waive a *Transmission Network Service Provider's* obligations under the *Transmission Ring-Fencing Guidelines*.
- (c) In developing the *Transmission Ring-Fencing Guidelines* the *AER* must consider, without limitation, the following matters:
 - (1) the need, so far as practicable, for consistency with Federal and State regulation in each *participating jurisdiction* of ring-fencing requirements of other utility businesses; and
 - (2) the need, so far as practicable, for consistency between the *Transmission Ring-Fencing Guidelines* and *Distribution Ring-Fencing Guidelines*.

- (d) In developing or amending the *Transmission Ring-Fencing Guidelines*, the AER must consult with *participating jurisdictions, Registered Participants, AEMO* and other *interested parties*, and such consultation must be otherwise in accordance with the *transmission consultation procedures*.
- (e) To avoid doubt, despite paragraphs (a), (b), (c) and (d) above and clause 6A.19.2(6), the *Transmission Ring-Fencing Guidelines* must not include any provisions which deal with or require the allocation of costs as between:
 - (1) *prescribed transmission services* and *negotiated transmission services*; or
 - (2) *categories of prescribed transmission services*,
 in a manner which is inconsistent with the *Cost Allocation Principles*, the *Cost Allocation Guidelines*, the *Pricing Principles for Prescribed Transmission Services* or the *pricing methodology guidelines*.

Part J Prescribed Transmission Services - Regulation of Pricing

6A.22 Terms used in Part J

6A.22.1 Aggregate annual revenue requirement (AARR)

For the purposes of this Part J, the *aggregate annual revenue requirement (AARR)* for *prescribed transmission services* provided by a *Transmission Network Service Provider*, is the *maximum allowed revenue* referred to in clause 6A.3.1 adjusted:

- (1) in accordance with clause 6A.3.2;
- (2) by subtracting the operating and maintenance costs expected to be incurred in the provision of *prescribed common transmission services*; and
- (3) by any allocation as agreed between *Transmission Network Service Providers* in accordance with clause 6A.29.3.

6A.22.2 Annual service revenue requirement (ASRR)

For the purposes of this Part J, the *annual service revenue requirement (ASRR)* for a *Transmission Network Service Provider* is the portion of the AARR for *prescribed transmission services* provided by a *Transmission Network Service Provider* that is allocated to each *category of prescribed transmission services* for that *Transmission Network Service Provider* and that is calculated by multiplying the AARR by the *attributable cost share* for that category of services in accordance with the principles in clause 6A.23.2.

6A.22.3 Meaning of attributable cost share

- (a) For a *Transmission Network Service Provider* for a *category of prescribed transmission services*, the *attributable cost share* for that *Transmission Network Service Provider* for that category of services must, subject to any

adjustment required or approved, under this Part, substantially reflect the ratio of:

- (1) the costs of the *transmission system* assets directly attributable to the provision of that *category of prescribed transmission services*; to
 - (2) the total costs of all the *Transmission Network Service Provider's transmission system* and any other *transmission system* assets directly attributable to the provision of *prescribed transmission services*.
- (b) The costs of the *transmission system* assets referred to in paragraph (a) refers to optimised replacement cost or to an accepted equivalent to optimised replacement cost that is referable to values contained in the accounts of the *Transmission Network Service Provider*.

6A.22.4 Meaning of attributable connection point cost share

- (a) For a *Transmission Network Service Provider* for *prescribed entry services* and *prescribed exit services*, the *attributable connection point cost share* for that *Transmission Network Service Provider* for each of those categories of services must substantially reflect the ratio of:
- (1) the costs of the *transmission system* assets directly attributable to the provision of *prescribed entry services* or *prescribed exit services*, respectively, at a *transmission network connection point*; to
 - (2) the total costs of all the *Transmission Network Service Provider's transmission system* assets directly attributable to the provision of *prescribed entry services* or *prescribed exit services*, respectively.
- (b) The costs of the *transmission system* assets referred to in paragraph (a) refers to optimised replacement cost or to an accepted equivalent to optimised replacement cost that is referable to values contained in the accounts of the *Transmission Network Service Provider*.

6A.23 Pricing Principles for Prescribed Transmission Services

6A.23.1 Introduction

- (a) This rule 6A.23 sets out the principles that constitute the *Pricing Principles for Prescribed Transmission Services*.
- (b) The *Pricing Principles for Prescribed Transmission Services* are given effect by *pricing methodologies*.

6A.23.2 Principles for the allocation of the aggregate annual revenue requirement

The *aggregate annual revenue requirement* for *prescribed transmission services* provided by a *Transmission Network Service Provider* is to be allocated in accordance with the following principles:

- (a) The *AARR* for a *Transmission Network Service Provider* must be allocated to each *category of prescribed transmission services* in accordance with the *attributable cost share* for each such category of services.
- (b) This allocation results in the *annual service revenue requirement (ASRR)* for that category of services.
- (c) The allocation of the *AARR* must be such that:
 - (1) every portion of the *AARR* is allocated; and
 - (2) the same portion of the *AARR* is not allocated more than once.
- (d) Where, as a result of the application of the *attributable cost share*, a portion of the *AARR* would be attributable to more than one category of *prescribed transmission services*, that *attributable cost share* is to be adjusted and applied such that any costs of a *transmission system* asset that would otherwise be attributed to the provision of more than one category of *prescribed transmission services*, is allocated as follows:
 - (1) to the provision of *prescribed TUOS services*, but only to the extent of the *stand-alone amount* for that *category of prescribed transmission services*;
 - (2) if any portion of the costs of a *transmission system* asset is not allocated to *prescribed TUOS services*, under subparagraph (1), that portion is to be allocated to *prescribed common transmission services*, but only to the extent of the *stand-alone amount* for that *category of prescribed transmission services*;
 - (3) if any portion of the costs of a *transmission system* asset is not attributed to *prescribed transmission services* under subparagraphs (1) and (2), that portion is to be attributed to *prescribed entry services* and/or *prescribed exit services*.

6A.23.3 Principles for the allocation of the annual service revenue requirement to connection points

The allocation of the *annual service revenue requirement* of a *Transmission Network Service Provider* for each *category of prescribed transmission services* to the relevant *connection points* (other than the *connection points* of any *Market Network Service Provider*), and the manner and sequence in which adjustments can be made to those allocations, for the relevant *regulatory year* to which the *maximum allowed revenue* relates, must be in accordance with the following principles:

- (a) The *annual service revenue requirement* for *prescribed TUOS services* is to be allocated between a locational component (*pre-adjusted locational component*) and a non-locational component (*pre-adjusted non-locational component*) either:
 - (1) as to 50% to each component; or

- (2) an alternative allocation to each component, that is based on a reasonable estimate of future *network* utilisation and the likely need for future *transmission* investment, and that has the objective of providing more efficient locational signals to *Market Participants*, *Intending Participants* and end users.
- (b) Subject to paragraph (d), the *pre-adjusted locational component* is to be adjusted by:
 - (1) subtracting any amount estimated as proceeds from *auctions* or any portion of *settlements residue* allocated to the *directional interconnector* which is not the subject of a *SRD agreement* estimated to be receivable by the *Transmission Network Service Provider* from the *connection points* for each relevant *directional interconnector* as referred to in clause 3.18.4, with that amount including an adjustment calculated in accordance with paragraph (f); and
 - (2) adding or subtracting the amount estimated by the *Co-ordinating Network Service Provider* for the *modified load export charge* receivable by or payable to the *Transmission Network Service Provider* under clause 6A.29A.5, with that amount including an adjustment calculated in accordance with paragraph (f),(the *adjusted locational component*).
- (c) If the *adjusted locational component* is a positive amount, it is to be allocated to *transmission network connection points* of *Transmission Customers* on the basis of their proportionate use of the relevant *transmission system* assets. The *CRNP methodology* and the *modified CRNP methodology* are two permitted methodologies to estimate the proportionate use of the relevant *transmission system* assets as referred to in paragraph (b).
- (d) If the *adjusted locational component* is a negative amount, then the *adjusted locational component* will be deemed to be zero and the absolute value of that negative amount is to be subtracted from the *pre-adjusted non-locational component* under subparagraph (e)(1).
- (e) The *pre-adjusted non-locational component* is to be adjusted by:
 - (1) subtracting the absolute value of the amount (if any) referred to in paragraph (d);
 - (2) adding or subtracting any amount for *settlements residue* (not being any *auction* amount referred to in subparagraph (b)(1), but including any amount of *settlements residue* due to *intra-regional loss factors*) estimated to be receivable by or payable to the *Transmission Network Service Provider* in accordance with clause 3.6.5(a)(3);
 - (3) adding or subtracting any adjustment arising as a result of the application of clauses 6A.23.4(c) and (d);

- (4) adding or subtracting any amount arising as a result of the application of prudent discounts (if any) under clauses 6A.26.1(d) to (g); and
 - (5) adding or subtracting any *over-recovery amount* or *under-recovery amount*, with that amount including an adjustment calculated in accordance with paragraph (f),

(the *adjusted non-locational component*).
 - (f) The adjustment referred to in subparagraphs (b)(1), (b)(2) and (e)(5) must be calculated as the sum of:
 - (1) the difference between:
 - (i) the estimated amount payable or receivable for a service (or component of a service) referred to in subparagraphs (b)(1), (b)(2) and (e)(5) in year $t - 1$; and
 - (ii) the amount actually payable or receivable for that service (or that component of service) in year $t - 1$;
 - (2) the difference between:
 - (i) the actual amount payable or receivable for that service (or that component of service) in year $t - 2$; and
 - (ii) the estimate of the amount payable or receivable for that service (or component of a service) in year $t - 2$ that was used for the purposes of clause (f)(1)(i) in accordance with the *Co-ordinating Network Service Provider's* or the *Transmission Network Service Provider's* (as the case may be) *pricing methodology* that applied in year $t - 1$; and
 - (3) grossed up on the basis of the *allowed rate of return* as approved by the AER in the relevant *revenue determination* that applies to the *Transmission Network Service Provider* at the time when the further adjustment is to be made.
 - (g) For the purposes of paragraph (f):

"year t "	means the <i>regulatory year</i> in which adjustments are made under paragraph (f).
"year $t - 1$ "	means the <i>regulatory year</i> immediately prior to year t or, where year t is the first year of a <i>regulatory control period</i> , the last <i>regulatory year</i> of the previous <i>regulatory control period</i> .
"year $t - 2$ "	means the <i>regulatory year</i> immediately prior to year $t - 1$ or, where year t is the: (1) first year of a <i>regulatory control period</i>, the

penultimate *regulatory year* of the previous *regulatory control period*; and

- (2) second year of a *regulatory control period*, the last *regulatory year* of the previous *regulatory control period*.
- (h) The *annual service revenue requirement* for *prescribed common transmission services* is to be adjusted by adding the operating and maintenance costs incurred in the provision of those services (to the extent that those costs were subtracted from the *maximum allowed revenue* in accordance with clause 6A.22.1).
- (i) The whole of the *annual service revenue requirement* for *prescribed entry services* is to be allocated to *transmission network connection points* (other than *connection points* of any *Market Network Service Provider*) in accordance with the *attributable connection point cost share* for *prescribed entry services* that are provided by the *Transmission Network Service Provider* at that *connection point*.
- (j) The whole of the *annual service revenue requirement* for *prescribed exit services* is to be allocated to *transmission network connection points* (other than *connection points* of any *Market Network Service Provider*) in accordance with the *attributable connection point cost share* for *prescribed exit services* that are provided by the *Transmission Network Service Provider* at that *connection point*.

6A.23.4 Principles for the recovery of the Annual Service Revenue Requirement as prices

The recovery of the *annual service revenue requirement* for a *Transmission Network Service Provider* as prices for *Transmission Customers* (but not *Market Network Service Providers*) for the relevant *regulatory year* to which the *maximum allowed revenue* relates, must be made in accordance with the following principles:

- (a) The *Transmission Network Service Provider* must have separate prices for:
 - (1) *prescribed TUOS services – adjusted locational component*;
 - (2) *prescribed TUOS services – adjusted non-locational component*;
 - (3) *prescribed common transmission services*;
 - (4) *prescribed entry services*; and
 - (5) *prescribed exit services*.
- (b) Prices for recovering the *prescribed TUOS services - adjusted locational component*:

- (1) must be based on demand at times of greatest utilisation of the *transmission network* by *Transmission Customers* and for which *network* investment is most likely to be contemplated;
- (2) subject to subparagraph (3) below, must not change by more than 2% on a *load* weighted average basis for the relevant *region* compared with the previous *regulatory year*; and
- (3) are not subject to the limitation in subparagraph (2):
 - (i) to the extent that the change in prices relate to the adjusted *modified load export charge* as referred to in clause 6A.23.3(b)(2); or
 - (ii) if, since the commencement of the previous *regulatory year*:
 - (A) the *load* at the *connection point* has materially altered;
 - (B) in connection with that alteration, the *Transmission Customer* requested a renegotiation of its *connection agreement* with the *Transmission Network Service Provider*; and
 - (C) the *AER* approved the change.
- (c) If, in the case of an increase in prices for recovering the *prescribed TUOS services - adjusted locational component*, the application of paragraph (b)(2) would result in a shortfall for the *prescribed TUOS services - adjusted locational component*, any shortfall may be recovered by increasing the *prescribed TUOS services - non-locational component* in clause 6A.23.3(e)(3).
- (d) If, in the case of a decrease in prices for recovering the *prescribed TUOS services - adjusted locational component*, the application of paragraph (b)(2) would result in a surplus for the *prescribed TUOS services - adjusted locational component*, any surplus must be offset by decreasing the *prescribed TUOS services - non-locational component* in clause 6A.23.3(e)(3).
- (e) Prices for recovering the *prescribed TUOS services - adjusted non-locational component* must be on a *postage-stamp basis*.
- (f) Prices for recovering *prescribed common transmission services* must be on a *postage-stamp basis*.
- (g) Prices for recovering *prescribed entry services* and *prescribed exit services* must be a fixed annual amount.

6A.24 Pricing methodology

6A.24.1 Pricing methodologies generally

- (a) In making a *transmission determination* under Part E of this Chapter 6A, the AER must include a decision to approve a proposed *pricing methodology* as part of that *transmission determination*, in accordance with that Part.
- (b) A *pricing methodology* is a methodology, formula, process or approach that, when applied by a *Transmission Network Service Provider* (or a *Co-ordinating Network Service Provider* on behalf of *Transmission Network Service Providers* within a region);
 - (1) allocates the *aggregate annual revenue requirement* for *prescribed transmission services* provided by the *Transmission Network Service Provider* to each *category of prescribed transmission services*;
 - (2) provides for the manner and sequence of adjustments to the *annual service revenue requirement*;
 - (3) allocates the *annual service revenue requirement* to *transmission network connection points* (other than *connection points* of any *Market Network Service Provider*); and
 - (4) determines the structure and recovery of prices for each *category of prescribed transmission services* under 6A.23.4(a).
- (b1) In addition to complying with any other requirements under this Chapter 6A, the *pricing methodology* of a *Transmission Network Service Provider* that is the *Co-ordinating Network Service Provider* for a *region* must provide for:
 - (1) the allocation of the AARR for *prescribed transmission services* provided by *Transmission Network Service Providers* within that *region*, including any allocation of the AARR as agreed between *Transmission Network Service Providers* in accordance with clause 6A.29.3;
 - (2) the calculation of *modified load export charges* consistent with clause 6A.29A.2;
 - (3) the allocation of *modified load export charges*:
 - (i) receivable by other *Co-ordinating Network Service Providers* in *interconnected regions*; and
 - (ii) payable to other *Co-ordinating Network Service Providers* in *interconnected regions*,to each *Transmission Network Service Provider* within its *region* under clause 6A.29A.5; and

- (4) the allocation of proceeds from *auctions* receivable by or payable to the *Transmission Network Service Provider* in its *region* as referred to in clause 6A.23.3(b)(1).
- (c) The *pricing methodology* proposed by a *Transmission Network Service Provider* and approved by the *AER* in accordance with Part E of this Chapter 6A must:
 - (1) give effect to and be consistent with the *Pricing Principles for Prescribed Transmission Services*; and
 - (2) comply with the requirements of, and contain or be accompanied by such information as is required by, the *pricing methodology guidelines* made for that purpose under rule 6A.25.
- (d) A *Transmission Network Service Provider* must comply with the *pricing methodology* approved by the *AER* as part of a *transmission determination* that applies to that *Transmission Network Service Provider*, and any other applicable requirements in the *Rules*, when the *Transmission Network Service Provider* is setting the prices that may be charged for the provision of *prescribed transmission services*.
- (d1) Where this Chapter provides that a matter is to be determined in accordance with the *pricing methodology* of a *Transmission Network Service Provider* who is the *Co-ordinating Network Service Provider* for a *region*, then no other *pricing methodology* applies in relation to that matter.
- (e) Subject to clause 6A.24.3, a *pricing methodology* applies for the duration of the relevant *regulatory control period*.
- (f) Subject to rule 6A.15, a *pricing methodology* may not be amended during the *regulatory control period*.

6A.24.2 Publication of pricing methodology and transmission network prices

A *Transmission Network Service Provider* must publish:

- (a) a current copy of its *pricing methodology* on its website;
- (b) if that *Transmission Network Service Provider* is also a *Co-ordinating Network Service Provider*, details of all *modified load export charges* to apply for the following *financial year* in accordance with the *pricing methodology guidelines* by 15 February each year; and
- (c) the prices for each of the *categories of prescribed transmission services* to apply for the following *financial year* by:
 - (1) 15 March each year, if the *regulatory year* which commences after that date begins on the commencement of a *financial year*; or
 - (2) 15 May each year, if the *regulatory year* which commences after that date does not begin on the commencement of a *financial year*.

6A.24.3 Basis for setting prices pending approval of pricing methodology

- (a) This clause 6A.24.3 applies where:
- (1) a *Transmission Network Service Provider* has submitted or resubmitted a proposed *pricing methodology* to the AER under clause 6A.10.1, 6A.11.2 or 6A.12.3;
 - (2) the AER has not made a final decision approving or amending that methodology under rule 6A.13 by a date that is 5 months prior to the commencement of the first *financial year* that a methodology referred to in subparagraph (1) would, if approved, apply (the **first pricing year**); and
 - (3) the *Transmission Network Service Provider* is reasonably required to commence the process of setting prices for the first pricing year.
- (b) Despite clause 6A.24.1(d), a *Transmission Network Service Provider* must set prices for the first pricing year in accordance with:
- (1) in the case where the AER has made a draft decision in which it proposes to approve a proposed *pricing methodology* - that proposed *pricing methodology*;
 - (2) if subparagraph (1) does not apply, the *pricing methodology* most recently approved for that *Transmission Network Service Provider* prior to the proposed *pricing methodology* referred to in subparagraph (a)(1);
 - (3) if there is no previously approved *pricing methodology* for that *Transmission Network Service Provider*, the previous method used by the *Transmission Network Service Provider* to establish prices, however determined, must be used in place of an approved *pricing methodology*.
- (c) Despite the AER subsequently approving a *pricing methodology* for a *Transmission Network Service Provider*:
- (1) the approved *pricing methodology* applies to the setting of prices for the year after the first pricing year and for the remainder of the relevant *regulatory control period*; and
 - (2) the *Transmission Network Service Provider* is not required to adjust, reverse or recompense any amounts to *Transmission Network Users* or their customers in connection with charges for services established pursuant to this clause 6A.24.3.

6A.24.4 Basis for setting prices pending approval of maximum allowed revenue

- (a) This clause 6A.24.4 applies where:

- (1) a *Transmission Network Service Provider* has submitted or resubmitted a *Revenue Proposal* under clause 6A.10.1, 6A.11.2 or 6A.12.3;
 - (2) the *AER* has not made a final decision on that *Revenue Proposal* under rule 6A.13 by a date that is 5 months prior to the commencement of the first *financial year* that a *Revenue Proposal* referred to in subparagraph (1) would, if approved, apply (the **first pricing year**); and
 - (3) the *Transmission Network Service Provider* is reasonably required to commence the process of setting prices for the first pricing year referred to in subparagraph (2)
- (b) Despite any other applicable requirements in the *Rules*, a *Transmission Network Service Provider* may set prices for the first pricing year referred to in clause 6A.24.4(a)(2) in accordance with:
 - (1) in the case where the *AER* has made a draft decision in which it proposes to approve the proposed *maximum allowed revenue* for the first pricing year referred to in clause 6A.24.4(a)(2), that proposed *maximum allowed revenue* amount; or
 - (2) in the case where the *AER* has made a draft decision in which it has refused to approve the proposed *maximum allowed revenue* for the first pricing year referred to in clause 6A.24.4(a)(2), the *maximum allowed revenue* for the first pricing year that the *AER* has proposed for that amount in the draft decision made under clause 6A.12.1.
- (c) For the avoidance of doubt, any *over-recovery amount* or *under-recovery amount* arising from the application of this clause 6A.24.4 is to be treated in accordance with clause 6A.23.3(c)(2)(iii).

6A.25 Pricing methodology guidelines for prescribed transmission services

6A.25.1 Making and amending of pricing methodology guidelines

- (a) The *AER* must, in accordance with the *transmission consultation procedures*, make and *publish* guidelines (the *pricing methodology guidelines*) relating to the preparation by a *Transmission Network Service Provider* of a proposed *pricing methodology*.
- (b) The *pricing methodology guidelines* must give effect to, and be consistent with, the *Pricing Principles for Prescribed Transmission Services*.
- (c) The *AER* must *publish* the first *pricing methodology guidelines* by 31 October 2007 and there must be *pricing methodology guidelines* in force at all times after that date.

- (d) In the event of an inconsistency between the *Rules* and the *pricing methodology guidelines*, the *Rules* prevail to the extent of that inconsistency.
- (e) The *pricing methodology guidelines* are binding on the *AER* and each *Transmission Network Service Provider* to which they apply.

6A.25.2 Contents of pricing methodology guidelines

The *pricing methodology guidelines* must specify or clarify:

- (a) the information that is to accompany a proposed *pricing methodology* being information that is necessary to allow the *AER* to form a view as to whether the proposed methodology is consistent with and gives effect to, the *Pricing Principles for Prescribed Transmission Services* and the requirements of this Part J;
- (b) permitted pricing structures for recovery of the locational component of providing *prescribed TUOS services* under clause 6A.23.4(e), having regard to:
 - (1) the desirability of consistent pricing structures across the *NEM*; and
 - (2) the role of pricing structures in signaling efficient investment decisions and *network* utilisation decisions;
- (c) in relation to prices set on a *postage-stamp basis*, permissible postage stamping structures for the prices for *prescribed common transmission services* and the recovery of the adjusted non-locational component of providing *prescribed TUOS services* having regard to:
 - (1) the desirability of a consistent approach across the *NEM*, particularly for *Transmission Customers* that have operations in multiple *participating jurisdictions*; and
 - (2) the desirability of signaling to actual and potential *Transmission Network Users* efficient investment decisions and *network* utilisation decisions;
- (d) the types of *transmission system assets* that are directly attributable to each *category of prescribed transmission services*, having regard to the desirability of consistency of cost allocation across the *NEM*;
- (e) those parts (if any) of a proposed *pricing methodology* or the information accompanying it, that will not be publicly disclosed without the consent of the *Transmission Network Service Provider*;
- (f) those parts (if any) of a proposed *pricing methodology* or the information accompanying it, that will not be publicly disclosed without the consent of the *Transmission Network Service Provider*; and

- (g) the matters which *Transmission Network Service Providers* that are also *Co-ordinating Network Service Providers* must include in their *pricing methodologies* in accordance with clause 6A.24.1(b1) for:
 - (1) the allocation of the *AARR* for *prescribed transmission services* provided by *Transmission Network Service Providers* within that *region*, including any allocation of the *AARR* as agreed between *Transmission Network Service Providers* in accordance with clause 6A.29.3;
 - (2) the calculation of *modified load export charges* consistent with clause 6A.29A.2; and
 - (3) the allocation of *modified load export charges*:
 - (i) receivable by other *Co-ordinating Network Service Providers* in *interconnected regions*; and
 - (ii) payable to other *Co-ordinating Network Service Providers* in *interconnected regions*,to each *Transmission Network Service Provider* within its *region* under clause 6A.29A.5.

6A.26 Prudent discounts

6A.26.1 Agreements for prudent discounts for prescribed transmission services

- (a) Subject to this clause 6A.26.1, the prices for *prescribed transmission services* that are determined in accordance with the *pricing methodology* of a *Transmission Network Service Provider*, are the maximum prices that a *Transmission Network Service Provider* is entitled to charge for the provision of the relevant *prescribed transmission services*.
- (b) A *Transmission Network Service Provider* may, but is not required to, agree with a *Transmission Customer* (the **beneficiary**) to charge lower prices for *prescribed TUOS services* and *prescribed common transmission services* provided to that beneficiary, than the prices determined in accordance with the provider's *pricing methodology*.
- (c) Where a *Transmission Customer* requests a *Transmission Network Service Provider* to charge that user reduced charges for *prescribed TUOS services* or *prescribed common transmission services* (**reduced charges**), the *Transmission Network Service Provider* must negotiate in good faith;
- (d) Subject to this clause 6A.26.1, a *Transmission Network Service Provider* who agrees to charge a beneficiary reduced charges may recover the difference between the revenue that would be recovered by the application of the maximum prices referred to in paragraph (a) and the reduced charges

(the **discount amount**) from *Transmission Customers* through charges for either or both:

- (1) the *adjusted non-locational component*; and
- (2) *prescribed common transmission services*,

in accordance with the *Co-ordinating Network Service Provider's* or *Transmission Network Service Provider's pricing methodology* (as the case may be).

- (e) A *Transmission Network Service Provider* may recover up to 70 per cent of a discount amount through the charges referred to in subparagraphs (d)(1) and (2).
- (f) A *Transmission Network Service Provider* may recover greater than 70 percent of the discount amount through either or both the charges referred to in subparagraphs (d)(1) and (2) if;
 - (1) the discount amount is no larger than that necessary to prevent the charges referred to in subparagraphs (d)(1) and (2) altering the beneficiary's behaviour to the point of adopting the most attractive alternative in place of the course of action the beneficiary would have adopted if no such charges were levied; and
 - (2) the giving of the discount would not place other customers of the *Transmission Network Service Provider* in a worse position than if the discount was not offered.
- (g) Where for any reason the *Transmission Network Service Provider* does not recover the proportion of a discount amount that the *Transmission Network Service Provider* is entitled to recover from other *Transmission Customers* under this clause in the *financial year* in which the reduced charges apply, the *Transmission Network Service Provider* may recover the difference through charges to *Transmission Customers* for the *adjusted non-locational component* of *prescribed TUOS services* to apply in a subsequent *financial year*, in accordance with the *Transmission Network Service Provider's pricing methodology*.

6A.26.2 Application to AER for approval of proposed prudent discount amounts

- (a) This clause applies where a *Transmission Network Service Provider* has agreed or proposes to agree, to reduced charges in accordance with clause 6A.26.1 and seeks to recover greater than 70 per cent of the discount amount through the charges referred to in clause 6A.26.1(d) to its other *Transmission Customers* (the **proposed recovery amount**).
- (b) A *Transmission Network Service Provider* may apply to the AER for approval to recover the proposed recovery amount.

- (c) A *Transmission Network Service Provider* seeking approval must submit to the *AER* a written application in accordance with any relevant requirements of the *information guidelines* in force under clause 6A.17.2.
- (d) If the *AER* determines that the requirements of clause 6A.26.1(f) are satisfied, the *AER* may approve the recovery of the proposed recovery amount, taking into account the matters referred to in paragraph (i).
- (e) If the *AER* determines that the requirements of clause 6A.26.1(f) are not satisfied, the *AER* may refuse the recovery of the proposed recovery amount, and must set out its reasons.
- (f) If the *AER* does not make a decision referred to in paragraph (d) or (e) within 60 *business days* from the date it receives the *Transmission Network Service Provider's* application and accompanying evidence under paragraph (c), then, on the expiry of that period, the *AER* is taken to have approved the recovery of the proposed recovery amount.
- (g) A *Transmission Network Service Provider* must provide the *AER* with such information as the *AER* requires for the purpose of making a determination under paragraphs (d) or (e) within the time specified by the *AER* in a notice provided to the provider by the *AER* for that purpose.

Consultation

- (h) Before making a determination under paragraph (d) or (e), the *AER* may consult with the relevant *Transmission Network Service Provider* and such other persons as the *AER* considers appropriate, on any matters arising out of an application to recover a proposed recovery amount as the *AER* considers appropriate.

Relevant factors

- (i) In making a determination under paragraph (d) or (e), the *AER* must take into account:
 - (1) the matters and proposals set out in the application referred to in paragraph (c);
 - (2) the requirements of clause 6A.26.1(f); and
 - (3) any other factors the *AER* considers relevant.
- (j) If the *AER* approves or is taken to approve recovery of the proposed recovery amount under paragraph (d) or (f), that approval is valid so long as the agreement between the *Transmission Network Service Provider* and the *Transmission Customer* remains in effect and its terms are not renegotiated, except where the *Transmission Network Service Provider* has provided information in its application that was materially false or misleading.
- (k) Where a *Transmission Network Service Provider* agrees to charge reduced charges in accordance with clause 6A.26.1, and no approval is granted

under this clause 6A.26.2, the *AER* must review the discount amount in the course of making a subsequent *revenue determination* for that provider, and if the recovery of any part of the discount amount does not comply with clause 6A.26.1(f), the *AER* may adjust (with interest) the *total revenue cap* of the *Transmission Network Service Provider* for the following *regulatory control period* in respect of the total amount that has been earned by the *Transmission Network Service Provider* and does not satisfy the requirements under the *Rules*.

6A.27 Billing Process

This rule describes the manner in which *Transmission Network Users* are billed for *prescribed transmission services* and how payments for those services are made.

6A.27.1 Billing for prescribed transmission services

- (a) For each *connection point* on its *transmission networks*, a *Transmission Network Service Provider* must calculate the *transmission service charges* payable by *Transmission Network Users* in accordance with the *transmission service prices* published under clause 6A.24.2.
- (b) A *Transmission Network Service Provider* must issue a bill to *Transmission Network Users* for *prescribed transmission services*.
- (c) Where the billing for a particular *financial year* is based on quantities which are undefined until after the commencement of the *financial year*, charges must be estimated from the previous year's billing quantities with a reconciliation to be made when the actual billing quantities are known and, where the previous year's billing quantities are unavailable or no longer suitable, nominated quantities may be used as agreed between the parties.
- (d) Where charges are to be determined for *prescribed transmission services* from *metering data*, these charges must be based on kW or kWh obtained from the *metering data* managed by *AEMO*.

6A.27.1A Billing of modified load export charges

This rule does not apply to the process of calculating and billing *modified load export charges*, which is regulated under rule 6A.29A.

6A.27.2 Minimum information to be provided in network service bills

- (a) The following is the minimum information that must be provided with a bill for a *connection point* issued by a *Transmission Network Service Provider* directly to a *Transmission Network User*:
 - (1) the *connection point* identifier;
 - (2) the dates on which the *billing period* starts and ends;

- (3) the identifier of the published *transmission service* price from which the *connection point* charges are calculated; and
 - (4) measured quantities, billed quantities, agreed quantities, prices and amounts charged for each component of the total *transmission service* account.
- (b) In addition to the minimum information requirements set out in paragraph (a), a bill for a *connection point* issued by a *Transmission Network Service Provider* directly to a *Transmission Customer* must separately identify, for the total amount levied in relation to *prescribed TUOS services* in the *billing period* for that *connection point* each of the following components:
 - (1) charges for the *adjusted locational component* and the *adjusted non-locational component* of *prescribed TUOS services*; and
 - (2) charges for *prescribed common transmission services*.
- (c) In addition to the minimum information requirements in paragraph (a), a bill for a *connection point* issued by a *Transmission Network Service Provider* directly to a *Distribution Network Service Provider* must separately identify the component of *designated pricing proposal services*, if any, to which each amount charged in the bill relates.

6A.27.3 Obligation to pay charges for prescribed transmission services

A *Transmission Network User* must pay charges for *prescribed transmission services* properly charged to it and billed in accordance with the *pricing methodology* of the relevant *Transmission Network Service Provider* by the date specified in the bill.

6A.27.4 Payments between Transmission Network Service Providers in the same region

- (a) A *Transmission Network Service Provider* must pay other *Transmission Network Service Providers* within the same *region* an amount of revenue equal to that which it is estimated it will collect during the following *regulatory year* or *financial year* (as the case may be), as charges for *prescribed transmission services* for the use of *transmission systems* owned by those other *Transmission Network Service Providers*.
- (b) The amount of any financial transfer under paragraph (a) must be determined by the relevant *Co-ordinating Network Service Provider* and paid in equal monthly instalments.
- (c) **[Deleted]**

6A.27.5 Calculation of financial transfers between Transmission Network Service Providers in the same region

- (a) If the *prescribed transmission use of system* revenue allocation and price and charge calculation under the *pricing methodology* of a *Transmission Network Service Provider* result in the allocation of some of a *Transmission Network Service Provider's* revenue to a *Transmission Customer* in relation to a *connection point* with another *Network Service Provider* in the same *region* then financial transfers between *Network Service Providers* must be made in accordance with paragraph (b).
- (b) Financial transfers referred to in paragraph (a) must be determined by the *Co-ordinating Network Service Provider* for the relevant *region* as a fixed annual amount for the next *financial year*. The *survey period* for this allocation is the most recent full *financial year* for which operating data is available.

6A.28 Prudential Requirements

This rule sets out the arrangements by which *Transmission Network Service Providers* may minimise financial risks associated with investment in *transmission network* assets.

6A.28.1 Prudential Requirements for prescribed transmission services

A *Transmission Network Service Provider* may require a *Transmission Network User* to establish prudential requirements for either or both *connection services* and *transmission use of system services*. These prudential requirements may take the form of, but need not be limited to, capital contributions, pre-payments or financial guarantees.

6A.28.2 Capital contribution or prepayment for a specific asset

Where the *Transmission Network Service Provider* is required to construct specific assets to provide *connection service* or *transmission use of system service* to a *Transmission Network User*, the provider may require that user to make a capital contribution or prepayment for all or part of the cost of the new assets installed and any contribution made must be taken into account in the determination of *transmission service* prices applicable to that user.

6A.28.3 Treatment of past capital contributions

- (a) The treatment of capital contributions for *connection service* and/or *transmission use of system service* made prior to 13 December 1998, by *Transmission Network Users* must be in accordance with any contractual arrangements with the relevant *Transmission Network Service Providers* applicable at that time.
- (b) Where contractual arrangements referred to in paragraph (a) are not in place, the treatment of past capital contributions for *connection service* and/or *transmission use of system service* must be negotiated by the *Transmission*

Network Service Provider and the Transmission Network User and, if a dispute arises and cannot be resolved, the matter must be referred to the AER.

6A.29 Multiple Transmission Network Service Providers

6A.29.1 Multiple Transmission Network Service Providers within a region

- (a) If *prescribed transmission services* within a *region* are provided by more than one *Transmission Network Service Provider*, the appointing *Transmission Network Service Providers* (the **appointing provider**) within that *region* must appoint a *Co-ordinating Network Service Provider* for that *region*. The *Co-ordinating Network Service Provider* is responsible for:
 - (1) the allocation of all relevant *AARR* within that *region*, including any allocation of the *AARR* as agreed between *Transmission Network Service Providers* in accordance with clause 6A.29.3;
 - (2) the calculation of *modified load export charges* and any adjustments to the charges in accordance with the *Rules* payable by *Co-ordinating Network Service Providers* in *interconnected regions*; and
 - (3) the allocation of *modified load export charges* and any adjustments to the charges in accordance with the *Rules* payable or receivable to or from *Co-ordinating Network Service Providers* in *interconnected regions* to each *Transmission Network Service Provider* within its *region*.
- (b) Each *Transmission Network Service Provider* must determine the *AARR* for its own *transmission system* assets which are used to provide *prescribed transmission services* within each *region*.
- (c) To make the allocation referred to in paragraph (a), the *Co-ordinating Network Service Provider* must use the total *AARR* of all *Transmission Network Service Providers* providing *prescribed transmission services* within the relevant *region*.
- (d) The *Co-ordinating Network Service Provider* is responsible for making the allocation referred to in paragraph (a), in accordance with its *pricing methodology*, in relation to *Transmission Network Users' and Transmission Network Service Providers' transmission network connection points* located within the *region* and an appointing provider is not required to address the matters specified in rule 6A.24.1(b)(1) when preparing its *pricing methodology*.
- (e) Each *Transmission Network Service Provider* within a *region* must promptly provide information reasonably requested by the *Co-ordinating Network Service Provider* for that *region* to enable the *Co-ordinating Network Service Provider* to properly perform its functions under this Part J.

- (f) The *Co-ordinating Network Service Provider* must provide sufficient information to an appointing *Transmission Network Service Provider* to enable that provider:
 - (1) to understand the basis for the allocation referred to in paragraphs (a) and (d); and
 - (2) to prepare its *pricing methodology* and replicate the pricing allocation.

6A.29.2 Single Transmission Network Service Provider within a region

If *prescribed transmission services* within a *region* are provided by only one *Transmission Network Service Provider*, that *Transmission Network Service Provider* is responsible for allocation of the AARR within that *region* and must liaise with the *Transmission Network Service Provider* similarly responsible in any other *interconnected regions*.

6A.29.3 Allocation over several regions

- (a) *Transmission Network Service Providers* responsible for the allocation of the AARR within a *region* may agree with one or more other such providers for *interconnected regions* to undertake the allocations of AARR as one allocation over all of those *regions*.
- (b) To make an allocation over several *regions*, the sum of the AARR of all *Transmission Network Service Providers* providing *prescribed transmission services* within those *regions* must be used.

6A.29A Modified load export charges

This rule sets out the arrangements for the calculation, invoicing and payment of *modified load export charges*.

6A.29A.1 Single Transmission Network Service Provider in a Region

For the purposes of this rule if *prescribed transmission services* within a *region* are provided by only one *Transmission Network Service Provider* then references in this rule to a *Co-ordinating Network Service Provider* is to be read as a reference to that *Transmission Network Service Provider*.

6A.29A.2 Calculation of the modified load export charges

- (a) A *Co-ordinating Network Service Provider* for a *region* must calculate the *modified load export charge* payable to it by the *Co-ordinating Network Service Provider* for each *interconnected region* in respect of the following *financial year*, by:
 - (1) calculating the amount that is 50% of the *annual service revenue requirement* for *prescribed TUOS services* for that *financial year* in the calculating *Co-ordinating Network Service Provider's region*;

- (2) adjusting that amount by subtracting any amount estimated to be receivable by *Transmission Network Service Providers* in the calculating *Co-ordinating Network Service Provider's region* as proceeds from *auctions* or any portion of *settlements residue* (as referred to in clause 6A.23.3(b)(1));
 - (3) allocating the adjusted amount calculated under subparagraph (2) to the *connection points* of *Transmission Customers* in its *region* and to *Transmission Network Services Providers interconnected* to its *region* (as if those *connection points* were also *connection points* of *Transmission Customers*) on the basis of their proportionate use of *transmission system assets*. The *MLEC CRNP Methodology* is the only permitted methodology for estimating the proportionate use of the relevant *transmission system assets* for the purposes of this paragraph (3); and
 - (4) determining the *modified load export charge* to be recovered from the relevant *Co-ordinating Network Service Provider* as the amount allocated in accordance with subparagraph (3), to the *connection points* of *Transmission Network Services Providers* in *interconnected regions* that is based on demand at times of greatest utilisation of the *transmission network* and for which *network investment* is most likely to be contemplated.
- (b) The *MLEC CRNP methodology* is the only permitted methodology for estimating the proportionate use of the relevant *transmission system assets* as referred to in subparagraph (a)(1).

6A.29A.3 Calculation of adjustments to the modified load export charge

A *Co-ordinating Network Service Provider* for a *region* must calculate adjustments to the *modified load export charge* amount payable to it by the *Co-ordinating Network Service Provider* for each *interconnected region* in respect of the following *financial year*, in accordance with clause 6A.23.3.

6A.29A.4 Billing the modified load export charge

- (a) The *Co-ordinating Network Service Provider* for a *region* must issue a monthly bill in accordance with paragraph (b) to the *Co-ordinating Network Service Provider* for each *interconnected region* for the *modified load export charge* (including any adjustment made to it in accordance with the *Rules*) payable to it by that *Co-ordinating Network Service Provider*.
- (b) The bill referred to in paragraph (a) must:
 - (1) set out the total annual estimated *modified load export charge* payable by the *Co-ordinating Network Service Provider*;
 - (2) contain reasonable details of the calculation of the *modified load export charge*; and

- (3) be issued as equal monthly instalments.
- (c) A *Co-ordinating Network Service Provider* must promptly pay any amounts properly calculated as owing by it and billed under paragraph (b).
- (d) Subject to paragraph (b), *Co-ordinating Network Service Providers* may agree to such terms and conditions for billing as they consider appropriate.
- (e) Each *Transmission Network Service Provider* whose *transmission network* is located in the *region* of the *Co-ordinating Network Service Provider* referred to in clause 6A.29A.2 must provide that *Co-ordinating Network Service Provider* with such information as the *Co-ordinating Network Service Provider* reasonably requires to estimate *modified load export charges*.

6A.29A.5 Allocation and billing process where multiple Transmission Network Service Providers in a Region

Where there is more than one *Transmission Network Service Provider* in a *region*:

- (a) the *Co-ordinating Network Service Provider* for that *region* must allocate any amounts receivable by or payable to it for *modified load export charges* under this rule to each *Transmission Network Service Provider* in its *region* in accordance with its *pricing methodology*;
- (b) the *Co-ordinating Network Service Provider* must issue a bill to each *Transmission Network Service Provider* in its *region* the net amount of *modified load export charges* allocated as payable or receivable by the *Co-ordinating Network Service Provider* under paragraph (a) including reasonable details of the calculation of those amounts;
- (c) a *Transmission Network Service Provider* must pay any amounts properly charged and billed to it by a *Co-ordinating Network Service Provider* under paragraph (b); and
- (d) the *Co-ordinating Network Service Provider* must pay any amounts properly allocated as payable to a *Transmission Network Service Provider* under paragraph (b).

Part K Commercial arbitration for disputes about terms and conditions of access for prescribed and negotiated transmission services

[Deleted]

Part L Annual Benchmarking Report

6A.31 Annual Benchmarking Report

- (a) The AER must prepare and *publish* a *network service provider performance report* (an *annual benchmarking report*) the purpose of which is to describe, in reasonably plain language, the relative efficiency of each *Transmission Network Service Provider* in providing *prescribed transmission services* over a 12 month period.
- (b) Clause 8.7.4 (excluding clause 8.7.4(a)) applies in respect of the preparation of an *annual benchmarking report*.
- (c) Subject to paragraphs (d) and (e), the AER must *publish* an *annual benchmarking report* at least every 12 months.
- (d) The first *annual benchmarking report* must be *published* by 30 September 2014.
- (e) The second *annual benchmarking report* must be *published* by 30 November 2015.

Schedule 6A.1 Contents of Revenue Proposals

S6A.1.1 Information and matters relating to capital expenditure

A *Revenue Proposal* must contain at least the following information and matters relating to capital expenditure:

- (1) a forecast of the required capital expenditure that complies with the requirements of clause 6A.6.7 and identifies the forecast capital expenditure by reference to well accepted categories such as:
 - (i) asset class (eg. *transmission lines*, *substations* etc); or
 - (ii) category driver (eg. *regulatory obligations or requirements*, replacement, *reliability*, net market benefit, business support etc),and identifies, in respect of proposed material assets:
 - (iii) the location of the proposed asset;
 - (iv) the anticipated or known cost of the proposed asset; and

- (v) the categories of *transmission services* which are to be provided by the proposed asset;
- (2) the methodology used for developing the capital expenditure forecast;
- (3) the forecasts of load growth relied upon to derive the capital expenditure forecasts and the methodology used for developing those forecasts of load growth;
- (4) the key assumptions that underlie the capital expenditure forecast;
- (5) a certification of the reasonableness of the key assumptions by the directors of the *Transmission Network Service Provider*;
- (6) capital expenditure for each of the past *regulatory years* of the previous and current *regulatory control period*, and the expected capital expenditure for each of the last two *regulatory years* of the current *regulatory control period*, categorised in the same way as for the capital expenditure forecast and separately identifying for each such *regulatory year*:
 - (i) margins paid or expected to be paid by the *Transmission Network Service Provider* in circumstances where those margins are referable to arrangements that do not reflect arm's length terms; and
 - (ii) expenditure that should have been treated as operating expenditure in accordance with the policy submitted under paragraph (9) for that *regulatory year*;
- (7) an explanation of any significant variations in the forecast capital expenditure from historical capital expenditure;
- (8) any *non-network options* considered by the *Transmission Network Service Provider*; and
- (9) the policy that the *Transmission Network Service Provider* applies in capitalising operating expenditure.

S6A.1.2 Information and matters relating to operating expenditure

A *Revenue Proposal* must contain at least the following information and matters relating to operating expenditure:

- (1) a forecast of the required operating expenditure that complies with the requirements of clause 6A.6.6 and identifies the forecast operating expenditure by reference to well accepted categories such as:
 - (i) particular programs; or
 - (ii) types of operating expenditure (eg. maintenance, payroll, materials etc),

and identifies in respect of each such category:

- (iii) to what extent that forecast expenditure is on costs that are fixed and to what extent it is on costs that are variable; and
 - (iv) the categories of *transmission services* to which that forecast expenditure relates;
- (2) the methodology used for developing the operating expenditure forecast;
- (3) the forecasts of key variables relied upon to derive the operating expenditure forecast and the methodology used for developing those forecasts of key variables;
- (4) the methodology used for determining the cost associated with planned maintenance programs designed to improve the performance of the relevant *transmission system* for the purposes of any *service target performance incentive scheme* that is to apply to the *Transmission Network Service Provider* in respect of the relevant *regulatory control period*;
- (5) the key assumptions that underlie the operating expenditure forecast;
- (6) a certification of the reasonableness of the key assumptions by the directors of the *Transmission Network Service Provider*;
- (7) operating expenditure for each of the first three *regulatory years* of the current *regulatory control period*, and the expected operating expenditure for each of the last two *regulatory years* of that *regulatory control period*, categorised in the same way as for the operating expenditure forecast;
- (8) an explanation of any significant variations in the forecast operating expenditure from historical operating expenditure; and
- (9) any *non-network options* considered by the *Transmission Network Service Provider*.

S6A.1.3 Additional information and matters

A *Revenue Proposal* must contain at least the following additional information and matters:

- (1) an identification and explanation of any significant interactions between the forecast capital expenditure and forecast operating expenditure programs;
- (2) the values that the *Transmission Network Service Provider* proposes are to be attributed to the *performance incentive scheme parameters* for the purposes of the application to the *Transmission Network Service Provider* of any *service target performance incentive scheme* that has been specified in a *framework and approach paper* and that applies in respect of the relevant *regulatory control period*, and an explanation of how the values proposed to be attributed to those parameters comply with any requirements relating to them set out in that scheme;

- (3) the values that the provider proposes are to be attributed to the *efficiency benefit sharing scheme parameters* for the purposes of the application to the *Transmission Network Service Provider* of any *efficiency benefit sharing scheme* that has been specified in a *framework and approach paper* that applies in respect of the relevant *regulatory control period*, and an explanation of how the values proposed to be attributed to those parameters comply with any relevant requirements set out in that scheme;
- (3A) a description, including relevant explanatory material, of how the *Transmission Network Service Provider* proposes any *capital expenditure sharing scheme* that has been specified in a *framework and approach paper* that applies in respect of the forthcoming *revenue determination* should apply to it;
- (3B) a description, including relevant explanatory material, of how the *Transmission Network Service Provider* proposes any *small-scale incentive scheme* that has been specified in a *framework and approach paper* that applies in respect of the forthcoming *revenue determination* should apply to it;
- (4) the provider's calculation of:
 - (i) the estimated *total revenue cap* for it for the relevant *regulatory control period*; and
 - (ii) the *maximum allowed revenue* for it for each *regulatory year* of the relevant *regulatory control period*,using the *post-tax revenue model* referred to in rule 6A.5, together with:
 - (iii) details of all amounts, values and other inputs used by the *Transmission Network Service Provider* for that purpose;
 - (iv) a demonstration that any such amounts, values and other inputs comply with the relevant requirements of Part C of Chapter 6A; and
 - (v) an explanation of the calculation of the amounts referred to in subparagraphs (i) and (ii) and of the amounts, values and inputs referred to in subparagraph (iii);
 - (vi) where one of those amounts, values or inputs is the *allowed rate of return*, details of any departure from the *Rate of Return Guidelines* in calculating that *allowed rate of return* and the reasons for that departure;
- (4A) the *Transmission Network Service Provider's* calculation of the proposed return on equity, return on debt and *allowed rate of return*, for each *regulatory year* of the *regulatory control period*, in accordance with clause 6A.6.2, including any departure from the methodologies set out in the *Rate of Return Guidelines* and the reasons for that departure;

- (4B) if the *Transmission Network Service Provider* proposes that the return on debt for a *regulatory year* of the *regulatory control period* is to be determined using the methodology referred to in clause 6A.6.2(i)(2), the formula it proposes should be applied in accordance with clause 6A.6.2(l);
- (4C) the *Transmission Network Service Provider's* proposed value of imputation credits as referred to in clause 6A.6.4;
- (5) the provider's calculation of the regulatory asset base for the relevant *transmission system* for each *regulatory year* of the relevant *regulatory control period* using the *roll forward model* referred to in clause 6A.6.1, together with:
 - (i) details of all amounts, values and other inputs used by the *Transmission Network Service Provider* for that purpose;
 - (ii) a demonstration that any such amounts, values and other inputs comply with the relevant requirements of Part C of Chapter 6A; and
 - (iii) an explanation of the calculation of the regulatory asset base for each *regulatory year* of the relevant *regulatory control period* and of the amounts, values and inputs referred to in subparagraph (i);
- (6) **[Deleted]**;
- (7) the depreciation schedules nominated by the *Transmission Network Service Provider* for the purposes of clause 6A.6.3, which categorise the relevant assets for these purposes by reference to well accepted categories such as:
 - (i) asset class (eg *transmission lines* and *substations*); or
 - (ii) category driver (eg *regulatory obligations or requirements*, replacement, *reliability*, net market benefit, and business support),and also by location, together with:
 - (iii) details of all amounts, values and other inputs used by the *Transmission Network Service Provider* to compile those depreciation schedules;
 - (iv) a demonstration that those depreciation schedules conform with the requirements set out in clause 6A.6.3(b); and
 - (v) an explanation of the calculation of the amounts, values and inputs referred to in subparagraph (iii);
- (8) the X factors nominated by the *Transmission Network Service Provider* for each *regulatory year* of the relevant *regulatory control period* for the purposes of clause 6A.6.8(a), together with a demonstration that those X factors comply with the requirements set out in clause 6A.6.8(b) of the *Rules*;

- (9) the commencement and length of the *regulatory control period* proposed by the *Transmission Network Service Provider*; and
- (10) if the *Transmission Network Service Provider* is seeking a determination by the AER that a *proposed contingent project* is a *contingent project* for the purposes of the relevant *revenue determination*:
 - (i) a description of the *proposed contingent project*, including reasons why the *Transmission Network Service Provider* considers the project should be accepted as a *contingent project* for the *regulatory control period*;
 - (ii) a forecast of the capital expenditure which the *Transmission Network Service Provider* considers is reasonably required for the purpose of undertaking the *proposed contingent project*;
 - (iii) the methodology used for developing that forecast and the key assumptions that underlie it;
 - (iv) information that demonstrates that the undertaking of the *proposed contingent project* is reasonably required in order to achieve one or more of the *capital expenditure objectives*;
 - (v) information that demonstrates that the *proposed contingent capital expenditure* for the *proposed contingent project* complies with the requirements set out in clause 6A.8.1(b)(2) ; and
 - (vi) the *trigger events* which are proposed in relation to the *proposed contingent project* and an explanation of how each of those conditions or events addresses the matters referred to in clause 6A.8.1(c).

Schedule 6A.2 Regulatory Asset Base

S6A.2.1 Establishment of opening regulatory asset base for a regulatory control period

(a) Application of this clause

This clause S6A.2.1:

- (1) applies to the establishment of the value of the regulatory asset base for a *transmission system* as at the beginning of a *regulatory control period* on the roll forward of the regulatory asset base to that *regulatory control period* from the previous *regulatory control period*; and
- (2) also applies to the establishment of the value of the regulatory asset base for a *transmission system* as at the beginning of a *regulatory control period* where the *transmission system* was not immediately before that time the subject of a *revenue determination*.

(b) **Roll forward model to comply with this clause**

The *roll forward model* referred to in clause 6A.6.1 must provide for those values to be established in accordance with the requirements of clauses S6A.2.1, S6A.2.2 and S6A.2.3.

(c) **Transmission systems of specific providers**

- (1) In the case of a *transmission system* owned, controlled or operated by one of the following *Transmission Network Service Providers* as at 16 February 2006, the value of the regulatory asset base for that *transmission system* as at the beginning of that first *regulatory year* must be determined by rolling forward the regulatory asset base for that *transmission system*, as set out in the table below, in accordance with this schedule:

Transmission Network Service Provider	Regulatory Asset Base (\$m)
EnergyAustralia	635.6 (as at 1 July 2004)
TransGrid	3,012.76 (as at 1 July 2004)
Powerlink	As per transitional revenue determination in accordance with clause 11.6.12
ElectraNet	823.75 (as at 1 January 2003)
Transend	603.6 (as at 31 December 2003)
SP AusNet	1,835.60 (as at 1 January 2003)
Murraylink Transmission Company	102.96 (as at 1 October 2003)
Directlink	116.68 (as at 1 July 2005)

- (2) The values in the table above are to be adjusted for the difference between:
- (i) any estimated capital expenditure that is included in those values for any part of a previous *regulatory control period*; and
 - (ii) the actual capital expenditure for that part of the previous *regulatory control period*.

This adjustment must also remove any benefit or penalty associated with any difference between the estimated and actual capital expenditure.

(d) **Other transmission systems**

- (1) This paragraph (d) applies to a *transmission system* not referred to in paragraphs (c) or (e), when *prescribed transmission services* that are provided by means of, or in connection with, that system are to be regulated under a *revenue determination*.
- (2) The value of the regulatory asset base for that *transmission system* as at the beginning of the first *regulatory year* of the first *regulatory control period* for the relevant *Transmission Network Service Provider* is the prudent and efficient value of the assets that are used by the *Transmission Network Service Provider* to provide those *prescribed transmission services* (but only to the extent that they are used to provide such services), as determined by the *AER*. In determining this value, the *AER* must have regard to the matters referred to in clause S6A.2.2.
- (3) The value of the regulatory asset base for that *transmission system* as at the beginning of the first *regulatory year* of any subsequent *regulatory control period* must be determined by rolling forward the value of the regulatory asset base for that *transmission system* as at the beginning of the first *regulatory year* of the first *regulatory control period* in accordance with this schedule.

(e) Former Market Network Services

- (1) This paragraph (e) applies to a *transmission system* where any services provided by means of, or in connection with, that *transmission system* are determined to be *prescribed transmission services* under clause 2.5.2(c).
- (2) The value of the regulatory asset base for that *transmission system*, as at the beginning of the first *regulatory year* of the first *regulatory control period* for which those services are to be regulated under a *revenue determination*, is the amount that is determined by the *AER* as the lesser of:
 - (i) the prudent and efficient value of the assets that are used by the relevant *Transmission Network Service Provider* to provide those prescribed services (but only to the extent they are used to provide such services), such value being determined by the *AER* having regard to the matters referred to in clause S6A.2.2; and
 - (ii) the sum of:
 - (A) the net present value of the revenue that it is expected would be earned by the *Transmission Network Service Provider* from the provision of those services, over the remaining life of the assets that are used by the provider to provide those services, if those services had not been determined to be *prescribed transmission services*; and

- (B) to the extent that such market benefit is not included in the expected revenue referred to in clause S6A.2.1(e)(2)(ii)(A), the net present value of the market benefit to *Registered Participants* of the services being determined to be *prescribed transmission services* compared to being continued to be treated as services that are not *prescribed transmission services*,

reduced by the net present value of the total operating expenditure over the remaining life of the *transmission system* which the AER considers to be reasonably required in order to achieve the *operating expenditure objectives*.

For the purposes of clause S6A.2.1(e)(2)(ii)(B), the net present value of the market benefit is the present value of the market benefit less the present value of costs, as those terms are defined for the purposes of the *regulatory investment test for distribution* or *regulatory investment test for transmission* (as the case may be).

- (3) The value of the regulatory asset base for that *transmission system* as at the beginning of the first *regulatory year* of any subsequent *regulatory control period* must be determined by rolling forward the value of the regulatory asset base for that *transmission system* as at the beginning of the first *regulatory year* of the first *regulatory control period* in accordance with this schedule.

(f) **Method of adjustment of value of regulatory asset base**

Except as otherwise provided in paragraph (c), (d) or (e) and subject to paragraph (g), the value of the regulatory asset base for a *transmission system* as at the beginning of the first *regulatory year* of a *regulatory control period* must be calculated by adjusting the value (the **previous value**) of the regulatory asset base for that *transmission system* as at the beginning of the first *regulatory year* of the immediately preceding *regulatory control period* (the **previous control period**) as follows:

- (1) The previous value of the regulatory asset base must be:
- (i) increased by the amount of all capital expenditure incurred during the previous control period, including any capital expenditure determined for that period under clause 6A.8.2(e)(1)(i) in relation to *contingent projects* where the *revenue determination* has been amended by the AER in accordance with clause 6A.8.2(h) (regardless of whether such capital expenditure is above or below the forecast capital expenditure for the period that is adopted for the purposes of the *transmission determination* (if any) for that period); and
 - (ii) reduced by the amount of any capital expenditure that has been recovered by way of a pass through under clause 6A.7.2 or clause 6A.7.3 where the amount of that capital expenditure

would otherwise have been included in the value of the regulatory asset base.

- (2) The previous value of the regulatory asset base must be increased by the amount of the estimated capital expenditure approved by the *AER* for any part of the previous control period for which actual capital expenditure is not available, including any capital expenditure in relation to *contingent projects* where the *total revenue cap* has been amended by the *AER* in accordance with clause 6A.8.2(h).
- (3) The previous value of the regulatory asset base must be adjusted for the difference between:
 - (i) the estimated capital expenditure for any part of a previous *regulatory control period* where that estimated capital expenditure has been included in that value; and
 - (ii) the actual capital expenditure for that part of the previous *regulatory control period*.

This adjustment must also remove any benefit or penalty associated with any difference between the estimated and actual capital expenditure.

- (4) The previous value of the regulatory asset base must only be increased by actual or estimated capital expenditure to the extent that all such capital expenditure is properly allocated to the provision of *prescribed transmission services* in accordance with the *Cost Allocation Methodology* for the relevant *Transmission Network Service Provider*.
- (5) The previous value of the regulatory asset base must be reduced by the amount of depreciation of the regulatory asset base during the previous control period, calculated in accordance with the rates and methodologies allowed in the *transmission determination* (if any) for that period.
- (6) The previous value of the regulatory asset base must be reduced by the disposal value of any asset where that asset has been disposed of during the previous control period.
- (7) The previous value of the regulatory asset base must be reduced by the value of any asset where the *AER* determines that the value of that asset should be removed in accordance with clause S6A.2.3.
- (8) Without prejudice to the application of any other provision of this paragraph (f), the previous value of the regulatory asset base may be increased by the inclusion of:
 - (i) past capital expenditure that has not been included in that value because that capital expenditure was incurred in connection with the provision of services that are not *prescribed transmission services*, and in these circumstances, such capital expenditure

must only be included to the extent the asset in respect of which that capital expenditure was incurred is subsequently used for the provision of *prescribed transmission services*; and

- (ii) past capital expenditure that has not been included in that value, but only to the extent that such past capital expenditure:
 - (A) relates to an asset that is used for the provision of *prescribed transmission services*;
 - (B) is considered by the *AER* to be reasonably required in order to achieve one or more of the *capital expenditure objectives*;
 - (C) is properly allocated to *prescribed transmission services* in accordance with the principles and policies set out in the *Cost Allocation Methodology* for the relevant *Transmission Network Service Provider*; and
 - (D) has not otherwise been recovered.
- (g) The previous value of the regulatory asset base must be reduced by any amount determined by the *AER* in accordance with clause S6A.2.2A(f), (i) or (j).

S6A.2.2 Prudency and efficiency of capital expenditure

In determining the prudency or efficiency of capital expenditure under clause S6A.2.1(d)(2) or S6A.2.1(e)(2), the *AER* must have regard to:

- (1) the need to provide a reasonable opportunity for the relevant *Transmission Network Service Provider* to recover the efficient costs of complying with all applicable *regulatory obligations or requirements* associated with the provision of *prescribed transmission services*;
- (2) the need to provide effective incentives to the *Transmission Network Service Provider* to promote economic efficiency in the provision of *prescribed transmission services*;
- (3) whether the relevant project in respect of which capital expenditure was made was evaluated against, and satisfied, the *regulatory investment test for distribution* or *regulatory investment test for transmission* (as the case may be);
- (4) whether the *Transmission Network Service Provider* undertook the capital expenditure in a manner consistent with good business practice and so as to practicably achieve the lowest sustainable cost of delivering the *prescribed transmission services* to be provided as a consequence of that capital expenditure;
- (5) the desirability of minimising investment uncertainty for the *Transmission Network Service Provider*; and

- (6) the need to provide incentives to the *Transmission Network Service Provider* to avoid undertaking inefficient capital expenditure.

In determining the prudence or efficiency of capital expenditure the *AER* must only take into account information and analysis that the provider could reasonably be expected to have considered or undertaken at the time that it undertook the relevant capital expenditure.

S6A.2.2A Reduction for inefficient past capital expenditure

- (a) Prior to making a decision on the regulatory asset base for a *transmission system* as required by clause 6A.14.1(5E), the *AER* may determine under this clause S6A.2.2A that the amount of capital expenditure as a result of which the previous value of the regulatory asset base would otherwise be increased in accordance with clause S6A.2.1(f) should be reduced.
 - (a1) For the purposes of this clause S6A.2.2A, "**review period**" means:
 - (1) the previous control period (excluding the last two *regulatory years* of that previous control period); and
 - (2) the last two *regulatory years* of the *regulatory control period* preceding the previous control period.
 - (b) The *AER* may only make a determination under paragraph (a) if any of the following requirements is satisfied:
 - (1) the requirement set out in paragraph (c) (the *overspending requirement*);
 - (2) the requirement set out in paragraph (d) (the *margin requirement*); or
 - (3) the requirement set out in paragraph (e) (the *capitalisation requirement*).
 - (c) The *overspending requirement* is satisfied where the sum of all capital expenditure incurred during the review period exceeds the sum of:
 - (1) the forecast capital expenditure accepted or substituted by the *AER* for the review period as such forecast capital expenditure has been adjusted in accordance with clauses 6A.7.1(f) and 6A.8.2(h); and
 - (2) any capital expenditure that is recovered by way of such part of an *approved pass through amount*, or of a *network support pass through amount*, as is permitted to be passed through to *Transmission Network Users* during the review period less any capital expenditure that is included in a *negative pass through amount*, or in a *network support pass through amount*, that is required to be passed through to *Transmission Network Users* during the review period.
 - (d) The *margin requirement* is satisfied where the amount of the capital expenditure as a result of which the previous value of the regulatory asset

base would otherwise be increased in accordance with clause S6A.2.1(f) includes capital expenditure that represents a margin paid by the *Transmission Network Service Provider* in circumstances where the margin is referable to arrangements that, in the opinion of the *AER*, do not reflect arm's length terms.

- (e) The *capitalisation requirement* is satisfied where the amount of the capital expenditure as a result of which the previous value of the regulatory asset base would otherwise be increased in accordance with clause S6A.2.1(f) includes expenditure that, under the *Transmission Network Service Provider's* applicable capitalisation policy submitted to the *AER* as part of its *Revenue Proposal*, should have been treated as operating expenditure.
- (f) Where the *overspending requirement* is satisfied, and subject to paragraphs (g) and (h), the *AER* may determine that the amount of the capital expenditure as a result of which the previous value of the regulatory asset base would otherwise be increased in accordance with clause S6A.2.1(f) should be reduced by such amount as the *AER* is satisfied corresponds to capital expenditure incurred during the review period that does not reasonably reflect the *capital expenditure criteria*.
- (g) The amount determined by the *AER* under paragraph (f):
 - (1) must not be greater than the amount calculated in accordance with paragraph (c);
 - (2) must be determined in a manner that is consistent with the *capital expenditure incentive objective*, and
 - (3) must be determined taking into account the *Capital Expenditure Incentive Guidelines*.
- (h) In making a determination under paragraph (f), the *AER* must:
 - (1) have regard to the *capital expenditure factors*; and
 - (2) only take into account information and analysis that the *Transmission Network Service Provider* could reasonably be expected to have considered or undertaken at the time that it undertook the relevant capital expenditure.
- (i) Where the *margin requirement* is satisfied, and subject to paragraph (k), the *AER* may determine that the amount of the capital expenditure as a result of which the previous value of the regulatory asset base would otherwise be increased in accordance with clause S6A.2.1(f) should be reduced by such of the margin referred to in paragraph (d) as the *AER* is reasonably satisfied would not have been paid if the arrangements to which the margin is referable had been on arm's length terms.
- (j) Where the *capitalisation requirement* is satisfied, and subject to paragraph (k), the *AER* may determine that the amount of the capital expenditure as a result of which the previous value of the regulatory asset base would

otherwise be increased in accordance with clause S6A.2.1(f) should be reduced by any or all of the amount of expenditure referred to in paragraph (e) which should have been treated as operating expenditure.

- (k) A determination made under paragraph (i) or (j) must be consistent with the *capital expenditure incentive objective* and, in making such a determination, the AER must take into account the *Capital Expenditure Incentive Guidelines*.
- (l) Nothing in this clause S6A.2.2A is to be taken to preclude the AER from:
 - (1) requiring a *Transmission Network Service Provider* to provide such information; or
 - (2) from undertaking such analysis,

as the AER considers appropriate to enable it to make a statement, with supporting reasons, as referred to in clause 6A.14.2(1).

S6A.2.2B Depreciation

- (a) Pursuant to clause 6A.14.1(5D), the AER must decide, for a draft decision under rule 6A.12 or a final decision under rule 6A.13, whether depreciation for establishing the regulatory asset base for a *transmission system* as at the commencement of the following *regulatory control period* is to be based on actual or forecast capital expenditure.
- (b) The decision referred to in paragraph (a) must be consistent with the *capital expenditure incentive objective*.
- (c) In making the decision referred to in paragraph (a), the AER must have regard to:
 - (1) the incentives that the *Transmission Network Service Provider* has in relation to undertaking efficient capital expenditure, including as a result of the application of any incentive scheme or any other incentives under the *Rules*;
 - (2) the substitution possibilities between assets with relatively short economic lives and assets with relatively long economic lives and the relative benefits of such asset types;
 - (3) the extent to which any capital expenditure incurred by the *Transmission Network Service Provider* has exceeded the corresponding amount of forecast capital expenditure accepted or substituted by the AER and the amount of that excess expenditure which is not efficient;
 - (4) the *Capital Expenditure Incentive Guidelines*; and
 - (5) the *capital expenditure factors*.

S6A.2.3 Removal of assets from regulatory asset base

- (a) For the purposes of rolling forward the regulatory asset base for a *transmission system* as described in clause 6A.6.1 and this schedule and subject to paragraph (c), the *AER* may only determine to remove, from the regulatory asset base for a *transmission system*, the value of an asset (or group of assets):
- (1) to the extent that:
 - (i) the asset (or group of assets) is dedicated to one *Transmission Network User* (not being a *Distribution Network Service Provider*) or a small group of *Transmission Network Users*; and
 - (ii) the value of the asset (or group of assets), as included in the value of that regulatory asset base as at the beginning of the first *regulatory year* of the current *regulatory control period*, exceeds the *indexed amount*, as at the time of the *AER's* determination, of \$10 million;
 - (2) if the *AER* determines that the asset (or group of assets) is no longer contributing to the provision of *prescribed transmission services*; and
 - (3) if the *AER* determines that the relevant *Transmission Network Service Provider* has not adequately sought to manage the risk of that asset (or that group of assets) no longer contributing to the provision of *prescribed transmission services* by:
 - (i) seeking to negotiate the payment of a lower price by the relevant *Transmission Network Users* for those *prescribed transmission services* in accordance with the *Rules*; or
 - (ii) in the case of assets committed to be constructed on or after 16 February 2006, seeking to enter into arrangements which provide for a reasonable allocation of the risks of the value of that asset (or that group of assets) no longer contributing to the provision of *prescribed transmission services*.
- For the purposes of clause S6A.2.3(a)(3)(ii), an asset is, and is only, to be taken to be committed to be constructed if it satisfies the criteria which a project needs to satisfy to be a "committed project" for the purposes of the *regulatory investment test for distribution* or *regulatory investment test for transmission* (as the case may be).
- (b) The *AER* may determine a separate amount which is to be included in the *annual building block revenue requirement* for a *Transmission Network Service Provider* for each *regulatory year* of a *regulatory control period* so as to compensate the *Transmission Network Service Provider* for the risk of the value of assets being removed from the regulatory asset base for the relevant *transmission system*, but only if it is satisfied that:

- (1) the risk is not otherwise addressed through another provision of the *Rules*;
 - (2) the *Transmission Network Service Provider* has taken all the steps that a prudent *Transmission Network Service Provider* would take to manage the risk; and
 - (3) the *total revenue cap* for the *Transmission Network Service Provider* for that *regulatory control period* does not adequately reflect risks that cannot be reasonably managed.
- (c) Nothing in paragraph (a) is to be taken to limit the application of clause S6A.2.2A.

S6A.2.4 Roll forward of regulatory asset base within the same regulatory control period

(a) **Application of this clause**

This clause S6A.2.4 applies to the establishment of the value of the regulatory asset base for a *transmission system* as at the beginning of one *regulatory year* in a *regulatory control period* on the roll forward of the regulatory asset base to that *regulatory year* from the immediately preceding *regulatory year* (if any) in that *regulatory control period*.

(b) **Roll forward model to comply with this clause**

The *roll forward model* referred to in clause 6A.6.1 must provide for that value to be established in accordance with the requirements of this clause S6A.2.4.

(c) **Method of adjustment of value of regulatory asset base**

The value of the regulatory asset base for a *transmission system* as at the beginning of the second or a subsequent year (**the later year**) in a *regulatory control period* must be calculated by adjusting the value (the **previous value**) of the regulatory asset base for that *transmission system* as at the beginning of the immediately preceding *regulatory year* (the **previous year**) in that *regulatory control period* as follows:

- (1) The previous value of the regulatory asset base must be increased by the amount of forecast capital expenditure accepted or substituted by the *AER* for the previous year in accordance with clause 6A.6.7(c) or clauses 6A.13.2(b)(4) and (5) (as the case may be).
- (2) The previous value of the regulatory asset base must be reduced by the amount of depreciation included in the *annual building block revenue requirement* for the previous year.
- (3) The previous value of the regulatory asset base must be reduced by the disposal value of any asset included in that value where the asset is forecast to be disposed of during the previous year.

- (4) The previous value of the regulatory asset base must be increased by an amount necessary to maintain the real value of the regulatory asset base as at the beginning of the later year by adjusting that value for inflation.

(d) **Allowance for working capital**

If the *AER* determines that it is appropriate to do so, it may include an allowance for working capital in the regulatory asset base for a *transmission system* which is rolled forward in accordance with this clause S6A.2.4.

Schedule 6A.3 CRNP methodology and modified CRNP methodology

S6A.3.1 Meaning of optimised replacement cost

For the purposes of this schedule 6A.3, references to “optimised replacement cost” include an accepted equivalent to optimised replacement cost that is referable to values contained in the accounts of the *Transmission Network Service Provider*.

S6A.3.2 CRNP methodology

CRNP Methodology (or *cost reflective network pricing*) is an allocation process that involves the following steps:

- (1) Attributing network ‘costs’ to *transmission system* assets: the locational component of the *ASRR* allocated to *prescribed TUOS services* is allocated to each asset used to provide *prescribed TUOS services* based on the ratio of the optimised replacement cost of that asset, to the optimised replacement cost of all *transmission system* assets used to provide *prescribed use of system services*. The allocation to each *transmission system* asset is the **‘locational network asset cost’**.
- (2) Determining the baseline allocation of *generation to loads* using a ‘fault contribution matrix’.
- (3) Determining the allocation of dispatched *generation to loads* over a range of actual operating conditions from the previous *financial year*. The range of operating scenarios is chosen so as to include the conditions that result in most stress on the *transmission network* and for which *network* investment may be contemplated. For each operating scenario selected:
 - (i) a constrained allocation of *generation to loads* matrix must be developed, in which *generation* is allocated to serving *loads* on the basis of the fault contribution matrix;
 - (ii) load flow analysis techniques are used to solve for *network* flows and to calculate the sensitivity of flows on each *network element* resulting from incremental changes in each *load*;

- (iii) the sensitivities are weighted by *load* to derive a ‘flow component’ magnitude in each *network* element due to each *load* for that hour;
- (iv) the relative utilisation of each *network* element by each *load* is calculated from the ‘flow component’ magnitudes, using only the flow components in the direction of the prevailing line flow.
- (4) When all the selected operating scenarios have been assessed, allocating the individual locational *network* asset costs to *loads* on a pro rata basis using the maximum ‘flow component’ that each *load* has imposed on each *network* asset across the range of operating conditions considered.
- (5) Summing the individual locational *network* asset costs allocated to each *load* to give the total amounts allocated to that *load*.

S6A.3.3 Modified CRNP methodology

Modified CRNP methodology is an allocation process that involves replacing step 1 of the CRNP methodology referred to in clause S6A.3.2(1) with the following 3 steps:

- (1) Allocating the *ASRR* allocated to *prescribed use of system services* to each *transmission system* asset used to provide *prescribed TUOS services* based on the ratio of the optimised replacement cost of the that asset to the optimised replacement cost of all *transmission system* assets used to provide *prescribed TUOS services*. The amount so allocated to each asset is the asset’s gross network asset cost.
- (2) Adjusting individual gross *network* asset costs: the individual gross *network* asset costs determined in subparagraph (1) must each be multiplied by a factor (between 0 and 1) that depends on the utilisation of each asset. The resulting amount for each asset is the locational network asset cost while the remainder is the non-locational network asset cost.
- (3) Determining the non-locational component: the sum of the non-locational *network* asset cost represents the non-locational component of the *ASRR* for *prescribed TUOS services*.

Schedule 6A.4 Application of this Chapter to AEMO and declared transmission system operators

S6A.4.1 Application of this Chapter to AEMO etc

- (a) For the purpose of applying this Chapter, *AEMO* will be regarded as a *Transmission Network Service Provider* providing *shared transmission services*.
- (b) However, in the application of this Chapter to *transmission services* provided by means of, or in connection with, the *declared transmission system* of an *adoptive jurisdiction*, a reference to a *Transmission Network Service Provider* is, in relation to the provision of *entry services*, *exit*

services or shared network capability services to be read as a reference to a declared transmission system operator.

S6A.4.2 Exclusions, qualifications and modifications

- (a) This Chapter will be read subject to the following exclusions, qualifications and modifications.

(b) **Part A (Introduction)**

Clause 6A.1.4(b) is excluded.

(c) **Part B (Transmission Determinations Generally)**

This Part applies subject to the following exclusions, qualifications and modifications:

Clause 6A.2.2 (Components of transmission determinations):

- (1) *A transmission determination for AEMO will not include a revenue determination.*
- (2) *However, AEMO must have a revenue methodology (which will not be subject to the AER's approval) setting out the method for calculating AEMO's maximum allowed revenue for the provision of prescribed transmission services for each regulatory year.*
- (3) *In formulating its revenue methodology, or an amendment to its revenue methodology, AEMO must consult with the public.*
- (4) *AEMO's maximum allowed revenue consists of:*
 - (i) *so much of the aggregate annual revenue requirement of each declared transmission system operator for AEMO's regulatory year as relates to the provision to AEMO of shared network capability services; and*
 - (ii) *the other costs forecast to be incurred by AEMO in the same regulatory year for the provision of prescribed shared transmission services.*

Note:

The costs under subparagraph (ii) might include the cost of *electricity network services* provided by a *declared transmission system operator* where those services are, from the standpoint of the operator, not *prescribed transmission services*.

- (5) The revenue methodology must include a description of:
 - (i) the categories of costs to be recovered; and

- (ii) the method (which must be consistent with the *Cost Allocation Principles*) for allocating costs to *prescribed transmission services* and *negotiated transmission services*; and
 - (iii) how under and over recovery of revenue in a particular *regulatory year* is to be treated.
- (6) The revenue methodology must be consistent with section 52 of the *National Electricity Law* and the provisions of Chapter 2 of these *Rules* applicable to *AEMO*.
- (7) *AEMO* must comply with its revenue methodology.
- (8) Before the commencement of the *regulatory year* to which *AEMO*'s revenue methodology applies, *AEMO* must *publish*:
 - (i) the revenue methodology; and
 - (ii) a report on how it has applied its revenue methodology for the purpose of determining prices for the ensuing *regulatory year*.
- (9) However, for the *regulatory year* commencing on 1 July 2009, *AEMO* may, instead of formulating and publishing its own revenue methodology, adopt as its revenue methodology relevant provisions of the *transmission determination* that would have applied to VENCORP for that *regulatory year* if the legislative and regulatory changes that took effect at the commencement of that *regulatory year* had not been made.

(d) **Part C (Regulation of Revenue – Prescribed Transmission Services)**

This Part is not applicable to *AEMO*.

This Part applies to a *declared transmission system operator* with the following modification of clause 6A.7.1:

If a *declared transmission system operator* is directed by *AEMO*, or is required by or agrees with a *Connection Applicant*, to construct an *augmentation*, clause 6A.7.1 applies as if:

- (1) the direction, requirement or agreement were an event in respect of which the *declared transmission system operator* were unconditionally authorised under clause 6A.7.1(a) to apply to the *AER* for revocation and substitution of a *revenue determination*; and
- (2) clause 6A.7.1(a)(1) to (7) were inapplicable to an application founded on such an event; and
- (3) the following were added after clause 6A.7.1(d):
 - (da) If a *declared transmission system operator* is directed by *AEMO*, or is required by or agrees with a *Connection Applicant*,

to construct an *augmentation*, and the operator applies to the AER for revocation of a *revenue determination* on that ground, the AER must revoke the *revenue determination*.

(e) **[Deleted]**

(f) **Part E (Revenue determinations and pricing methodologies)**

Part E applies subject to the following exclusions, qualifications and modifications:

1. Clause 6A.10.1 (Submission of proposal, pricing methodology and information)

Clause 6A.10.1 applies to AEMO as if for paragraphs (a), (b) and (c) the following were substituted:

(a) AEMO must, as and when required by the AER, submit to the AER:

(1) a proposed *pricing methodology* relating to *shared transmission services* that are *prescribed TUOS services* or *prescribed common transmission services* (**prescribed shared transmission services**).

(2) **[Deleted]**

(b) AEMO's *pricing methodology*:

(1) must be designed to recover no more than AEMO's *maximum allowed revenue* for the provision of *prescribed shared transmission services*; and

(2) must set out the principles on which prices for *prescribed shared transmission services* are to be determined.

(c) Exact equivalence is not required between the costs of providing a service and the revenue derived from providing the service in a particular *regulatory year* if there are reasonable grounds to believe that costs will over time approximate revenue.

(ca) **[Deleted]**

1A. Clause 6A.10.1A AER's framework and approach paper)

Clause 6A.10.1A is not applicable to AEMO.

2. **[Deleted]**

3. Clause 6A.11.1 (Preliminary examination and determination of non-compliance with relevant requirements)

Clause 6A.11.1 applies to *AEMO* only insofar as relevant to a *pricing methodology*.

4. Clause 6A.11.2 (Resubmission of proposal, pricing methodology or information)

Clause 6A.11.2 applies to *AEMO* only insofar as relevant to a *pricing methodology*.

5. Clause 6A.11.3 (Resubmission of proposal, pricing methodology or information)

Clause 6A.11.3 applies to *AEMO* only insofar as relevant to a *pricing methodology*.

6. Rule 6A.12 (Draft decision and further consultation)

This *Rule* applies to *AEMO* only insofar as relevant to a decision on a *pricing methodology*.

7. Rule 6A.13 (Final decision)

This *Rule* applies to *AEMO* only insofar as relevant to a decision on a *pricing methodology*.

8. Rule 6A.14 (Requirements relating to draft and final decisions)

(a) This *Rule* applies to *AEMO* only insofar as relevant to a decision on a *pricing methodology*.

(b) Clause 6A.14.3(e) (which requires the *AER* to approve a *regulatory control period* of 5 *regulatory years*) is inapplicable to *AEMO*.

Note:

The *Rule* is thus largely inapplicable. Of clause 6A.14.1 only paragraphs (6), (7) and (8) are applicable. Clause 6A.14.2 requires the *AER* to give reasons setting out the basis and rationale of its decision. This requirement is relevant to a decision on a pricing methodology but the matters of detail mentioned in paragraphs (1) to (4) would, as a general rule, be irrelevant to such a decision. Of clause 6A.14.3 only paragraphs (f) to (i) would be relevant.

9. Rule 6A.15 (Revocation of revenue determination or amendment of pricing methodology for wrong information or error)

This *Rule* applies to *AEMO* only insofar as relevant to the amendment of a *pricing methodology*.

10. Rule 6A.16 (Miscellaneous)

This *Rule* applies as if it included the following additional paragraphs:

- (g) *AEMO* must, on or before 15 May in each year, *publish* its prices for *prescribed shared transmission services* for its next *regulatory year*.
- (h) A *declared transmission system operator* must notify *AEMO* of its revenue requirement for the provision of *shared network capability services* for *AEMO's next regulatory year* in sufficient time to enable *AEMO* to calculate prices in accordance with the approved *pricing methodology* and meet its obligations under paragraph (g).

(g) **Part F (Information Disclosure)**

This Part is not applicable to *AEMO*.

(h) **Part G (Cost Allocation)**

AEMO's revenue methodology must be consistent with the *Cost Allocation Principles* set out in this Part: see clause S6A.4.2(c)(5). This Part applies to *AEMO* only insofar as it is relevant to that requirement.

(i) **Part H (Transmission Consultation Procedures)**

No exclusions, qualifications or modifications are prescribed.

(j) **Part I (Ring-Fencing Arrangements for Transmission Network Service Providers)**

This Part is not applicable to *AEMO*.

(k) **Part J (Prescribed Transmission Services – Regulation of Pricing)**

Part J applies subject to the following exclusions, qualifications and modifications:

1. Rule 6A.23 (Pricing Principles for Prescribed Transmission Services)

Clause 6A.23.3 applies as if it included the following additional paragraphs:

- (g) In relation to the *declared transmission system* of an *adoptive jurisdiction*:
 - (1) *AEMO* is responsible for allocating the *ASRR* for *prescribed TUOS services* and *prescribed common transmission services*; and
 - (2) the relevant *declared transmission system operator* is responsible for allocating the *ASRR* for *prescribed entry services* and *prescribed exit services*.

- (h) A *declared transmission system operator* must:

- (1) allocate costs between *shared network capability services* and *prescribed connection services*; and
- (2) notify *AEMO* of its allocation (and the basis on which it was made) in sufficient time to calculate prices for *AEMO's next regulatory year* in accordance with its *pricing methodology*; and
- (3) provide *AEMO* (as and when requested by *AEMO*) with the information *AEMO* reasonably requires to allocate *ASRR* for *prescribed TUOS services* and *prescribed common transmission services*.

Clause 6A.23.4 applies as if it included the following additional paragraph:

- (k) A *declared transmission system operator* is not required to develop separate prices for recovery of the *ASRR* referable to *shared network capability services*.

2. Rule 6A.24 (Pricing Methodology)

Clause 6A.24.1 applies as if the following paragraphs were substituted for paragraphs (e) and (f):

- (e) Subject to express provisions of these *Rules* to the contrary, a *pricing methodology*:
 - (1) applies for the duration of the relevant *regulatory control period*; and
 - (2) may not be amended during the *regulatory control period*.
- (f) However, the *AER* may, on an application made by *AEMO* during the *regulatory year* commencing on 1 July 2009, amend *AEMO's pricing methodology* as it applies to the setting of prices for the *regulatory year* commencing on 1 July 2010 and later *regulatory years*.

Clause 6A.24.2 applies as if the following sub-paragraphs were substituted for sub-paragraphs (c)(1) and (c)(2):

- (1) **[deleted]**; or
- (2) 15 May each year.

3. Clause 6A.26.1 (Agreements for prudent discounts for prescribed transmission services)

Clause 6A.26.1 applies as if:

- (1) the power under paragraph (b) to agree to charge lower prices for *prescribed TUOS services* and *prescribed common transmission services* were vested in AEMO to the exclusion of the relevant *declared transmission system operator*; and
 - (2) additional provisions to the following effect were included:
 - (i) AEMO must obtain the written consent of the relevant *declared transmission system operator* before exercising that power;
 - (ii) the relevant *declared transmission system operator* and AEMO must negotiate in good faith whenever either of them asks the other to consider a proposal for the exercise of that power in a particular manner.
4. Clause 6A.26.2 (Application to AER for approval of proposed prudent discount amounts)

Clause 6A.26.2 (k) is not applicable to AEMO.
5. Clause 6A.29.1 (Multiple Transmission Network Service Providers within a region)

Clause 6A.29.1 applies as if it included the following additional paragraph:
 - (g) AEMO is (without appointment under clause 6A.29.1(a)) the *Co-ordinating Network Service Provider* for a *region* that includes the whole or the major part of the *declared shared network*.

(l) **[Deleted]**

(m) **Schedule S6A.1 (Contents of Revenue Proposals)**

This Schedule is not applicable to AEMO.

(n) **Schedule S6A.2 (Regulatory Asset Base)**

This Schedule is not applicable to AEMO.

Clause S6A.2.3(a)(3)(i) is not applicable to a *declared transmission system operator*.

(o) **Schedule S6A.3 (CRNP methodology and modified CRNP methodology)**

This Schedule applies without exclusion, qualification or modification.

CHAPTER 6B

Chapter 6B Retail markets

Part A Retail support

Division 1 – Application and definitions

6B.A1.1 Application of this Part

This Part:

- (a) applies to a *Distribution Network Service Provider* and a *retailer* who have *shared customers*; and
- (b) applies to the exclusion of Part J of Chapter 6 to a *Market Customer* who is a *retailer*; and
- (c) prevails over any inconsistent provisions in a distribution determination.

6B.A1.2 Definitions

In this Part:

customer connection service has the same meaning as in the *NERL*.

date of issue of a *statement of charges* means the date on which the *Distribution Network Service Provider* sends the statement to the *retailer*.

default rate means the *bank bill rate* (as in force from time to time) plus two percentage points per annum.

due date for payment means 10 *business days* from the *date of issue* specified on a *statement of charges*.

network charges means charges that a *Distribution Network Service Provider* is entitled to claim for *customer connection services* in respect of *shared customers* under these *Rules*.

retail billing period means a calendar month or any other period agreed between a *Distribution Network Service Provider* and a *retailer*.

shared customer has the same meaning as in the *NERL*.

statement of charges—see clause 6B.A2.4.

Division 2 Billing and payment rules

6B.A2.1 Obligation to pay

Subject to this Part, a *retailer* must pay to a *Distribution Network Service Provider* the *network charges* payable in respect of each *shared customer* by the *due date for payment*.

Note:

This clause is a conduct provision for the purpose of the NEL.

6B.A2.2 Direct customer billing and energy-only contracts

- (a) Where a *Distribution Network Service Provider* and a *shared customer* agree that the *customer* will be responsible for paying *network charges* directly to the *Distribution Network Service Provider* (a **direct billing arrangement**), the *Distribution Network Service Provider* may issue a bill to that *customer* for any or all of the *customer connection services* provided to that *customer's* premises.
- (b) The *Distribution Network Service Provider* must notify the *retailer* of the *direct billing arrangement* as soon as reasonably practicable after commencement of the agreement.
- (c) A *retailer* has no liability to pay *network charges* that have been, or are to be, billed to the *shared customer* under a *direct billing arrangement*.
- (d) Where a *retailer* and a *shared customer* enter into a contract for the sale of electricity only, the *retailer* must notify the relevant *Distribution Network Service Provider* as soon as reasonably practicable after commencement of the contract.

6B.A2.3 Calculating network charges

Network charges must be calculated in accordance with these *Rules* and a *Distribution Network Service Provider's* distribution determination.

6B.A2.4 Statement of charges

- (a) A *Distribution Network Service Provider* must provide a statement of *network charges* (a **statement of charges**) to a *retailer* as agreed between the parties but no later than the 10th *business day* of the *retail billing period* next following the *retail billing period* to which the charges relate.
- (b) The *statement of charges* must include:
 - (1) the *network charges*, separately identified, in respect of each *shared customer's* premises for which *metering data* was received, or a service request was completed, during that *retail billing period*;

- (2) the *date of issue* of the *statement of charges*, and the *due date for payment*;
- (3) where applicable, the *metering data* for each *shared customer's* premises;
- (4) any adjustments to *network charges* from previous *retail billing periods*; and

Note:

See clause 6B.A3.1.

- (5) where applicable, any credits for GSL payments that the *Distribution Network Service Provider* is required to make in respect of a *shared customer's* premises.
- (c) Subject to these *Rules* and the *Retail Market Procedures*, the format of the *statement of charges* must be as agreed between the *retailer* and *Distribution Network Service Provider* or, in default of agreement, as reasonably determined by the *Distribution Network Service Provider*.
 - (d) In this rule:

GSL payment means a payment by a *Distribution Network Service Provider* in respect of non-compliance with a *distribution service* standard or *distribution reliability* standard.

service request means a request by a *retailer* to a *Distribution Network Service Provider* for a *customer connection service*.

6B.A2.5 Time and manner of payment

- (a) Subject to clause 6B.A3.3(c), a *retailer* must, by the *due date for payment*, pay the full amount specified in a *statement of charges* without set-off.
- (b) Payment must be made into the *Distribution Network Service Provider's* nominated bank account.

Division 3 Matters incidental to billing and payment

6B.A3.1 Adjustment of network charges

- (a) If a *retailer* is not permitted to recover *network charges* from a *shared customer* under the *NERL* or the *NERR*, then neither is the *Distribution Network Service Provider* permitted to recover those charges from the *retailer*.
- (b) Subject to paragraph (a), *network charges* contained in a *statement of charges* may be adjusted to account for any error in, or correction or substitution of:

- (1) *metering data*; or
 - (2) any other amount or factor that affects the calculation of the *network charges*.
- (c) An adjustment under paragraph (b) may be made by a *Distribution Network Service Provider* by including, in a subsequent *statement of charges*, the amount required to be paid by, or credited to, the *retailer* together with an explanation of the adjustment.

Note:

See also clause 6B.A3.3.

6B.A3.2 Tariff reassignment

- (a) *A retailer*:
 - (1) must, if a *shared customer* informs the *retailer* of a *change* in use of electricity consumption at the *customer's* premises as a result of which the *retailer* reasonably considers that the existing tariff applying to the *customer* should no longer apply; and
 - (2) may, for any other reason, but not more than once in any 12 *month* period in respect of the same premises,

request the *Distribution Network Service Provider* to review the tariff to which the *customer* is assigned.
- (b) The request is to include:
 - (1) the reasons for the request; and
 - (2) any relevant information provided by the *customer*; and
 - (3) the tariff proposed by the *retailer*.
- (c) On receipt of the request, the *Distribution Network Service Provider* must decide whether the tariff should be *changed*.
- (d) The *Distribution Network Service Provider* must inform the *retailer* of its decision and, if the decision is not to *change* the tariff or to assign a tariff other than that proposed by the *retailer*, the *Distribution Network Service Provider* must also inform the *retailer* of its reasons for the decision.
- (e) If the *Distribution Network Service Provider* decides to *change* the tariff, it must make the *change* in accordance with:
 - (1) the requirements of the *NERL* and the *NERR*;
 - (2) any provisions of the *Distribution Network Service Provider's* distribution determination governing the assignment or re-assignment of *retail customers* to tariffs; and

Note:

See clause 6.18.4.

- (3) the *Rules* and the *Retail Market Procedures*.

6B.A3.3 Disputed statements of charges

If a *retailer* disputes an amount (the **disputed amount**) set out in a *statement of charges*, the following provisions apply:

- (a) The *retailer* must give written notice to the *Distribution Network Service Provider* of the disputed amount and the reasons for disputing payment.

Note:

A *retailer* may also give notice pursuant to this clause if it seeks an adjustment under clause 6B.A3.1 or where it disputes an adjustment made under that clause.

- (b) Payment by the *retailer* of all or part of an amount set out in a *statement of charges* does not affect the right of the *retailer* to dispute the amount.
- (c) If the *retailer* has given notice under paragraph (a) and payment of the charges to which the statement relates has not yet been made, the *retailer* must pay the *Distribution Network Service Provider* by the *due date for payment* (unless the *Distribution Network Service Provider* agrees otherwise) the greater of:
- (1) the undisputed component of the *statement of charges*; or
 - (2) 80% of the total amount due under the disputed *statement of charges*;
- (d) The *retailer* must, if the dispute is not resolved by agreement of the parties within 10 *business days* after the date the *retailer* gave notice under paragraph (a), immediately submit the dispute for resolution or determination in accordance with Chapter 8.
- (e) If the *retailer* fails to submit the dispute for resolution or determination in accordance with paragraph (d), the *Distribution Network Service Provider* may submit the dispute for resolution or determination in accordance with Chapter 8.
- (f) Subject to any determination of the *DRP*, if following resolution or determination of the dispute in accordance with Chapter 8, the amount due to the *Distribution Network Service Provider* is:
- (1) more than the amount already paid by the *retailer*, the *retailer* must pay the difference to the *Distribution Network Service Provider* within 3 *business days* of the resolution or determination of the dispute, together with interest on the amount of the difference at the *default rate* for each *day* from the original *due date for payment* to the actual date of payment; or

- (2) less than the amount already paid by the *retailer*, the *Distribution Network Service Provider* must pay the difference to the *retailer* within 3 *business days* of the resolution or determination of the dispute, together with interest on the amount of the difference at the *default rate* for each *day* from the date the *retailer* made the overpayment to the *Distribution Network Service Provider* to the actual date of repayment of the amount of the excess by the *Distribution Network Service Provider*.

6B.A3.4 Interest

If requested, a *Distribution Network Service Provider* and a *retailer* must pay interest at the *default rate* on any amount due to the other under this Chapter that remains unpaid after the *due date for payment*, until the date on which that amount is paid in full.

6B.A3.5 Notification of changes to charges

- (a) A *Distribution Network Service Provider* must notify a *retailer* of:
 - (1) any proposed *changes* in the *Distribution Network Service Provider*'s price lists under Chapter 6 (**preliminary information**) no later than 2 *business days* after the date on which the *changes* are notified to the *AER* under these *Rules*; and
 - (2) any *changes* in the *Distribution Network Service Provider*'s price lists approved by the *AER* no later than 2 *business days* after the date on which the *AER* notifies the *Distribution Network Service Provider* of the approval; and
 - (3) any *change* in the level of a *network charge* (other than a *network tariff*) as soon as reasonably practicable after the *Distribution Network Service Provider* becomes aware of that *change* and, if the *change* requires the approval of the *AER* under these *Rules*, no later than 2 *business days* after the *AER* advises the *Distribution Network Service Provider* that the *change* (or the resulting charge) is approved by the *AER*.
- (b) A *retailer* must treat preliminary information notified under paragraph (a)(1) as *confidential information*.
- (c) A *Distribution Network Service Provider* has no liability where proposed *changes* contained in preliminary information provided under paragraph (a)(1) are subsequently not approved, or are modified, by the *AER*.

Part B Credit support required for late payment

Note:

The *credit support* rules set out in Part B are conduct provisions for the purpose of the *NEL*.

Division 1 Application and definitions

6B.B1.1 Application of Part B

This Part B (to be known as the **credit support rules**) applies to a *Distribution Network Service Provider* and a *retailer*:

- (a) in respect of *shared customers*;
- (b) in respect of charges for services for which the *retailer* pays the *Distribution Network Service Provider* in arrears in accordance with a *statement of charges* under clause 6B.A2.4.

6B.B1.2 Definitions

In this part:

date of issue has the meaning given in clause 6B.A1.2.

default rate has the meaning given in clause 6B.A1.2.

due date for payment has the meaning given in clause 6B.A1.2.

network charges has the meaning given in clause 6B.A1.2.

shared customer has the meaning given in clause 6B.A1.2.

statement of charges—see clause 6B.A2.4.

Division 2 Requirements for credit support

6B.B2.1 Distribution Network Service Provider may require credit support in limited circumstances

- (a) A *Distribution Network Service Provider* may only require a *retailer* to provide *credit support* if within the previous 12 months, the *retailer* has failed to pay in full:
 - (1) the charges contained in 3 *statements of charges* by the *due date for payment*; or
 - (2) the charges contained in 2 consecutive *statements of charges* by the *due date for payment*; or
 - (3) the charges contained in 1 *statement of charges* within 15 *business days* of the *due date for payment*.

and then only in accordance with the *credit support rules*.

- (b) A *Distribution Network Service Provider* may only require a *retailer* to provide *credit support* up to an amount equal to the charges contained in the

most recent *statement of charges* that gave rise to the requirement for the *retailer* to provide *credit support* under clause 6B.B2.1(a).

- (c) If a *retailer* fails to pay charges contained in a *statement of charges*, but the charges are disputed, and the *retailer* has complied with the requirements of clause 6B.A3.3 in respect of the dispute, the *retailer* will not be considered in default in payment of the disputed charges and the *Distribution Network Service Provider* will not be entitled to require the *retailer* to provide *credit support*.

Division 3 Provision of credit support by retailers

6B.B3.1 Retailer to provide credit support

- (a) A *retailer* must, on request by a *Distribution Network Service Provider*, under clause 6B.B2.1 provide *credit support* to a *Distribution Network Service Provider* in accordance with the *credit support* rules.
- (b) The *credit support* provided by a *retailer* must be:
 - (1) for an amount requested by the *Distribution Network Service Provider*, not exceeding an amount equal to the charges contained in the most recent *statement of charges* that gave rise to the requirement for the *retailer* to provide *credit support* under clause 6B.B2.1; and
 - (2) provided within 5 *business days* of the *Distribution Network Service Provider's* request; and
 - (3) an acceptable form of *credit support* in favour of the *Distribution Network Service Provider* (see clause 6B.B3.2).
- (c) A *retailer* must ensure that at all times the aggregate undrawn amount of the *credit support* is not less than the amount requested by a *Distribution Network Service Provider* in accordance with clause 6B.B2.1.

6B.B3.2 Acceptable form of credit support

- (a) A *retailer* required to provide *credit support* under these *Rules* must provide the *credit support* in an acceptable form.
- (b) An acceptable form of *credit support* is:
 - (1) a form of *credit support* that the *retailer* agrees to provide, and the *Distribution Network Service Provider* agrees to accept; or
 - (2) an undertaking:
 - (i) substantially in the form set out in Schedule 6B.1; and
 - (ii) issued by a financial institution acceptable to the *Distribution Network Service Provider*.

Division 4 Other Rules relating to credit support

6B.B4.1 Application of credit support

- (a) A *Distribution Network Service Provider* may only apply or draw on the *credit support* if:
 - (1) the *Distribution Network Service Provider* has given not less than 3 *business days'* notice to a *retailer* that it intends to apply or draw on the *credit support* in respect of an amount due and payable by the *retailer* to the *Distribution Network Service Provider*, and that amount remains *outstanding*; and
 - (2) there is no unresolved dispute under clause 6B.A3.3 about the *retailer's* liability to pay that amount.

6B.B4.2 Return of credit support

- (a) If:
 - (1) a *Distribution Network Service Provider* and a *retailer* no longer have any *shared customers*; or
 - (2) in the 12 *months* since the *credit support* was provided, the *retailer* has paid in full the charges contained in each *statement of charges* issued in that 12 *month* period by the due date for payment,

the *Distribution Network Service Provider* must pay, cancel or return to a *retailer* as appropriate, any balance of *credit support outstanding* after payment of all amounts owing by the *retailer* to the *Distribution Network Service Provider*.

6B.B4.3 Other retailer obligations

- (a) A *retailer* must not take any steps to restrain (by injunction or otherwise):
 - (1) an issuer of *credit support* from paying out, or otherwise satisfying, a claim properly made by the *Distribution Network Service Provider* under the terms of the *credit support*; or
 - (2) the *Distribution Network Service Provider* from making a claim on the *credit support* in accordance with the *credit support rules*; or
 - (3) the *Distribution Network Service Provider* using the money obtained by calling on the *credit support*.
- (b) A *Distribution Network Service Provider* may disclose to its financiers, the *AER* or *AEMO* that it has required or called on *credit support* provided by the *retailer* under the *credit support rules*.

Schedule 6B.1 Prescribed form of unconditional undertaking for credit support

(Clause 6B.B3.2)

In this deed:

- (a) ABC Ltd (ACN) is the *retailer*; and
- (b) DEF Ltd (ACN) is the *Distribution Network Service Provider*; and
- (c) GHI Ltd (ACN) is the Financial Institution.

The Financial Institution unconditionally undertakes to pay, on demand by the *Distribution Network Service Provider*, to the *Distribution Network Service Provider* any sum or sums up to a maximum aggregate of \$.....

The payment or payments are to be made forthwith and unconditionally, without reference to the retailer, and despite any instruction from the retailer not to make the payment or payments.

A demand for payment under this deed is to be made on behalf of the *Distribution Network Service Provider* by[*name of person authorised to act on behalf of the Distribution Network Service Provider*]

This deed is terminated if:

- (a) the *Distribution Network Service Provider* notifies the Financial Institution that it no longer requires the Financial Institution's undertaking; or
- (b) the Financial Institution pays to the *Distribution Network Service Provider* a sum or sums amounting to its maximum aggregate liability under this deed; or
- (c) the parties agree to terminate it.

Executed as a deed at this day of 20.....

CHAPTER 7

7. Metering

Part A Introduction

7.1 Introduction to the Metering Chapter

7.1.1 Contents

This Chapter sets out provisions relating to:

- (a) roles and responsibilities of *financially responsible Market Participants*, *Metering Coordinators* and *AEMO*;
- (b) the appointment of and the qualifications and registration requirements applying to *Metering Providers* and *Metering Data Providers*;
- (b1) the qualifications and registration requirements applying to *Embedded Network Managers*;
- (c) the appointment of *Metering Coordinators* and *Metering Coordinator* default arrangements;
- (d) *metering installation* requirements;
- (e) *metering data services* and the *metering database*;
- (f) *metering register* requirements, disclosure of *NMI* information and *metering data* provision to *retail customers*;
- (g) security of, and rights to access, *metering installations*, services provided by *metering installations*, *energy data* held in *metering installations* and *metering data* from *metering installations*;
- (h) procedures to be established, maintained and *published* by *AEMO* including the *metrology procedures* and *service level procedures*; and
- (i) B2B arrangements.

Part B Roles and Responsibilities

7.2 Role and Responsibility of financially responsible Market Participant

7.2.1 Obligations of financially responsible Market Participants to establish metering installations

- (a) Except as otherwise specified in paragraph (c), before participating in the market in respect of a *connection point*, and for so long as the *financially responsible Market Participant* continues to participate in the market in

respect of a *connection point*, the *financially responsible Market Participant* must ensure that:

- (1) a *Metering Coordinator* is appointed in respect of the *connection point* in accordance with clause 7.6.2;
- (2) the *connection point* has a *metering installation* and that the *metering installation* is registered with AEMO; and
- (3) prior to registration, a *NMI* has been obtained with respect to the *connection point*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) AEMO may refuse to permit a *financially responsible Market Participant* to participate in the *market* in respect of any *connection point* in relation to which that *financially responsible Market Participant* is not in compliance with its obligations under paragraph (a).
- (c) For an *interconnector*:
 - (1) the relevant *Transmission Network Service Provider* is responsible for the provision, installation and maintenance of a *metering installation*; and
 - (2) AEMO is responsible for the collection of *metering data* from that *metering installation*, the processing of that data and the delivery of the processed data to the *metering database*.

7.2.2 [Not used]

7.2.3 Agreements with Local Network Service Provider

For the purpose of section 140(2)(b) of the *National Energy Retail Law*, an agreement in force under the following clauses of the *Rules* is taken to be an agreement in force under 'rule 7.2.3':

- (a) clause 7.6.3;
- (b) clause 7.6.4; and
- (c) clause 11.86.7.

7.2.4 [Not used]

7.2.5 Agreements with Metering Provider

For the purpose of section 140(2)(c) of the *National Energy Retail Law*, an agreement in force under clause 7.3.2(b) of the *Rules* is taken to be an agreement in force under 'rule 7.2.5'.

7.3 Role and Responsibility of Metering Coordinator

7.3.1 Responsibility of the Metering Coordinator

- (a) For the term of its appointment in respect of a *connection point*, the *Metering Coordinator* is the person responsible for the:
 - (1) provision, installation and maintenance of a *metering installation* in accordance with Part D of this Chapter 7;
 - (2) except as otherwise specified in clause 7.5.1(a), collection of *metering data* with respect to the *metering installation*, the processing of that data, retention of *metering data* in the *metering data services database* and the delivery of the *metering data* to the *metering database* and to other persons in accordance with Part E of this Chapter 7; and
 - (3) managing access to and the security of the *metering installation*, services provided by the *metering installation*, *energy data* held in the *metering installation* and *metering data* from the *metering installation* in accordance with Part F of this Chapter 7.
- (b) The *Metering Coordinator* must perform its role in accordance with:
 - (1) this Chapter 7; and
 - (2) procedures authorised under the *Rules*.
- (c) AEMO must establish, maintain and *publish* relevant explanatory material that sets out the role of the *Metering Coordinator* consistent with this Chapter 7.

7.3.2 Role of the Metering Coordinator

Appointment of a Metering Provider

- (a) The *Metering Coordinator* at a *connection point* (other than a *connection point* with a type 7 *metering installation*) must:
 - (1) appoint a *Metering Provider* or *Metering Providers* for the provision, installation and maintenance of the *metering installation*; or
 - (2) subject to the *metrology procedure*, appoint a *Metering Provider* or *Metering Providers* for the provision and maintenance of that

installation and allow another person to appoint a *Metering Provider* to install the *metering installation*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) The *Metering Coordinator* at a *connection point* (other than a *connection point* with a type 7 *metering installation*) must:
 - (1) appoint a *Metering Provider* or *Metering Providers*:
 - (i) for the provision, installation and maintenance of the *metering installation*, where the *Metering Coordinator* has appointed the *Metering Provider* under paragraph (a)(1); or
 - (ii) for the provision and maintenance of the *metering installation*, where another person has appointed the *Metering Provider* under paragraph (a)(2).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) The *Metering Coordinator* may elect to terminate an appointment made under paragraph (b)(1)(i) after the *metering installation* is installed and, if such an appointment is terminated, the *Metering Coordinator* must appoint another *Metering Provider* for the maintenance of the *metering installation*.

Appointment of a Metering Data Provider

- (d) Except as otherwise specified in clause 7.5.1(a), the *Metering Coordinator* at a *connection point* must:
 - (1) appoint a *Metering Data Provider* to provide *metering data services*; and
 - (2) provide the *financially responsible Market Participant* with the name of the *Metering Data Provider* appointed under subparagraph (1).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

Metering installations

- (e) The *Metering Coordinator* at a *connection point* (other than a *connection point* with a type 7 *metering installation*) must:

- (1) ensure that the *metering installation* is provided, installed and maintained in accordance with the *Rules* and procedures authorised under the *Rules*;
- (2) ensure that the components, accuracy and testing of the *metering installation* complies with the requirements of the *Rules* and procedures authorised under the *Rules*;
- (3) ensure that the security control of the *metering installation* is provided in accordance with rule 7.15;
- (4) where *remote acquisition* is used or is to be used, ensure that a *communications interface* is installed and maintained to facilitate connection to the *telecommunications network*;
- (5) ensure that AEMO is provided (when requested) with the information specified in Schedule 7.1 for any new or replacement *metering installation* or any altered *metering installation*; and
- (6) ensure that no device that is capable of producing *interval energy data* and is already installed in a *metering installation* is replaced with a device that only produces *accumulated energy data* unless the *metrology procedure* permits the replacement to take place.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (f) The *Metering Coordinator* at a *connection point* with a *small customer metering installation* must ensure that *energy data* is retrieved from that *small customer metering installation* via remote access.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (g) A *Metering Coordinator* must not prevent, hinder or otherwise impede a *Local Network Service Provider* from locally accessing a *metering installation* or *connection point* for the purposes of *reconnecting* or *disconnecting* the *connection point*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

Metering data services

- (h) Except as specified in clause 7.5.1(a), the *Metering Coordinator* at a *connection point* must:

- (1) ensure that the *Metering Data Provider* appointed under paragraph (d) accommodates any special site or technology related conditions determined by *AEMO* in accordance with clause 7.8.12(c), and the *Metering Coordinator* must clarify any matters with *AEMO* in order to choose a *Metering Data Provider* for that *metering installation* that is mutually suitable to all parties;
- (2) ensure that *metering data services* are provided in accordance with the *Rules* and procedures authorised under the *Rules*;
- (3) for any type 5 *metering installation* where the annual flow of electricity through the *connection point* is greater than the *type 5 accumulation boundary*, ensure that *interval energy data* is collected;
- (4) for any type 4A *metering installation*, ensure that *interval energy data* is collected; and
- (5) arrange for the provision of relevant *metering data* to the *Metering Data Provider* if *remote acquisition*, if any, becomes unavailable.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

Access to small customer metering installation

- (i) The *Metering Coordinator* at a *connection point* with a *small customer metering installation* must:
 - (1) ensure that access to the *metering installation*, the services provided by the *metering installation* and *energy data* held in the *metering installation* is only granted to persons entitled to access that *metering installation*, or the services provided by the *metering installation* or *energy data* held in the *metering installation* in accordance with this Chapter 7;
 - (2) not arrange a *disconnection* except:
 - (i) on the request of the *financially responsible Market Participant*, *Local Network Service Provider* or, *Exempt Embedded Network Service Provider* in relation to a *child connection point* on its *network*;
 - (ii) where such *disconnection* is effected via remote access;
 - (iii) in accordance with *jurisdictional electricity legislation*; and
 - (iv) if applicable, in accordance with the *emergency priority procedures*;
 - (3) not arrange a *reconnection* except:

- (i) on the request of the *financially responsible Market Participant, Local Network Service Provider, Incoming Retailer* or, *Exempt Embedded Network Service Provider* in relation to a *child connection point* on its *network*;
 - (ii) where such *reconnection* is effected via remote access;
 - (iii) in accordance with *jurisdictional electricity legislation*; and
 - (iv) if applicable, in accordance with the *emergency priority procedures*; and
- (4) not arrange a *retailer planned interruption* of the supply of electricity at the *metering installation* except:
 - (i) on the request of the *retailer*;
 - (ii) in accordance with *jurisdictional electricity legislation*; and
 - (iii) if applicable, in accordance with the *emergency priority procedures*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

7.4 Qualification and Registration of Metering Providers, Metering Data Providers and Embedded Network Managers

7.4.1 Qualifications and registration of Metering Providers

- (a) **[Not used]**
- (a1) A *Metering Provider* is a person who:
 - (1) meets the requirements set out in Schedule 7.2; and
 - (2) is accredited by and registered by *AEMO* in that capacity in accordance with the qualification process established under clause S7.2.1(b).
- (b) Any person may apply to *AEMO* for accreditation and registration as a *Metering Provider*.
- (c) *AEMO* must include requirements for accreditation of *Metering Providers* in the *service level procedures*. The adoption of the requirements by *Metering Providers* is to be included in the qualification process in accordance with clause S7.2.1(b). The requirements must include a dispute resolution process.

- (d) A *Metering Provider* must comply with the provisions of the *Rules* and procedures authorised under the *Rules* that are expressed to apply to *Metering Providers* relevant to their category of registration.
- (e) A *Market Generator* which is involved in the trading of *energy* must not be registered as a *Metering Provider* for *connection points* in respect of which the *metering data* relates to its own use of *energy*.
- (f) Except as otherwise specified in paragraph (g), a *Market Customer* must not be registered as a *Metering Provider* at any *connection point*.
- (g) If a *Market Participant* is a *Market Customer* and also a *Network Service Provider* then the *Market Participant* may be registered as a *Metering Provider* for that *connection point* notwithstanding paragraph (f), providing that at the *connection points* on the *transmission network*, the *Market Participant* must regard the *Transmission Network Service Provider* with which it has entered into a *connection agreement* as the *Local Network Service Provider*.

7.4.2 Qualifications and registration of Metering Data Providers

- (a) A *Metering Data Provider* is a person who:
 - (1) meets the requirements set out in Schedule 7.3; and
 - (2) is accredited by and registered by *AEMO* in that capacity in accordance with the qualification process established under clause S7.3.1(c).
- (b) Any person may apply to *AEMO* for accreditation and registration as a *Metering Data Provider*.
- (c) **[Not used]**
- (c1) *AEMO* must include requirements for accreditation of *Metering Data Providers* in the *service level procedures*. The adoption of the requirements by *Metering Data Providers* is to be included in the qualification process in accordance with clause S7.3.1(c). The requirements must include a dispute resolution process.
- (d) A *Metering Data Provider* must comply with the provisions of the *Rules* and procedures authorised under the *Rules* that are expressed to apply to *Metering Data Providers* relevant to their category of registration.
- (e) A *Market Generator* which is involved in the trading of *energy* must not be registered as a *Metering Data Provider* for *connection points* in respect of which the *metering data* relates to its own use of *energy*.
- (f) Except as otherwise specified in paragraph (g), a *Market Customer* must not be registered as a *Metering Data Provider* at any *connection point*.

- (g) If a *Market Participant* is a *Market Customer* and also a *Network Service Provider* then the *Market Participant* may be registered as a *Metering Data Provider* for that *connection point* notwithstanding paragraph (f).

7.4.2A Qualifications and registration of Embedded Network Managers

- (a) An *Embedded Network Manager* must:
 - (1) meet the requirements set out in schedule 7.7; and
 - (2) be accredited and registered by *AEMO* in that capacity in accordance with the qualification process established under clause S7.7.1(b).
- (b) Any person may apply to *AEMO* for accreditation and registration as an *Embedded Network Manager*.
- (c) *AEMO* must include requirements for accreditation and registration of *Embedded Network Managers* in the *ENM service level procedures*. The adoption of the requirements by *Embedded Network Managers* is to be included in the qualification process in accordance with clause S7.7.1(b). The requirements must include a dispute resolution process.
- (d) *AEMO* must develop and *publish* guidelines to assist persons wishing to be accredited and registered by *AEMO* as an *Embedded Network Manager* with the preparation of their applications to *AEMO*.
- (e) An *Embedded Network Manager* must comply with the provisions of the *Rules* and procedures authorised under the *Rules* that are expressed to apply to *Embedded Network Managers*.

7.4.2B List of Embedded Network Managers

AEMO must *publish* and maintain a list of persons accredited and registered as *Embedded Network Managers*.

7.4.3 Nature of appointment of Metering Provider or Metering Data Provider

- (a) A *Metering Provider* or *Metering Data Provider* must perform all of the obligations of a *Metering Provider* or *Metering Data Provider* (as the case may be) in respect of a *metering installation* under the *Rules* and procedures authorised under the *Rules* on terms and conditions (including as to price) to be commercially agreed between the *Metering Provider* or *Metering Data Provider* and the appointing *Metering Coordinator*.
- (b) Subject to the terms of appointment by the *Metering Coordinator* and in accordance with the *Rules* and procedures authorised under the *Rules*:
 - (1) a *Metering Provider* appointed under clause 7.3.2(b); and
 - (2) a *Metering Data Provider* appointed under clause 7.3.2(d).

may supply services in respect of the *metering installation* in addition to those provided under paragraph (a), including access to the services provided by the *metering installation* and *metering data* from the *metering installation*, on terms and conditions (including as to price) to be commercially agreed between the *Metering Provider* or *Metering Data Provider* (as the case may be) and the requesting party.

7.4.4 Deregistration of Metering Providers, Metering Data Providers and Embedded Network Managers

- (a) *AEMO* must establish, maintain and *publish* a procedure for deregistration of *Metering Providers* and *Metering Data Providers* which incorporates the principles specified in paragraph (b).
- (a1) *AEMO* must establish, maintain and *publish* a procedure for deregistration of *Embedded Network Managers*. This procedure must include a process for:
 - (1) voluntary deregistration by *Embedded Network Managers*; and
 - (2) determining a breach of the provisions of the *Rules* or of the procedures under the *Rules* by *AEMO*, which process incorporates the principles specified in paragraph (b).
- (a2) *AEMO* must deregister an *Embedded Network Manager* if the *Embedded Network Manager* requests deregistration and the request is made in accordance with the procedures developed by *AEMO* under paragraph (a1)(1).
- (b) A breach of the provisions of the *Rules* or of the procedures authorised under the *Rules* must be determined against the following principles:
 - (1) the definition of breach must contain three or more levels of severity, the highest level of severity being a ‘material breach’;
 - (2) the deregistration of a *Metering Provider*, *Metering Data Provider* or an *Embedded Network Manager* can only occur if it can be demonstrated that the person has committed a material breach; and
 - (3) the levels of a breach with severity below a material breach are to be treated as warnings with different levels of magnitude.
- (c) If *AEMO* reasonably determines that a *Metering Provider*, *Metering Data Provider* or an *Embedded Network Manager* has breached a provision of the *Rules* or of procedures authorised under the *Rules* that applies to *Metering Providers*, *Metering Data Providers* or *Embedded Network Managers*:
 - (1) *AEMO* must send to that *Metering Provider*, *Metering Data Provider* or *Embedded Network Manager* a notice in writing setting out the nature of the breach; and

- (2) *AEMO* must, if the *Metering Provider*, *Metering Data Provider* or *Embedded Network Manager* remains in breach for a period of more than 7 days after notice in accordance with subparagraph (c)(1), conduct a review to assess the *Metering Provider's*, *Metering Data Provider's* or *Embedded Network Manager's* capability for ongoing compliance with the *Rules* or procedures authorised under the *Rules*.
- (d) *AEMO* may, following a review conducted under subparagraph (c)(2) and in accordance with the procedure under paragraph (a), deregister the *Metering Provider*, *Metering Data Provider* or *Embedded Network Manager*, suspend the person from some categories of registration or allow the person to continue to operate under constraints agreed with *AEMO*.
- (e) If following a review under subparagraph (c)(2), *AEMO* deregisters or suspends from some categories of registration or allows the *Metering Provider*, *Metering Data Provider* or *Embedded Network Manager* to continue to operate under constraints, then *AEMO* must inform:
 - (1) the relevant *Metering Coordinator(s)* and the relevant *financially responsible Market Participants*; and
 - (2) in the case of an *embedded network manager* only, the *Exempt Embedded Network Service Provider*,of the outcome of that review.

7.5 Role and Responsibility of AEMO

7.5.1 Responsibility of AEMO for the collection, processing and delivery of metering data

- (a) Where the *Metering Coordinator* at a *connection point* or proposed *connection point* on a *transmission network* is the *Local Network Service Provider*, *AEMO* is responsible for:
 - (1) the collection of *metering data* with respect to the *metering installation*, the processing of that data, the delivery of the processed data to the *metering database* and the provision of *metering data* in accordance with the *Rules* and procedures authorised under the *Rules*; and
 - (2) the appointment of the *Metering Data Provider* to provide the *metering data services* in accordance with paragraph (b).
- (b) In performing its role under paragraph (a), *AEMO* must:
 - (1) subject to the limitation on that choice imposed by paragraph (d), permit the *financially responsible Market Participant* to appoint a *Metering Data Provider* of its choice to perform the obligations of a *Metering Data Provider* with respect to the *metering installation* under this Chapter 7;

- (2) where a *financially responsible Market Participant* has not appointed a *Metering Data Provider* in accordance with subparagraph (1), appoint a *Metering Data Provider* to perform the obligations of a *Metering Data Provider* with respect to the *metering installation* under this Chapter 7; and
 - (3) comply with the processes for the collection, processing and delivery of *metering data* from the *metering installation* to the *metering database* and the provision of *metering data* to the persons who may receive *metering data* under clause 7.10.3(a) in accordance with the procedures authorised under the *Rules*, and may establish additional processes if necessary in order to fulfil that role.
- (c) If any additional processes are established by *AEMO* for the purpose of fulfilling its obligations under subparagraph (b)(3), and those processes impact on other persons, the relevant parts of those processes that impact on those persons must be incorporated in the *service level procedures*.
- (d) Where a *financially responsible Market Participant* chooses to appoint a *Metering Data Provider* under subparagraph (b)(1), it must:
- (1) only appoint a *Metering Data Provider* who can fully accommodate any special site or technology related conditions described in the document *published* under clause 7.8.12(c)(1); and

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (2) clarify any matters with *AEMO* in order to choose a *Metering Data Provider* for that *metering installation* that is mutually suitable to all parties.

7.5.2 AEMO's costs in connection with metering installation

When *AEMO* is required to undertake functions associated with a *metering installation* in accordance with the requirements of the *metrology procedure* (which could include the preparation and application of a *profile*), *AEMO's* cost is to be recovered through *Participant fees* in accordance with a budget prepared under clause 2.11.3(b)(3) unless the *metrology procedure* specifies an alternative method of cost recovery in which case *AEMO* must not recover the costs through *Participant fees*.

7.5A Role and Responsibility of Embedded Network Managers

7.5A.1 Responsibility of Embedded Network Managers for management services

The provision of *embedded network management services* must be carried out only by an *Embedded Network Manager*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

7.5A.2 EN information

An *Embedded Network Manager* must:

- (a) maintain information about the types and configuration of *metering installations* at the *parent connection point* and all *child connection points* on the *Embedded Network Manager's embedded network* and about the subtractive or other arrangements used in respect of those *metering installations* relevant to *settlements*; and
- (b) in accordance with the *B2B Procedures*, make that information available on request to:
 - (1) the *financially responsible Market Participant* for any *child connection point* on the *embedded network* or that *Market Participant's Metering Coordinator*;
 - (2) any *Incoming Retailer* or its *Metering Coordinator*; or
 - (3) the *Exempt Embedded Network Service Provider* of the relevant *embedded network*.

Note

Schedule 4 of the *National Electricity Amendment (Expanding Competition in metering and related services)* Rule 2015 No.12 inserts a definition for *Incoming Retailer*.

Part C Appointment of Metering Coordinator

7.6 Appointment of Metering Coordinator

7.6.1 Commercial nature of the Metering Coordinator appointment and service provision

- (a) A *Metering Coordinator* assumes responsibility in respect of a *connection point* under this Chapter 7, and must perform all of the obligations of the *Metering Coordinator* under the *Rules* and procedures authorised under the *Rules* on terms and conditions (including as to price) to be commercially agreed between the *Metering Coordinator* and the person who appoints the *Metering Coordinator* under clause 7.6.2.
- (b) Subject to the terms of its appointment under clause 7.6.2 and in accordance with the *Rules* and procedures authorised under the *Rules*, a *Metering Coordinator* may supply services in respect of the *metering installation* in addition to those provided under paragraph (a), including access to the services provided by the *metering installation* and *metering data* from the

metering installation, on terms and conditions (including as to price) to be commercially agreed between the *Metering Coordinator* and the requesting party.

7.6.2 Persons who may appoint Metering Coordinators

- (a) A *Metering Coordinator* may only be appointed:
 - (1) with respect to a *connection point* or proposed *connection point* on a *transmission network*, by the *Market Participant* which is *financially responsible* at the *connection point*;
 - (2) with respect to a *connection point* (other than the *connection point* of a *retail customer*) that connects, or is proposed to *connect*, a *generating system* to a *distribution network*, by:
 - (i) the *Market Participant* which is *financially responsible* at the *connection point*;
 - (ii) a *Non-Market Generator* who owns, controls or operates the *generating system* that is connected to the *distribution network* at the *connection point*; or
 - (iii) a person who owns, controls or operates the *generating system* that is connected to the *distribution network* at the *connection point* and is exempt from the requirement to register as a *Generator* under clause 2.2.1(c); and
 - (3) with respect to any other *connection point*, by:
 - (i) the *Market Participant* which is *financially responsible* at the *connection point*; or
 - (ii) the *large customer* whose premises are supplied at the *connection point*.
- (b) A person making an appointment under paragraph (a) must do so in accordance with the *Rules* and procedures authorised under the *Rules*.
- (c) The *Market Settlement and Transfer Solution Procedures* must specify that a *Metering Coordinator* at a *connection point* is responsible for the *metering installation*:
 - (1) where the change in the *Metering Coordinator* at a *connection point* is effected due to a change in the *financially responsible Market Participant* at that *connection point*, on the day that the *market load* at the *connection point* transfers to the new *financially responsible Market Participant*; and
 - (2) otherwise, on any other day.

7.6.3 Appointment with respect to transmission network connection

- (a) Where a *connection point* or proposed *connection point* is on a *transmission network*, only the *Local Network Service Provider* or the *financially responsible Market Participant* at the *connection point* may be appointed as *Metering Coordinator* under clause 7.6.2
- (b) Where a *connection point* or proposed *connection point* is on a *transmission network*, the *financially responsible Market Participant* at the *connection point* may request in writing an offer from the *Local Network Service Provider* to act as the *Metering Coordinator* in respect of the *connection point*.
- (c) If the *Local Network Service Provider* receives a request under paragraph (b), the *Local Network Service Provider* must:
 - (1) offer to act as the *Metering Coordinator* in respect of that *connection point*;
 - (2) provide the *financially responsible Market Participant* with the name of the *Metering Provider* and the *Metering Data Provider* that would be appointed under clause 7.3.2(a)(1) and 7.3.2(d), if requested by the *financially responsible Market Participant*; and
 - (3) provide the *financially responsible Market Participant* with the terms and conditions (including as to price) relating to that offer no later than 15 *business days* after the *Local Network Service Provider* receives a written request from the *financially responsible Market Participant*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

7.6.4 Type 7 metering installations

- (a) The *financially responsible Market Participant* must appoint the *Local Network Service Provider* as the *Metering Coordinator* in respect of a *connection point* which has a *type 7 metering installation* connected to, or proposed to be connected to, the *Local Network Service Provider's network*.
- (b) The *Local Network Service Provider* may provide the *financially responsible Market Participant* with a standard set of terms and conditions on which it will agree to act as the *Metering Coordinator* for a *type 7 metering installation*.
- (c) Where the *Local Network Service Provider* has not provided the *financially responsible Market Participant* with a standard set of terms and conditions referred to in paragraph (b), the *financially responsible Market Participant* must request an offer from the *Local Network Service Provider* to act as the *Metering Coordinator* pursuant to paragraph (a).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) The *Local Network Service Provider* must, within 15 *business days* of receipt of the request under paragraph (c), make an offer to the *financially responsible Market Participant* setting out the terms and conditions on which it will agree to act as the *Metering Coordinator*.
- (e) The terms and conditions of an offer made under paragraph (b) or (d) must:
 - (1) be fair and reasonable; and
 - (2) not have the effect of unreasonably discriminating between *financially responsible Market Participants*, or between customers of a *financially responsible Market Participant*.
- (f) A *financially responsible Market Participant* must accept an offer on the standard terms and conditions of appointment provided by the *Local Network Service Provider* under paragraph (b) or (d), unless the *financially responsible Market Participant* and *Local Network Service Provider* agree other terms and conditions to apply to the appointment of the *Local Network Service Provider* as the *Metering Coordinator* under paragraph (a).
- (g) For the avoidance of doubt, any *Metering Coordinator* appointed under paragraph (a) must comply with Chapter 2 of the *Rules*, including the requirement that a *Metering Coordinator* be registered with AEMO as a *Metering Coordinator* under clause 2.4A.1(a).

7.7 Metering Coordinator default arrangements

7.7.1 Obligations of financially responsible Market Participants on Metering Coordinator default event and end of contract term

- (a) Without limiting the obligations of a *financially responsible Market Participant* under clause 7.2.1(a), the *financially responsible Market Participant* must appoint a new *Metering Coordinator* in respect of a *connection point* in circumstances where:
 - (1) a *Metering Coordinator default event* occurs with respect to the existing *Metering Coordinator* for the *connection point*; or
 - (2) the appointment of the existing *Metering Coordinator* by a person in accordance with clauses 7.6.2(a)(2)(ii), (2)(iii) or (3)(ii) (the **relevant person**) is terminated or expires and the relevant person does not appoint a new *Metering Coordinator* within the period specified by AEMO in procedures authorised under the *Rules*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) The *financially responsible Market Participant* must appoint the *Metering Coordinator* in accordance with paragraph (a) as soon as practicable after the *Metering Coordinator default event* occurs or the period referred to in subparagraph (a)(2) has elapsed (as the case may be).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) If:
 - (1) the *financially responsible Market Participant* is required to appoint a new *Metering Coordinator* in respect of a *connection point* for a relevant person in accordance with paragraph (a); and
 - (2) the existing contract between the *financially responsible Market Participant* and the relevant person does not deal with the appointment of a *Metering Coordinator* in these circumstances,

the terms and conditions of the contract between the *financially responsible Market Participant* and the relevant person relating to the appointment of the *Metering Coordinator* (including as to price) must be fair and reasonable.

- (d) The appointment of the *Metering Coordinator* in accordance with clause 7.6.2(a) must include terms to the effect that the appointment of the *Metering Coordinator* will terminate on the appointment of a new *Metering Coordinator* following the occurrence of a *Metering Coordinator default event* in respect of the *Metering Coordinator*.

7.7.2 Notices to be provided by Metering Coordinator

A *Metering Coordinator* must without delay notify:

- (a) the *financially responsible Market Participant* and relevant person (as defined in clause 7.7.1(a)(2)) who has appointed it in accordance with clause 7.6.2 in respect of a *connection point*; and
 - (b) AEMO,
- of:
- (c) the occurrence of a *Metering Coordinator default event* in relation to the *Metering Coordinator*; or

- (d) the termination or expiry of the contract under which the *Metering Coordinator* has been appointed by a relevant person.

7.7.3 AEMO may issue breach notice

- (a) *AEMO* must establish, maintain and *publish* a procedure for the issue of a *Metering Coordinator default notice* in respect of *Metering Coordinators* which incorporates the principles specified in paragraph (b).
- (b) A breach of the provisions of the *Rules* or of the procedures authorised under the *Rules* must be determined against the following principles:
 - (1) the definition of breach must contain three or more levels of severity, the highest level of severity being a ‘material breach’;
 - (2) the issue of a *Metering Coordinator default notice* can only occur if it can be demonstrated that the *Metering Coordinator* has committed a material breach; and
 - (3) the levels of a breach with severity below a material breach are to be treated as warnings with different levels of magnitude.
- (c) If *AEMO* reasonably determines that a *Metering Coordinator* has breached a provision (or provisions) of the *Rules* or of procedures authorised under the *Rules* that applies to *Metering Coordinators* then:
 - (1) *AEMO* must send to that *Metering Coordinator* a notice in writing setting out the nature of the breach;
 - (2) *AEMO* must, if the *Metering Coordinator* remains in breach for a period of more than 7 days after notice in accordance with subparagraph (c)(1), conduct a review to assess the *Metering Coordinator’s* capability for ongoing compliance with the *Rules* or procedures authorised under the *Rules*; and
 - (3) *AEMO* may, following a review conducted under subparagraph (c)(2), issue a notice to the *Metering Coordinator* which must identify the continuing breach and state that the notice is a notice for the purpose of paragraph (d) of the definition of a *Metering Coordinator default event*.
- (d) If *AEMO* has issued a notice under subparagraph (c)(3), it must promptly issue a notice to the *financially responsible Market Participant* and relevant person for each *connection point* for which the *Metering Coordinator* in respect of whom the *Metering Coordinator default event* occurred is appointed by the *financially responsible Market Participant* or relevant person. Such notice must:
 - (1) state that a *Metering Coordinator default event* under paragraph (d) of the definition of *Metering Coordinator default event* has occurred; and

- (2) specify the *Metering Coordinator* in respect of whom the *Metering Coordinator default event* occurred.

Part D Metering installation

7.8 Metering installation arrangements

7.8.1 Metering installation requirements

- (a) The *Metering Coordinator* at a *connection point* must ensure that there is a *metering installation* at that *connection point*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) The *Metering Coordinator* at a *connection point* must ensure that *energy data* held in the *metering installation* is based on units of watthour (**active energy**) and where required varhour (**reactive energy**).
- (c) Installation and maintenance of a *metering installation* must be carried out only by a *Metering Provider* appointed under clause 7.3.2(a).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

7.8.2 Metering installation components

- (a) A *Metering Provider* must, in accordance with the *Rules* and procedures authorised under the *Rules*, ensure that a *metering installation* (other than a type 7 *metering installation*) :
 - (1) contains a device that has either a visible or an equivalently accessible display of the cumulative total *energy* measured by that *metering installation* (at a minimum);

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (2) is accurate in accordance with clause 7.8.8;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (3) in the case of *metering installations* types 1, 2, 3, or 4, has *electronic data transfer* facilities from the *metering installation* to the *metering data services database*;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (4) includes a *communications interface* to meet the requirements of clause 7.3.2(e)(4);

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (5) is secure in accordance with rule 7.15;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (6) records *energy data* in a manner that enables *metering data* to be collated in accordance with clause 7.10.5;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (7) is capable of separately recording *energy data* for *energy* flows in each direction where bi-directional *active energy* flows occur or could occur;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (8) has a *measurement element* for *active energy* and if required in accordance with Schedule 7.4 a *measurement element* for *reactive energy*, with both measurements to be recorded;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (9) includes facilities for storing *interval energy data* for a period of at least 35 *days* if the *metering installation* is registered as a type 1, 2, 3 or 4 *metering installation*;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (10) includes facilities for storing *interval energy data* for a period of at least 200 *days* or such other period as specified in the *metrology procedure* if the *metering installation* is registered as a type 4A or type 5 *metering installation*; and

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (11) in the case of a type 6 *metering installation*, includes facilities capable of continuously recording, the total accumulated *energy* supplied through it by a visible display in accordance with subparagraph (1), over a period of at least 12 months.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) A *metering installation* may consist of combinations of:

- (1) a *current transformer*;
- (2) a *voltage transformer*;
- (3) secure and protected wiring from the *current transformer* and the *voltage transformer* to the *meter*;
- (4) *communications interface* equipment such as a modem, isolation requirements, telephone service, radio transmitter and data link equipment;
- (5) auxiliary electricity supply to the *meter*;
- (6) an alarm circuit and monitoring facility;
- (7) a facility to keep the *metering installation* secure from interference;
- (8) test links and fusing;
- (9) summation equipment; and

- (10) several *metering points* to derive the *metering data* for a *connection point*.
- (c) Subject to paragraph (ea), the *financially responsible Market Participant* at a *connection point* must:
 - (1) apply to the *Local Network Service Provider* for a *NMI*; and
 - (2) provide the *Metering Coordinator* with the *NMI* for the *metering installation* within 5 *business days* of receiving the *NMI* from the *Local Network Service Provider*.
- (d) The *Local Network Service Provider* must:
 - (1) issue a unique *NMI* for each *metering installation* on its *network* to the *financially responsible Market Participant*; and

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (2) register the *NMI* with *AEMO* in accordance with procedures from time to time specified by *AEMO*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (e) The *Metering Coordinator* must ensure that *AEMO* is provided with the relevant details of the *metering installation* as specified in Schedule 7.1 within 10 *business days* of receiving the *NMI* under subparagraph (c)(2).
- (ea) An *Embedded Network Manager* at a *child connection point* on an *embedded network* for which it is the *Embedded Network Manager* must:
 - (1) apply to *AEMO* for a *NMI* for a *metering installation* at a *child connection point*;
 - (2) provide the *Metering Coordinator*, *financially responsible Market Participant* and the *Exempt Embedded Network Service Provider* with the *NMI* for the *metering installation* within 5 *business days* of receiving the *NMI* from *AEMO*; and
 - (3) register the *NMI* with *AEMO* in accordance with procedures from time to time specified by *AEMO*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (eb) The obligation in paragraph (ea) does not apply to the extent a *metering installation* at a *child connection point* already has a *NMI*.
- (ec) *AEMO* must issue for each *metering installation* at a *child connection point* a unique *NMI* to the *Embedded Network Manager*.

Requirements for metering installations for non-market generating units

- (f) In addition to the requirements in paragraphs (a) to (e), the *Metering Coordinator* at a *connection point* for a *non-market generating unit* must ensure that the *metering installation*:
 - (1) where payments for the purchase of electricity *generated* by that unit are based on different rates according to the time of the day, is capable of recording *interval energy data*;
 - (2) where a *current transformer*, a *voltage transformer* or a *measurement element* for *reactive energy* is installed, meets the requirements in Schedule 7.4 for the type of *metering installation* appropriate to that *connection point*;
 - (3) for units with a *nameplate rating* greater than 1 MW, meets:
 - (i) the accuracy requirements specified in Schedule 7.4; and
 - (ii) the measurement requirements in subparagraph (a)(8);
 - (4) in relation to new accumulation *metering* equipment for units with a *nameplate rating* equal to or less than 1 MW, meets the minimum standards for *active energy* class 1.0 watt hour or 2.0 watt hour *meters* in accordance with clause S7.4.6.1(f);
 - (5) for units with a *nameplate rating* of equal to or less than 1 MW that are capable of recording *interval energy*, meets the minimum standards of accuracy for the *active energy meter* in accordance with Schedule 7.4 for a type 3 or 4 *metering installation* which is based on projected sent out annual *energy* volumes; and
 - (6) if reasonably required by the *Distribution Network Service Provider* (where such a request must be in writing and with reasons), after taking into account the size of the *generating unit*, its proposed role and its location in the *network*, has the *active energy* and *reactive energy* measured where the unit has a *nameplate rating* of less than 1 MW.

Requirements for metering installations for a small generating unit classified as a market generating unit

- (g) In addition to the requirements for *metering installations* for *non-market generating units* in paragraph (f), the *Metering Coordinator* for a *small generating unit* classified as a *market generating unit* must ensure that a *metering installation*:

- (1) is classified as a type 1, 2, 3 or 4 *metering installation*; and
- (2) is capable of recording *interval energy data* relevant to *settlements*.

7.8.3 Small customer metering installations

- (a) Except as specified in clause 7.8.4, a *Metering Coordinator* must ensure that any new or replacement *metering installation* in respect of the *connection point* of a *small customer* is a type 4 *metering installation* that meets the *minimum services specification*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) *AEMO* must establish, maintain and *publish* procedures relating to the *minimum services specification* that set out for each service specified in the *minimum service specification*:
 - (1) minimum service levels, including service availability and completion timeframes; and
 - (2) minimum standards, including completion rates against the service levels and accuracy requirements.
- (c) The procedures established under paragraph (b) may also include technical requirements of one or more of the services specified in the *minimum services specification*.

7.8.4 Type 4A metering installation

No existing telecommunications network

- (a) *AEMO* may exempt a *Metering Coordinator* from complying with clause 7.8.3(a) in respect of a *connection point* for a period of up to 5 years if the *Metering Coordinator* demonstrates to *AEMO*'s reasonable satisfaction that there is no existing *telecommunications network* which enables remote access to the *metering installation* at that *connection point*.
- (b) Where the *Metering Coordinator* is exempt under paragraph (a) from complying with clause 7.8.3(a) in respect of a *connection point*, the *Metering Coordinator* must ensure that any new or replacement *metering installation* in respect of that *connection point* including, for the avoidance of doubt, a *metering installation* at a *new connection*, is a type 4A *metering installation* that has the capability, if remote access is activated, of providing the services in table S7.5.1.1.
- (c) Subject to the reapplication of paragraph (a), on and from the date that an exemption under paragraph (a) ceases to apply in respect of a *connection point*, the *Metering Coordinator* must ensure that the *metering installation*

at that *connection point* is a type 4 *metering installation* that meets the *minimum services specification*.

Small customer refusal

- (d) A *Metering Coordinator* is not required to comply with clause 7.8.3(a) where, in the *Metering Coordinator's* reasonable opinion, the *small customer* has communicated its refusal to the installation or proposed installation of a type 4 *metering installation* at a *connection point* in accordance with paragraph (e).
- (e) For the purposes of paragraph (d) a *small customer* refusal to the installation or proposed installation of a type 4 *metering installation* must be communicated:
 - (1) verbally, in writing or by conduct; and
 - (2) to the *financially responsible Market Participant*, *Metering Coordinator* or *Metering Provider*.
- (f) If the *small customer* communicates its refusal under paragraph (e) to the *financially responsible Market Participant* or *Metering Provider*, the *financially responsible Market Participant* or *Metering Provider* (as the case may be) must promptly provide written notice of the refusal to the *Metering Coordinator* which must include:
 - (1) the date of the refusal;
 - (2) how the refusal was communicated; and
 - (3) details of the *NMI* at the relevant *connection point*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (g) A *Metering Coordinator* must retain a written record of a *small customer* refusal under paragraph (e) for a period of at least 7 years.
- (h) Where paragraph (d) applies:
 - (1) the *Metering Coordinator* must ensure that the new or replacement *metering installation* installed at that *connection point* is a type 4A *metering installation*; and
 - (2) clause 7.8.3(a) will apply to any subsequent installation or proposed installation of a new or replacement *metering installation* at that *connection point*, subject to the reapplication of paragraph (d).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (i) Nothing in paragraph (h) prevents a *Metering Coordinator* from, at any time, activating the remote access capabilities of a *metering installation* with the consent of the *small customer* at the *connection point*.

7.8.5 Emergency management

- (a) The *Metering Coordinator* at a *connection point* must ensure that access to the *metering installation*, services provided by the *metering installation* and *energy data* held in the *metering installation* are managed in accordance with the *emergency priority procedures* in the event of an emergency condition as determined in accordance with those *emergency priority procedures*.
- (b) *AEMO* must establish, maintain and *publish* procedures that set out:
 - (1) the criteria for determining when an emergency condition is present and which *metering installations* will be affected by the emergency condition; and
 - (2) where a *Metering Coordinator* supplies services to a *Local Network Service Provider* from a *metering installation* that is affected by an emergency condition, which services the *Metering Coordinator* must prioritise at the request of the *Local Network Service Provider*.
- (c) A *Local Network Service Provider* must comply with the *emergency priority procedures* when issuing any service prioritisation request to a *Metering Coordinator* under those procedures.

7.8.6 Network devices

LNSP obligations

- (a) A *Local Network Service Provider*:
 - (1) may install and maintain a *network device* provided that the installation and maintenance of the *network device* does not:
 - (i) adversely impact on the operation of the *metering installation*, including its compliance with the *Rules* and procedures authorised under the *Rules*;
 - (ii) damage the *metering installation*; or
 - (iii) prevent the *metering installation* being maintained or removed, as required, by or on behalf of the *Metering Coordinator*;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (2) must not remove a *metering installation*, or any part of a *metering installation*, in order to install or maintain a *network device*; and

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (3) subject to paragraph (b), must not use a *network device* to provide services to a *retail customer* or any other third party.
- (b) A *Local Network Service Provider* may use a *network device* to:
- (1) *reconnect* or *disconnect* a *metering installation* via remote access, as permitted under *energy laws*; or
 - (2) provide services to a *retail customer* but only where those services are incidental to the provision of *network services* that are reasonably required to enable the *Local Network Service Provider* to meet its obligations to provide a safe, reliable and secure *network*.
- (c) Information obtained from a *network device*:
- (1) may be accessed by the *Local Network Service Provider*; and
 - (2) is confidential and must be treated as *confidential information* in accordance with the *Rules*; and
 - (3) for the purposes of clause 8.6.2(c), is deemed to have been provided by the *retail customer* at the relevant *connection point*.

Metering Coordinator obligations

- (d) The *Metering Coordinator* at a *connection point*:
- (1) must, at the request of the *Local Network Service Provider*, ensure that the *Local Network Service Provider* receives all reasonable assistance to facilitate access to a metering facility for:
 - (i) the installation of a *network device* under paragraph (a)(1); and
 - (ii) the maintenance of a *network device*; and
 - (2) unless paragraph (f) applies, must not, and must ensure that the *Metering Provider* does not:
 - (i) remove the *network device*;

- (ii) take any action that adversely impacts on the operation of the *network device*;
 - (iii) damage the *network device*; or
 - (iv) prevent the *network device* being maintained or removed, as required, by or on behalf of the *Local Network Service Provider*,
- except with the consent of the *Local Network Service Provider*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (e) All reasonable costs incurred by the *Metering Coordinator* as a consequence of providing assistance to the *Local Network Service Provider* under paragraph (d)(1) must be borne by the *Local Network Service Provider*.
- (f) The *Metering Coordinator* may remove or arrange the removal of a *network device* from the metering facility, without the consent of the *Local Network Service Provider*, if:
 - (1) the *Metering Coordinator* proposes to install a new or replacement *metering installation* at a *connection point*;
 - (2) there is a *network device* in the metering facility at the *connection point*; and
 - (3) in the *Metering Coordinator's* or *Metering Provider's* reasonable opinion, the *metering installation* cannot be installed in the metering facility in a manner that allows it to:
 - (i) operate effectively and in compliance with the *Rules* and procedures authorised under the *Rules*; and
 - (ii) be maintained or removed, as required, by or on behalf of the *Metering Coordinator*,without removing or impacting on the *network device* as specified in paragraphs (d)(2)(i) to (iv); and
 - (4) it has complied with paragraph (g) and any applicable *jurisdictional electricity legislation*.
- (g) If a *Metering Coordinator* removes or arranges the removal of an existing *network device* under paragraph (f) it must:
 - (1) notify the *Local Network Service Provider* of its removal as soon as practicable after it is removed; and

- (2) keep a record in accordance with paragraph (h) of the basis upon which the determination under paragraph (f)(3) was made.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (h) A record kept for the purposes of subparagraph (g) must include, in respect of each *network device*:
 - (1) the address from which the *network device* was removed;
 - (2) the date and time of removal of the *network device*;
 - (3) photographs and measurements of the *network device*, the *metering installation* and the metering facility; and
 - (4) any other material in relation to the determination in accordance with paragraph (f)(3) that is required by the procedures made under paragraph (i).

Network device procedures

- (i) AEMO must develop and maintain procedures that apply to:
 - (1) *Metering Coordinators* and *Local Network Service Providers* and which specify when an existing *metering installation* that is to be replaced by a *Metering Coordinator* may be a *network device* for the purpose of this clause 7.8.6;
 - (2) *Metering Coordinators* and *Local Network Service Providers* when installing or removing *network devices*, including the return of a *network device* to the *Local Network Service Provider*; and
 - (3) notifications to be given in respect of activities which affect *network devices* or *metering installations*, including the provision of records maintained under paragraph (g)(2) when requested by the *Local Network Service Provider*.

Clause does not apply to transmission network connection points

- (j) This clause 7.8.6 does not apply in respect of *transmission network connection points*.

Definitions

- (k) In this clause 7.8.6, **metering facility** means the existing facility used to house the *metering installation*.

7.8.7 Metering point

- (a) The *Metering Coordinator* must ensure that:

- (1) the *metering point* is located as close as practicable to the *connection point*; and
- (2) any *instrument transformers* required for a *check metering installation* are located in a position which achieves a mathematical correlation with the *metering data*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) The *financially responsible Market Participant*, the *Local Network Service Provider* or, in the case of a *child connection point*, the *Embedded Network Manager*, and AEMO must use their best endeavours to agree to adjust the *metering data* which is recorded in the *metering database* to allow for physical losses between the *metering point* and the relevant *connection point* where a *meter* is used to measure the flow of electricity in a power conductor.
- (c) Where a *Market Network Service Provider* installs a *two-terminal link* between two *connection points*, AEMO in its absolute discretion may require a *metering installation* to be installed in the *facility* at each end of the *two-terminal link*. Each of these *metering installations* must be separately assessed to determine the requirement for *check metering* in accordance with Schedule 7.4.

7.8.8 Metering installation types and accuracy

- (a) The type of *metering installation* and the accuracy requirements for a *metering installation* are to be determined in accordance with Schedule 7.4.
- (b) A *check metering installation* is not required to have the degree of accuracy required of a *metering installation* but the *Metering Coordinator* must ensure that it has mathematical correlation with the *metering installation* and be consistent with the requirements of Schedule 7.4.
- (c) The *Metering Coordinator* at a *connection point* must ensure that the accuracy of a type 6 *metering installation* is in accordance with regulations issued under the *National Measurement Act* or, in the absence of any such regulations, with the *metrology procedure*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

7.8.9 Meter churn

- (a) Any alteration or replacement of a *metering installation* under this Chapter 7 must be managed in accordance with the *meter churn procedures*.

- (b) A *Metering Coordinator* may arrange to alter a type 5 or 6 *metering installation* in accordance with paragraph (a) to make it capable of *remote acquisition* where:
 - (1) the alteration of the *metering installation* is reasonably required to address operational difficulties as defined in paragraph (d); or
 - (2) the *Metering Coordinator* is the *Local Network Service Provider* and the alteration of the *metering installation* is reasonably required to enable the *Local Network Service Provider* to meet its obligations to provide a safe, reliable and secure *network*.
- (c) An alteration of a *metering installation* by a *Metering Coordinator* in accordance with paragraph (b) does not alter the classification of that installation to a type 4 or 4A *metering installation*.
- (d) For the purposes of subparagraph (b)(1), operational difficulties arise where the *metering installation* is difficult or unsafe to access because:
 - (1) the *metering installation* is on a remote property;
 - (2) the *metering installation* is within a secure facility;
 - (3) the *metering installation* is in close proximity to hazardous materials; or
 - (4) accessing or arranging access to the *metering installation* otherwise poses a risk to the safety and security of persons or property.
- (e) The *Market Settlement and Transfer Solution Procedures* must include provisions that enable:
 - (1) an *Incoming Retailer* to nominate a *Metering Coordinator*, *Metering Provider* or *Metering Data Provider* to be appointed at a *connection point* in respect of which it is the *Incoming Retailer*, and for those appointments to be recorded as being effective on or, where requested by an *Incoming Retailer*, after the day that the *market load* at the *connection point* transfers to the *Incoming Retailer* as the new *financially responsible Market Participant*; and
 - (2) the installation of a new or replacement *metering installation* at a *connection point* as soon as practicable after the transfer of a *market load* at that *connection point* has been effected by AEMO.
- (f) AEMO must establish, maintain and *publish* procedures for the *Metering Coordinator*, *Metering Provider*, *Metering Data Provider* and *financially responsible Market Participant* to consider in managing the *meter churn* resulting from an alteration or replacement of a *metering installation* under paragraph (a) (the '*meter churn procedures*').

7.8.10 Meter installation malfunctions

- (a) Unless an exemption is obtained by the *Metering Coordinator* from AEMO under this clause 7.8.10, the *Metering Coordinator* must in respect of a *connection point* with:
- (1) a type 1, 2 or 3 *metering installation*, if a *metering installation malfunction* occurs to the *metering installation*, cause repairs to be made to it as soon as practicable but no later than 2 *business days* after the *Metering Coordinator* has been notified of the *metering installation malfunction*; or
 - (2) a *metering installation* other than the installations referred to in subparagraph (1), if a *metering installation malfunction* occurs to the *metering installation*, cause repairs to be made to it as soon as practicable but no later than 10 *business days* after the *Metering Coordinator* has been notified of the *metering installation malfunction*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) AEMO must establish, maintain and *publish* a procedure applicable to the provision of exemptions for the purpose of paragraph (a).
- (c) If an exemption is provided by AEMO under this clause 7.8.10 then the *Metering Provider* must provide AEMO with a plan for the rectification of the *metering installation*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) A *Registered Participant*, *Metering Provider* or *Metering Data Provider* who becomes aware of a *metering installation malfunction* of a *metering installation* that cannot be rectified within the applicable timeframes as specified in paragraph (a) must notify the *Metering Coordinator* of the *metering installation malfunction* within 1 *business day*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

7.8.11 Changes to metering equipment, parameters and settings within a metering installation

The *Metering Coordinator* at a *connection point* must ensure that changes to parameters or settings within a *metering installation* are:

- (a) authorised by *AEMO* prior to the alteration being made;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) implemented by a *Metering Provider*;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) confirmed by the *Metering Coordinator* within 2 *business days* after the alteration has been made; and

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) reported to *AEMO* to enable *AEMO* to record the changes in the *metering register*.

7.8.12 Special site or technology related conditions

- (a) Special site or technology related conditions are situations where *AEMO* determines that special arrangements are required to support the integrity of the collection and processing of *metering data* from nominated *metering installations*. These conditions include, but are not limited to, the following situations:
 - (1) a *connection point* or proposed *connection point* on a *transmission network*, where the *metering data* collection and/or processing arrangements from *metering installations* nominated in the document published in subparagraph (c)(1) require a single *Metering Data Provider*;
 - (2) a situation where two or more *metering points* are required to form a *metering installation* and the *metering data* determined from that *metering installation* is required to be identified as a virtual *NMI* in the *settlements process*;
 - (3) a *metering installation* on an *interconnector*; or
 - (4) a *metering installation* on the *interconnection* between adjacent *distribution networks*.
- (b) Special site or technology related conditions do not exist until they are described and published in the document specified in subparagraph (c)(1).

- (c) Where *AEMO* determines that special site or technology related conditions exist under paragraph (a), it must:
 - (1) describe and *publish* those special site or technology related conditions including the nomination of *metering installations* affected by those conditions in a document;
 - (2) notify *Metering Coordinators* and *financially responsible Market Participants* of the availability of the document specified in subparagraph (1) at the time of its *publication* and each time that document is revised; and
 - (3) clarify any matters with the *Metering Coordinator* or the *financially responsible Market Participant* in order to enable the *Metering Coordinator* or *financially responsible Market Participant* to choose a *Metering Data Provider* for that *metering installation* that is mutually suitable to all parties.
- (d) The *Metering Coordinator* or the *financially responsible Market Participant* at a *connection point* may make alterations to a *metering installation* and its *metering data* collection arrangements in order to remove its classification as a special site or technology related condition, in which case *AEMO* must remove that *metering installation* from the document specified in subparagraph (c)(1).

7.8.13 Joint metering installations

- (a) Where more than one *Market Participant* uses a *metering installation* at a particular *connection point*, they must agree and notify *AEMO* as to which of them will appoint the *Metering Coordinator* for that *metering installation*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) In the absence of such agreement, *AEMO* may nominate one of the *Market Participants* to appoint the *Metering Coordinator* for that *metering installation*.
- (c) Where more than one *Market Participant* is subject to the same special site or technology related conditions as specified in clause 7.8.12(a), the *Metering Coordinator* must notify *AEMO* of the *Metering Data Provider* that will provide the *metering data services* for the relevant *metering installation*.
- (d) In the absence of a *Metering Coordinator* notifying *AEMO* in accordance with paragraph (c), *AEMO* may nominate a *Metering Data Provider* to provide the *metering data services* for the *metering installation*.

- (e) Clause 7.8.13 does not apply to a *metering installation* at a *child connection point*.

7.9 Inspection, Testing and Audit of Metering installations

7.9.1 Responsibility for testing

- (a) A person who arranges or carries out testing of a *metering installation* under this clause 7.9.1 must do so in accordance with:
 - (1) this clause 7.9.1; and
 - (2) the relevant inspection and testing requirements set out in Schedule 7.6.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) A *Registered Participant* may request that the *Metering Coordinator* make arrangements for the testing of a *metering installation* and if the request is reasonable, the *Metering Coordinator* must:
 - (1) not refuse the request; and
 - (2) make arrangements for the testing.
- (c) Where the *Metering Coordinator* does not arrange for the testing requested under paragraph (b), the *Metering Coordinator* must advise *AEMO* that the requested testing has not been arranged and *AEMO* must make the arrangements for the testing where, in *AEMO*'s reasonable opinion, it is practicable for *AEMO* to do so.
- (d) The *Registered Participant* who requested the tests under paragraph (b) may make a request to the *Metering Coordinator* to witness the tests.
- (e) The *Metering Coordinator* must not refuse a request received under paragraph (d) and must no later than 5 *business days* prior to the testing, advise:
 - (1) the party making the request; and
 - (2) the *financially responsible Market Participant*,
of:
 - (3) the location and time of the tests; and
 - (4) the method of testing to be undertaken.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (f) The *Metering Coordinator* and *AEMO* must co-operate for the purpose of making arrangements for *AEMO* to inspect or test the *metering installation* where:
 - (1) the *Metering Coordinator* must make arrangements for *AEMO* to have access to the *metering installation*; and
 - (2) *AEMO* must:
 - (i) no later than seven *business days* prior to the testing or inspection, give the *Metering Coordinator* notice of:
 - (A) its intention to access the *metering installation* for the purpose of inspection or testing;
 - (B) the name of the *representative* who will be conducting the test or inspection on behalf of *AEMO*; and
 - (C) the time when the test or inspection will commence and the expected time when the test or inspection will conclude; and
 - (ii) where reasonable, comply with the security and safety requirements of the *Metering Coordinator*.
- (g) Where the *Metering Coordinator* has arranged testing of, or *AEMO* has undertaken testing of, a *metering installation* under this clause 7.9.1 and Schedule 7.6, the *Metering Coordinator* or *AEMO* (as the case may be) must:
 - (1) inform the *financially responsible Market Participant* that testing has been undertaken in respect of the *metering installation* in accordance with this clause 7.9.1; and
 - (2) make the test results available in accordance with paragraphs (h) and (i).
- (h) If the test results referred to in paragraph (g) indicate deviation from the technical requirements for that *metering installation*, the *Metering Coordinator* or *AEMO* (as the case may be) must ensure that the test results are provided as soon as practicable to the persons who receive that *metering data* under clause 7.10.3(a).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (i) If the test results referred to in paragraph (g) indicate compliance with the technical requirements for that *metering installation*, the *Metering Coordinator* or *AEMO* (as the case may be) must ensure that the test results are provided as soon as practicable:
 - (1) in circumstances where the tests were requested by a *Registered Participant*, to the *Registered Participant* and persons receive that *metering data* under clause 7.10.3(a); or
 - (2) to a *Registered Participant* if requested by that *Registered Participant*, where the tests are not the result of a request for testing.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (j) *AEMO* must check test results recorded in the *metering register* by arranging for sufficient audits annually of *metering installations* and to satisfy itself that the accuracy of each *metering installation* complies with the requirements of this Chapter 7.
- (k) The *Metering Coordinator* must store the test results in accordance with clause 7.9.5 and provide a copy to *AEMO* upon request or as part of an audit.
- (l) The cost of any test under paragraph (b) must be borne by:
 - (1) if paragraph (h) applies, the *Metering Coordinator*; and
 - (2) otherwise, the *Registered Participant* who requested the test.

7.9.2 Actions in event of non-compliance

- (a) If the accuracy of the *metering installation* does not comply with the requirements of the *Rules*, the *Metering Coordinator* must:
 - (1) advise *AEMO* as soon as practicable of the errors detected and the possible duration of the existence of the errors; and
 - (2) arrange for the accuracy of the *metering installation* to be restored in a time-frame agreed with *AEMO*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) *AEMO* may make appropriate corrections to the *metering data* to take account of errors referred to in paragraph (a) and to minimise adjustments to the final *settlements* account.

7.9.3 Audits of information held in metering installations

- (a) *AEMO* is responsible for auditing *metering installations*.
- (b) A *Registered Participant* may request *AEMO* to conduct an audit to determine the consistency between the data held in the *metering database* and the data held in the relevant *metering installation*.
- (c) If there are inconsistencies between data held in a *metering installation* and data held in the *metering database*, the *Metering Coordinator* and *Registered Participants* with a financial interest in the *metering installation* or the *energy* measured by that *metering installation* must liaise together to determine the most appropriate way to resolve the discrepancy.
- (d) If there is an inconsistency between the data held in a *metering installation* and the data held in the *metering database*, the data in the *metering installation* is to be taken as *prima facie* evidence of the *connection point's energy data*.
- (e) *AEMO* must carry out periodic random audits of *metering installations* to confirm compliance with the *Rules*.
- (e1) The *Metering Coordinator* must ensure that *AEMO* has unrestrained access to *metering installations* for the purpose of carrying out such random audits provided that *AEMO* agrees to comply with the *Metering Coordinator's* reasonable security and safety requirements and has first given the *Metering Coordinator* at least two *business days'* notice of its intention to carry out an audit, which notice must include:
 - (1) the name of the *representative* who will be conducting the audit on behalf of *AEMO*; and
 - (2) the time when the audit will commence and the expected time when the audit will conclude.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (f) The costs of any audit conducted under paragraph (b) will be borne by:
 - (1) if paragraph (c) applies, the *Metering Coordinator*; or
 - (2) otherwise, the *Registered Participant* who requested the audit.

7.9.4 Errors found in metering tests, inspections or audits

- (a) If a *metering installation* test, inspection or audit, carried out in accordance with clause 7.9.1, demonstrates errors in excess of those prescribed in Schedule 7.4, the *Metering Coordinator* must ensure the *metering data* is

substituted in accordance with this clause 7.9.4 and clause 7.10.1 as appropriate.

- (b) If *AEMO* or the *Metering Coordinator* is not aware of the time at which the error that was identified in paragraph (a) arose, the error is to be deemed to have occurred at a time half way between the time of the most recent test or inspection which demonstrated that the *metering installation* complied with the relevant accuracy requirement and the time when the error was detected.
- (c) The time that the error was deemed to occur, as determined in paragraph (b), is to be used by the *Metering Data Provider* in performing substitution of the *metering data*.
- (d) If a test or audit of a *metering installation* demonstrates an error of measurement of less than 1.5 times the error permitted by Schedule 7.4, no substitution of readings is required unless in *AEMO*'s reasonable opinion a particular party would be significantly affected if no substitution were made.
- (e) If any substitution is required under paragraph (d), *AEMO* must request the *Metering Coordinator* or the *financially responsible Market Participant* or the *Metering Data Provider*, as appropriate, to arrange for a suitable substitution of the incorrect *metering data* to be undertaken in accordance with the recommendations of any audit report provided by *AEMO* (under clauses 7.9.1(j), 7.9.3(b) or 7.9.3(e)), or if no audit report is provided, in accordance with the substitution requirements of the *metrology procedure*.

7.9.5 Retention of test records and documents

- (a) All records and documentation of tests prepared under this Chapter 7 or for the purposes of this Chapter 7 must be retained in accordance with this clause 7.9.5.
- (b) The *Metering Coordinator* must ensure records and documentation are retained as follows:
 - (1) for a period of at least 7 years:
 - (i) sample testing of *meters* while the *meters* of the relevant style remain in service;
 - (ii) the most recent sample test results of the *meters* referred to in subparagraph (i) after the *meters* are no longer in service;
 - (iii) non-sample testing of *meters* while the *meters* remain in service;
 - (iv) the most recent non-sample test results after the *meters* are no longer in service;
 - (v) the most recent sample test results of *instrument transformers* after *instrument transformers* of the relevant type are no longer in service;

- (vi) the most recent non sample test results of *instrument transformers* after they are no longer in service;
 - (vii) tests of new *metering* equipment of the relevant style while the equipment remains in service; and
 - (viii) tests of new *metering* equipment of the relevant style after the equipment is no longer in service; and
- (2) for a period of at least 10 years:
- (i) sample testing of *instrument transformers* while *instrument transformers* of the relevant type remain in service; and
 - (ii) non-sample testing of *instrument transformers* while they remain in service.
- (c) The *Metering Coordinator* must ensure records of type tests and pattern approvals carried out or obtained in accordance with S7.4.6.1(f) are retained while *metering* equipment of the relevant type remains in service and for at least 7 years after it is no longer in service.

7.9.6 Metering installation registration process

AEMO must establish, maintain and *publish* a registration process to facilitate the application of this Chapter 7 to *Market Participants*, *Metering Coordinators* and *Network Service Providers* in respect of:

- (a) new *metering installations*;
- (b) modifications to existing *metering installations*; and
- (c) decommissioning of *metering installations*,

including the provision of information on matters such as application process, timing, relevant parties, fees and *metering installation* details.

Part E Metering Data

7.10 Metering Data Services

7.10.1 Metering Data Services

- (a) *Metering Data Providers* must provide *metering data services* in accordance with the *Rules* and procedures authorised under the *Rules*, including:
 - (1) collecting *metering data* by local access or by *remote acquisition*;
 - (2) the validation and substitution of *metering data* for a type 1, 2, 3 and 4 *metering installation*;

- (3) the validation, substitution and estimation of *metering data* for a type 4A, 5 and 6 *metering installation*;
 - (4) the calculation, estimation and substitution of *metering data* for a type 7 *metering installation*;
 - (5) establishing and maintaining a *metering data services database* associated with each *metering installation* and providing access to the *metering data services database* in accordance with clause 7.10.2;
 - (6) delivery of *metering data* and relevant *NMI Standing Data* for a *metering installation* in accordance with clause 7.10.3;
 - (7) the delivery of *metering data* and relevant *NMI Standing Data* to AEMO for *settlements*;
 - (8) ensuring the *metering data* and other data associated with the *metering installation* is protected from local access or remote access while being collected and while held in the *metering data services database* and that *data* is provided only in accordance with the *Rules*;
 - (9) maintaining the standard of accuracy of the time setting of the *metering data services database* and the *metering installation* in accordance with clause 7.10.6;
 - (10) notifying the *Metering Coordinator* of any *metering installation malfunction* of a *metering installation* within 1 *business day*; and
 - (11) management and storage of *metering data* in accordance with clause 7.10.2.
- (b) Despite anything to the contrary in the *Rules*, AEMO may obtain *energy data* directly from a *metering installation* for the *settlements* process.

7.10.2 Data management and storage

- (a) *Metering Data Providers* must:
- (1) retain *metering data* for all relevant *metering installations* in the *metering data services database*:
 - (i) online in an accessible format for at least 13 months;
 - (ii) following the retention under subparagraph (1)(i), in an accessible format for an overall period of not less than 7 years; and
 - (2) archive in an accessible format for a period of 7 years:
 - (i) *metering data* in its original form collected from the *metering installation*;

- (ii) records of each substitution to *metering data* in respect of a *metering installation*; and
- (3) if required in procedures authorised by *AEMO* under this Chapter 7, provide the persons referred to in clauses 7.15.5(c)(1) to 7.15.5(c)(5a) with access to the *metering data* and *NMI Standing Data* in the *metering data services database*; and

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (4) except for the persons referred to in clauses 7.15.5(c)(1) to 7.15.5(c)(5a), ensure that no other person has access to the *metering data services database*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) *Metering Data Providers* accredited for type 7 *metering installations* must maintain techniques for determining *calculated metering data* for type 7 *metering installations* that are *market loads* under Schedule 7.4 in accordance with the *metrology procedure*.
- (c) *Metering Data Providers* must maintain *electronic data transfer* facilities in order to deliver *metering data* from the *metering data services database* to the *metering database* in accordance with the relevant *service level procedures*.
- (d) *Check metering data*, where available, and appropriately adjusted for differences in *metering installation* accuracy, where applicable, must be used by the *Metering Data Provider* to validate *metering data*.
- (e) If the *Metering Data Provider* becomes aware that the *metering data* that has been delivered into the *metering database* from a *metering data services database* is incorrect, then the *Metering Data Provider* must provide corrected *metering data* to the persons referred to in clauses 7.15.5(c)(1) to 7.15.5(c)(5a).
- (f) *Metering data* may only be altered by a *Metering Data Provider* except in the preparation of *settlements ready data*, in which case *AEMO* may alter the *metering data* in accordance with clause 7.11.2(c).
- (g) A *Metering Data Provider* may only alter *metering data* in the *metering data services database* in accordance with the *metrology procedure*.
- (h) *Metering Data Providers* must maintain *electronic data transfer* facilities in order to deliver *metering data* from the *metering data services database* in accordance with clause 7.10.3.

- (i) The *Metering Data Provider's* rules and protocols for supplying the *metering data services* must be approved by AEMO and AEMO must not unreasonably withhold such approval.
- (j) The *Metering Data Provider* must arrange with the *Metering Coordinator* to obtain the relevant *metering data* if *remote acquisition*, if any, becomes unavailable.

7.10.3 Provision of metering data to certain persons

- (a) The *Metering Data Provider* must provide *metering data* and relevant *NMI Standing Data* to the persons referred to in clauses 7.15.5(c)(1) to 7.15.5(c)(5a) as required by and in accordance with the *Rules* and procedures authorised by AEMO under this Chapter 7.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) AEMO must ensure that the procedures it authorises under this Chapter 7 do not require the *Metering Data Provider* to provide *metering data* or relevant *NMI Standing Data* to a person under paragraph (a) except to the extent that such *metering data* or relevant *NMI Standing Data* is required by that person to perform its obligations under the *Rules*, the *National Energy Retail Rules* or *jurisdictional electricity legislation*.

7.10.4 Use of check metering data

- (a) *Check metering data*, where available and provided that the *check metering data* has been appropriately adjusted for differences in *metering installation* accuracy, must be used by *Metering Data Providers* or AEMO, as the case may be, for:
 - (1) validation;
 - (2) substitution; and
 - (3) estimation,of *metering data* as required by clauses 7.10.1 and 7.11.2(c).

7.10.5 Periodic energy metering

- (a) The *Metering Data Provider* must, for type 1, 2, 3, 4, 4A and 5 *metering installations*, collate *metering data* relating to:
 - (1) the amount of *active energy*; and
 - (2) *reactive energy* (where relevant) passing through a *connection point*,

in *trading intervals* within a *metering data services database* unless it has been agreed between AEMO, the *Local Network Service Provider*, *Embedded Network Manager* in relation to *child connection points* and the *financially responsible Market Participant* that *metering data* may be recorded in sub-multiples of a *trading interval*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) For type 6 *metering installations*, *metering data* relating to the amount of *active energy* passing through a *connection point* must be converted into *trading intervals* in the *profiling* process undertaken by AEMO in accordance with the *metrology procedure* and the *metrology procedure* must specify:
- (1) the parameters to be used in preparing the *trading interval metering data* for each *market load*, including the algorithms;
 - (2) the *metering data* from *first-tier loads* that is to be used in the conversion process;
 - (3) the quality and timeliness of the *metering data* from the *first-tier loads*;
 - (4) the party responsible for providing the *metering data* from the *first-tier loads*; and
 - (5) if required, the method of cost recovery in accordance with clause 7.5.2.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) The *Metering Data Provider* must, for type 7 *metering installations*, prepare *metering data* relating to the amount of *active energy* passing through a *connection point* in accordance with clause 7.10.1(a)(4) in *trading intervals* within a *metering data services database*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

7.10.6 Time settings

- (a) The *Metering Provider* must set the times of clocks of all *metering installations* with reference to *Eastern Standard Time* to a standard of accuracy in accordance with Schedule 7.4 relevant to the *load* through the

connection point when installing, testing and maintaining *metering installations*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) *AEMO* must ensure that the *metering database* clock is maintained within –1 second and +1 second of *Eastern Standard Time*.
- (c) The *Metering Data Provider* must maintain the *metering data services database* clock within –1 second and + 1 second of *Eastern Standard Time*.
- (d) The *Metering Data Provider* must:
 - (1) check the accuracy of the clock of the *metering installation* with reference to *Eastern Standard Time* to a standard of accuracy in accordance with Schedule 7.4 relevant to the *load* through the *connection point* on each occasion that the *metering installation* is accessed;
 - (2) reset the clock of the *metering installation* so that it is maintained to the required standard of accuracy in accordance with Schedule 7.4 relevant to the *load* through the *connection point* where the clock error of a *metering installation* does not conform to the required standard of accuracy on any occasion that the *metering installation* is accessed; and
 - (3) notify the *Metering Provider* where the *Metering Data Provider* is unable to reset the clock of the *metering installation* in accordance with subparagraph (2).

7.10.7 Metering data performance standards

- (a) Except as otherwise specified in clause 7.5.1, the *Metering Coordinator* must ensure that *metering data* is provided to *AEMO* for all *trading intervals* where the *metering installation* has the capability for *remote acquisition of metering data*, and that the data is:
 - (1) derived from a *metering installation* compliant with clause 7.8.8(a);
 - (2) provided within the timeframe required for *settlements* and *prudential requirements* specified in the *metrology procedure*, and the relevant *service level procedures*;
 - (3) actual or substituted in accordance with the *metrology procedure*; and
 - (4) provided in accordance with the performance standards specified in the *metrology procedure*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) The performance standards specified in subparagraph (a)(4) must be set at a level that does not impose a material risk on *AEMO*'s ability to meet its *settlements* and *prudential requirements* obligations under the *Rules*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) *AEMO* may relax or exempt the performance standards specified in subparagraph (a)(4) in circumstances, including those referred to in clause 7.8.9(b), when *AEMO* and the *Metering Coordinator* agree on a lower performance standard that does not place a material risk on *AEMO*'s ability to meet its *settlements* and *prudential requirements* obligations under the *Rules*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) Where the *metering installation* is a type 4A *metering installation* or does not have the capability for *remote acquisition* of *metering data*, the *Metering Coordinator* must ensure that *metering data* is provided to *AEMO* and that the data is:
- (1) derived from a *metering installation* compliant with clause 7.8.8(a);
 - (2) provided within the timeframe required for *settlements* specified in the *metrology procedure* and the relevant *service level procedures*;
 - (3) actual, substituted or estimated in accordance with the *metrology procedure*; and
 - (4) provided in accordance with the performance standards specified in the *metrology procedure*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

7.11 Metering data and database

7.11.1 Metering database

- (a) *AEMO* must create, maintain and administer a *metering database* (either directly or under a contract for provision of the database) containing information for each *metering installation* registered with *AEMO*.
- (b) *AEMO* must ensure that the *metering database* has the capability for remote access.
- (c) The *metering database* must include *metering data*, *settlements ready data*, and information for each *metering installation* registered with *AEMO* in accordance with rule 7.12.
- (d) *AEMO* must:
 - (1) enable the persons referred to in clauses 7.15.5(c)(1) to 7.15.5(c)(5a) and clause 7.15.5(e) to access or receive data in the *metering database*; and
 - (2) except as specified in subparagraph (1), ensure that no other person has access to the *metering database*.
- (e) For all types of *metering installations*, the *metering database* must contain *metering data* that is:
 - (1) retained online in an accessible format for at least 13 months; and
 - (2) following the retention under subparagraph (1), archived in an accessible format for an overall period of not less than 7 years.
- (f) The *settlements ready data* held in the *metering database* must be used by *AEMO* for *settlements* purposes.
- (g) The *settlements ready data* held in the *metering database* may be used by *Distribution Network Service Providers* for the purpose of determining *distribution service charges* in accordance with clause 6.20.1.
- (h) *AEMO* must retain *settlements ready data* for all *metering installations* for a period of 7 years.
- (i) Despite anything to the contrary in this *Rule*, *AEMO* may provide an *energy ombudsman* with *metering data* relating to a *Registered Participant* from a *metering installation*, the *metering database*, or the *metering register*, if the *energy ombudsman* has received a complaint to which the data is relevant from a *retail customer* of the *Registered Participant*.
- (j) *AEMO* must notify the relevant *Registered Participant* of any information requested by the *energy ombudsman* under paragraph (i) and, if it is requested by that *Registered Participant*, supply the *Registered Participant* with a copy of any information provided to the *energy ombudsman*.

- (k) *AEMO* must, acting jointly with the *energy ombudsman*, develop procedures for the efficient management of timely access to data by the *energy ombudsman*.

7.11.2 Data validation, substitution and estimation

- (a) If *AEMO* in the preparation of *settlements ready data* detects *metering data* that fails validation *AEMO* must notify the *Metering Data Provider* within 1 business day of detection.
- (b) Where a *Metering Data Provider* receives notification under paragraph (a), the *Metering Data Provider* must use its best endeavours to provide corrected *metering data* to *AEMO* within 1 *business day* or advise *AEMO* that this time limit cannot be achieved, and the reason for delay, in which case the parties must agree on a revised time limit by which the corrected *metering data* will be provided.
- (c) Where *metering data* fails validation by *AEMO* in the preparation of *settlements ready data* and replacement *metering data* is not available within the time required for *settlements* then *AEMO* must prepare a substitute value in accordance with the *metrology procedure*.

7.11.3 Changes to energy data or to metering data

- (a) The *Metering Coordinator* must ensure that *energy data* held in a *metering installation* is not altered except when the *meter* is reset to zero as part of a repair or reprogramming.
- (b) If an on-site test of a *metering installation* requires the injection of current, the *Metering Coordinator* must ensure that:
 - (1) the *energy data* stored in the *metering installation* is inspected; and
 - (2) if necessary following the inspection under subparagraph (1), alterations are made to the *metering data*, to ensure that the *metering data* in the *metering data services database* and the *metering database* is not materially different from the *energy* consumed at that *connection point* during the period of the test.
- (c) If a *Metering Coordinator* considers alterations are necessary under paragraph (b)(2), the *Metering Coordinator* must:
 - (1) notify *AEMO* that alteration to the *metering data* is necessary; and
 - (2) advise the *financially responsible Market Participant* of the need to change the *metering data* and the *Metering Coordinator* must arrange for the *Metering Data Provider* to:
 - (i) alter the *metering data* for the *connection point* held in the *metering data services database* in accordance with the validation, substitution and estimation procedures in the *metrology procedure*; and

- (ii) provide the altered *metering data* to the persons who receive that *metering data* under clause 7.10.3(a).
- (d) If a test referred to in paragraph (b) is based on actual *connection point loads*, no alteration is required.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

7.12 Register of Metering Information

7.12.1 Metering register

- (a) As part of the *metering database*, AEMO must maintain a *metering register* of all *metering installations* and *check metering installations* which provide *metering data* used for *settlements*.
- (b) The *metering register* referred to in paragraph (a) must contain the information specified in Schedule 7.1.

7.12.2 Metering register discrepancy

- (a) If the information in the *metering register* indicates that the *metering installation* or the *check metering installation* does not comply with the requirements of the *Rules*, AEMO must advise affected *Registered Participants* of the discrepancy.
- (b) The *Metering Coordinator* must arrange for the discrepancy to be corrected within 2 *business days* of receipt of notification under paragraph (a) unless exempted by AEMO.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

7.13 Disclosure of NMI information

7.13.1 Application of this Rule

A *retailer* is entitled to information under this *Rule* only if the relevant information is not available to the *retailer* through the *Market Settlement and Transfer Solution Procedures*.

7.13.2 NMI and NMI checksum

- (a) A *Distribution Network Service Provider* must, at the request of a *retailer*, and within 1 *business day* of the date of the request, provide the *retailer*

with the *NMI* and *NMI* checksum for premises identified in the request by reference to:

- (1) a unique meter identifier held by the *Distribution Network Service Provider*; or
 - (2) a street address; or
 - (3) the code used by Australia Post to provide a unique identifier for postal addresses.
- (b) If a computer search by the *Distribution Network Service Provider* does not produce a unique match for the information provided by the *retailer*, the *Distribution Network Service Provider* must provide the *retailer* with any computer matches achieved up to a maximum of 99.

7.13.3 NMI Standing Data

A *Distribution Network Service Provider* must, at the request of a *retailer*, and within 2 *business days* of the date of the request, provide the *retailer* with the *NMI Standing Data* for premises identified in the request by reference to the *NMI* for the premises.

7.14 Metering data provision to retail customers

- (a) *AEMO* must establish, maintain and *publish* the *metering data provision procedures* in accordance with this rule 7.14, this Chapter 7, and otherwise in accordance with the *Rules*.
- (b) The objective of the *metering data provision procedures* is to establish the minimum requirements for the manner and form in which *metering data* should be provided to a *retail customer* (or its *customer authorised representative*) in response to a request for such data from the *retail customer* or *customer authorised representative* to the *retailer* or the *Distribution Network Service Provider*.
- (c) The *metering data provision procedures* must:
 - (1) specify the manner and form in which *retail customers' metering data* must be provided, including a:
 - (i) detailed data format; and
 - (ii) summary data format;
 - (2) for *retail customers* for whom *interval metering data* is available, specify the summary data format, which, at a minimum should include the *retail customer's*:
 - (i) nature and extent of *energy* usage for daily time periods;
 - (ii) usage or *load* profile over a specified period; and

- (iii) a diagrammatic representation of the information referred to in subparagraph (i);
- (3) for *retail customers* for whom accumulated *metering data* is available, specify a summary data format;
- (4) include timeframes in which a *retailer* or a *Distribution Network Service Provider* must, using reasonable endeavours, respond to requests made by a *retail customer* or *customer's authorised representative*. The timeframe to be included must:
 - (i) be no more than 10 *business days*, except where requests are made by a *customer authorised representative* in relation to more than one *retail customer* of either the *retailer* or *Distribution Network Service Provider* to whom the request is made; and
 - (ii) take account of procedures in place relating to the validation of *metering data*; and
- (5) specify a minimum method of delivery for the requested *metering data*.
- (d) *Retailers* and *Distribution Network Service Providers* must comply with the *metering data provision procedures* when responding to requests by a *retail customer* or *customer authorised representative*.

Part F Security of metering installation and energy data

7.15 Security of metering installation and energy data

7.15.1 Confidentiality

- (a) *Energy data, metering data, NMI Standing Data*, information included under a scheme for a NMI Standing Data Schedule as referred to in clause 3.13.12A, information in the *metering register* and passwords are confidential and must be treated as *confidential information* in accordance with the *Rules*.
- (b) For the purposes of clause 8.6.2(c), *metering data* from a *metering installation* at a *retail customer's connection point* is deemed to have been provided by the *retail customer*.

7.15.2 Security of metering installations

- (a) The *Metering Coordinator* at a *connection point* must ensure that the *metering installation* is secure and that associated links, circuits and information storage and processing systems are protected by security mechanisms acceptable to AEMO.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) *AEMO* may override any of the security mechanisms fitted to a *metering installation* with prior notice to the *Metering Coordinator*.
- (c) If a *Local Network Service Provider*, *financially responsible Market Participant*, *Metering Provider* or *Metering Data Provider* becomes aware that a seal protecting *metering* equipment has been broken, it must notify the *Metering Coordinator* within 5 business days.
- (d) If a broken seal has not been replaced by the person who notified the *Metering Coordinator* under paragraph (c), the *Metering Coordinator* must ensure that the broken seal is replaced no later than:
 - (1) the first occasion on which the *metering* equipment is visited to take a reading; or
 - (2) 100 days,after receipt of notification that the seal has been broken.
- (e) The costs of replacing broken seals as required by paragraph (d) are to be borne by:
 - (1) the *financially responsible Market Participant* if the seal was broken by a *retail customer* of that *Market Participant*;
 - (2) a *Registered Participant* if the seal was broken by the *Registered Participant*;
 - (3) the *Metering Provider* if the seal was broken by the *Metering Provider*;
 - (4) the *Metering Data Provider* if the seal was broken by the *Metering Data Provider*; or
 - (5) otherwise by the *Metering Coordinator*.
- (f) If it appears that as a result of, or in connection with, the breaking of a seal referred to in paragraph (c) that the relevant *metering* equipment may no longer meet the relevant minimum standard, the *Metering Coordinator* must ensure that the *metering* equipment is tested.

7.15.3 Security controls for energy data

- (a) The *Metering Coordinator* must ensure that *energy data* held in the *metering installation* is protected from local access and remote access by suitable password and security controls in accordance with paragraph (c).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) The *Metering Provider* must keep records of passwords secure.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) Except as otherwise specified in clause 7.15.4(e), the *Metering Provider* must allocate 'read only' passwords to *Market Participants*, *Local Network Service Providers* and *AEMO*, except where separate 'read only' and 'write' passwords are not available, in which case the *Metering Provider* must allocate a password to *AEMO* only. For the avoidance of doubt, a *financially responsible Market Participant* may allocate that 'read only' password to a *retail customer* who has requested access to its *energy data* in accordance with paragraph (g).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) The *Metering Provider* must hold 'read only' and 'write' passwords.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (e) The *Metering Provider* must forward a copy of the passwords held under paragraph (d) to *AEMO* on request by *AEMO* for *metering installations* types 1, 2, 3 and 4.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (f) *AEMO* must hold a copy of the passwords referred to in paragraph (e) for the sole purpose of revealing them to a *Metering Provider* in the event that the passwords cannot be obtained by the *Metering Provider* by any other means.
- (g) Subject to the authorisation of the *Metering Coordinator* which is for the purpose of managing congestion in accordance with clause 7.15.5(b), if a *retail customer* of a *financially responsible Market Participant* requests a 'read only' password, the *financially responsible Market Participant* must:

- (1) obtain a 'read only' password from the *Metering Provider* in accordance with paragraph (c); and
 - (2) provide a 'read only' password to the *retail customer* within 10 *business days*.
- (h) The *Metering Coordinator* referred to in paragraph (g) must not unreasonably withhold the authorisation required by the *financially responsible Market Participant*.
- (i) The *Metering Provider* must allocate suitable passwords to the *Metering Data Provider* that enables the *Metering Data Provider* to collect the *energy data* and to maintain the clock of the *metering installation* in accordance with clause 7.10.6.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (j) The *Metering Data Provider* must keep all *metering installation* passwords secure and not make the passwords available to any other person.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

7.15.4 Additional security controls for small customer metering installations

In respect of a *small customer metering installation*:

- (a) the *Metering Coordinator* must ensure that access to *energy data* held in the *metering installation* is only given to a person and for a purpose that is permitted under the *Rules*;
- (b) the *Metering Coordinator* must ensure that access to services provided by the *metering installation* and *metering data* from the *metering installation* is only given to:
- (1) in respect of a service listed in the *minimum services specification* in column 1 of table S7.5.1.1 and of *metering data* in connection with that service, an *access party* listed in column 3 of table S7.5.1.1;
 - (2) a person and for a purpose that is permitted under the *Rules*; or
 - (3) except as otherwise specified in subparagraph (1) or (2):
 - (i) the *Local Network Service Provider*, but only to the extent that, in the *Metering Coordinator's* reasonable opinion, such access is reasonably required by the *Local Network Service Provider* to

enable it to meet its obligations to provide a safe, reliable and secure *network*; or

- (ii) a person and for a purpose to which the *small customer* has given prior consent;
- (c) the *Metering Coordinator* must ensure that the services provided by the *metering installation* are protected from local access and remote access by suitable password and security controls in accordance with paragraph (e);
- (d) the *Metering Provider* must keep records of passwords secure; and
- (e) the *Metering Provider* must ensure that:
 - (1) it forwards a copy of a password allowing local access and a copy of a password allowing remote access to the *metering installation*, services provided by the *metering installation* and *energy data* held in the *metering installation*, to the *Metering Coordinator*, *Metering Data Provider* *Embedded Network Manager* in relation to *child connection points* and *AEMO*; and
 - (2) except as provided above, no other person receives or has access to a copy of a password allowing local access or remote access to the *metering installation*, services provided by the *metering installation* or *energy data* held in the *metering installation*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

7.15.5 Access to data

- (a) Access to *energy data* recorded by a *metering installation* must only be provided where passwords are allocated in accordance with rule 7.15.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) The *Metering Coordinator* must ensure that access to *energy data* from the *metering installation* is scheduled appropriately to ensure that congestion does not occur.
- (c) Except as specified in paragraphs (d) or (e), only the following persons may access or receive *metering data*, *settlements ready data*, *NMI Standing Data*, and data from the *metering register* for a *metering installation*:
 - (1) *Registered Participants* with a financial interest in the *metering installation* or the *energy* measured by that *metering installation*;

- (2) the *Metering Coordinator* appointed in respect of the *connection point* for that *metering installation*, or a person who was previously appointed as the *Metering Coordinator* in respect of that *connection point*, as required in connection with a *Metering Coordinator default event* in accordance with procedures authorised under the *Rules*;
 - (3) the *Metering Provider* appointed with respect to that *metering installation*;
 - (4) the *Metering Data Provider* appointed with respect to that *metering installation*, or who was previously appointed with respect to a *metering installation* as required in accordance with the *Rules* and procedures authorised under the *Rules*;
 - (5) *AEMO* and its authorised agents; and
 - (5a) in relation to a *metering installation* at a *child connection point*, an *Embedded Network Manager*;
 - (6) the *AER* or *Jurisdictional Regulators* upon request to *AEMO*.
- (d) In addition to the persons listed in paragraph (c), the following persons may access or receive *metering data* in accordance with the *Rules* and procedures authorised under the *Rules*:
- (1) a *retail customer* or *customer authorised representative*, upon request by that *retail customer* or its *customer authorised representative* to the *retailer* or *Distribution Network Service Provider* in relation to that *retail customer's metering installation* in accordance with the *metering data provision procedures*;
 - (2) if a *small customer* has consented to a person accessing the *metering data* from its *small customer metering installation* in accordance with clause 7.15.4(b)(3), to that person;
 - (3) a *large customer* or a *customer authorised representative*, in relation to *metering data* from the *metering installation* in respect of the *connection point* of the *large customer*;
 - (4) the *energy ombudsman* in accordance with paragraphs 7.11.1(i) – (k); and
 - (5) an *Exempt Embedded Network Service Provider* in relation to a *metering installation* at a *child connection point* on its *network*.
- (e) In addition to the persons listed in paragraphs (c) and (d), a *retailer* may access and receive *NMI Standing Data*.
- (f) Without limiting this clause 7.15.5 or clause 7.13.3:
- (1) a *retailer* may access and receive *NMI Standing Data*;

- (2) a *customer authorised representative* may receive *metering data*;
- (3) a *retailer* or a *Distribution Network Service Provider* may access, receive or provide *metering data* to a *customer authorised representative*; and
- (4) *Exempt Embedded Network Service Provider* and its *Embedded Network Manager* may access or receive *metering data*,

after having first done whatever may be required or otherwise necessary, where relevant, under any applicable privacy legislation (including if appropriate making relevant disclosures or obtaining relevant consents from *retail customers*).

PART G Procedures

7.16 Procedures

7.16.1 Obligation to establish, maintain and publish procedures

- (a) *AEMO* is responsible for the establishment and maintenance of procedures specified in Chapter 7 except for procedures established and maintained under rule 7.17.
- (b) The procedures authorised by *AEMO* under Chapter 7 must be established and maintained by *AEMO* in accordance with the *Rules consultation procedures*.
- (c) The *Information Exchange Committee* is responsible for the establishment and maintenance of procedures specified in rule 7.17.
- (d) The procedures authorised by the *Information Exchange Committee* must be established and maintained in accordance with the requirements of rule 7.17.
- (e) The procedures established or maintained under this clause 7.16.1 must be *published* by the party authorised to make the procedure.
- (f) *AEMO* must establish, maintain and *publish* a list of procedures authorised under the *Rules* relevant to this Chapter 7, irrespective of who authorised those procedures.

7.16.2 Market Settlement and Transfer Solution Procedures

- (a) *AEMO*, must establish, maintain and *publish* *Market Settlement and Transfer Solution Procedures*.
- (b) *AEMO* must *publish* any amendment to the *Market Settlement and Transfer Solution Procedures*.

- (c) All *Registered Participants, Metering Providers, Metering Data Providers* and *Embedded Network Managers* must comply with the *Market Settlement and Transfer Solution Procedures*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) If a *Registered Participant, Metering Provider, Metering Data Provider* or *Embedded Network Manager* breaches the requirements of the *Market Settlement and Transfer Solution Procedures*, AEMO may send to that *Registered Participant, Metering Provider, Metering Data Provider* or *Embedded Network Manager* a notice in writing setting out the nature of the breach.
- (e) If the *Registered Participant, Metering Provider, Metering Data Provider* or *Embedded Network Manager* remains in breach for more than 5 *business days* after receipt of the notice from AEMO, AEMO must advise:
 - (1) the AER; and
 - (2) in the case of breach by a *Registered Participant* other than a *Metering Coordinator*, the *Authority* responsible for administering *jurisdictional electricity legislation* in the *participating jurisdiction* in which the *connection point* to which the breach relates is located.

7.16.3 Requirements of the metrology procedure

- (a) AEMO must establish, maintain and *publish* the *metrology procedure* that will apply to *metering installations* in accordance with this clause 7.16.3 and this Chapter 7.
- (b) The *metrology procedure* must include a minimum period of 3 months between the date when the *metrology procedure* is *published* and the date the *metrology procedure* commences unless the change is made under clause 7.16.7(e) in which case the effective date may be the same date as the date of *publication*.
- (c) The *metrology procedure* must include:
 - (1) information on the devices and processes that are to be used to:
 - (i) measure, or determine by means other than a device, the flow of electricity in a power conductor;
 - (ii) convey the measured or determined data under subparagraph (i) to other devices;
 - (iii) prepare the data using devices or algorithms to form *metering data*; and

- (iv) provide access to the *metering data* from a *telecommunications network*;
- (2) the requirements for the provision, installation and maintenance of *metering installations*;
- (3) the obligations of *Metering Coordinators, financially responsible Market Participants, Local Network Service Providers, Metering Providers, Metering Data Providers* and *Embedded Network Managers*;
- (4) details on:
 - (i) the parameters that determine the circumstances when *metering data* must be delivered to *AEMO* for the purposes of Chapter 3 and such parameters must include, but are not limited to, the volume limit per annum below which *AEMO* will not require *metering data* for those purposes;
 - (ii) the timeframe obligations for the delivery of *metering data* relating to a *metering installation* for the purpose of *settlements*; and
 - (iii) the performance standards for *metering data* required for the purpose of *settlements*;
- (5) subject to clause 7.16.4(d)(2), zero MWh as the specification for the *type 5 accumulation boundary*;
- (6) procedures for:
 - (i) the validation and substitution of *metering data*;
 - (ii) the estimation of *metering data*;
 - (iii) the method:
 - (A) by which *accumulated metering data* is to be converted by *AEMO* into *trading interval metering data*; and
 - (B) of managing the *first-tier load metering data* that is necessary to enable the conversion referred to in subparagraph (A) to take place; and
- (7) other matters in the *Rules* required to be included in the *metrology procedure*.

7.16.4 Jurisdictional metrology material in metrology procedure

- (a) Subject to this clause 7.16.4, *AEMO* may include in the *metrology procedure* other metrology material that is in the nature of a guideline, specification or other standard for a *participating jurisdiction* in relation to

type 5, 6 and 7 *metering installations* which alters the application of the *metrology procedure* for that jurisdiction (*jurisdictional metrology material*).

- (b) *Jurisdictional metrology material* may only be submitted to AEMO for inclusion in the *metrology procedure* by the *Ministers of the MCE*.
- (c) *Jurisdictional metrology material* submitted to AEMO under paragraph (b) must:
 - (1) be in writing;
 - (2) be provided to AEMO within sufficient time for AEMO to meet its obligations under this clause 7.16.4;
 - (3) be consistent with the matters contained in clauses 7.16.3 and 7.16.5;
 - (4) contain a date by which the *Ministers of the MCE* will undertake a review in relation to harmonising the *jurisdictional metrology material* with the *metrology procedure* (the **review date**); and
 - (5) be accompanied by written reasons as to why the *jurisdictional metrology material* is required instead of the *metrology procedure*.
- (d) *Jurisdictional metrology material* may address the following matters:
 - (1) guidelines for the replacement of a device capable of producing *interval energy data* with a device that only produces *accumulated energy data*; and
 - (2) the specification of the *type 5 accumulation boundary*.
- (e) On receiving *jurisdictional metrology material* from the *Ministers of the MCE*, AEMO must undertake the *Rules consultation procedures* in relation to that material, including in that consultation the reasons referred to subparagraph (c)(5).
- (f) At the conclusion of the *Rules consultation procedures* under paragraph (e), AEMO must provide a final report to the *Ministers of the MCE* in accordance with rule 8.9(k) of the outcome of that procedure and:
 - (1) in the case where the *Ministers of the MCE* do not advise AEMO of any amendments to the *jurisdictional metrology material*, AEMO must incorporate that material into a separate part of the *metrology procedure*; or
 - (2) in the case where the *Ministers of the MCE* advise AEMO of amendments to the *jurisdictional metrology material*, AEMO must incorporate the amended material into a separate part of the *metrology procedure*.

- (g) The *jurisdictional metrology material*, as included in the *metrology procedure* by AEMO, expires on the review date unless the *Ministers of the MCE* submit to AEMO new *jurisdictional metrology material* in accordance with this clause 7.16.4.
- (h) The *jurisdictional metrology material* must not prevent the *metering data* from being collected as *interval metering data* if required by the *financially responsible Market Participant* or a *Local Network Service Provider* for any purpose other than for *settlements*.

7.16.5 Additional metrology procedure matters

- (a) The *metrology procedure* may:
 - (1) clarify the operation of the *Rules* in relation to:
 - (i) *load profiling*;
 - (ii) the provision and maintenance of *meters*;
 - (iii) the provision of *metering data services*;
 - (iv) metrology for a *market load* connected to a *network* where the owner or operator of that *network* is not a *Registered Participant*;
 - (v) the accreditation of *Metering Providers*, *Metering Data Providers* and *Embedded Network Managers*; and
 - (vi) with respect to the provision, installation and maintenance of *metering installations* and the provision of *metering data services*, the obligations of *Metering Coordinators*, *financially responsible Market Participants*, *Local Network Service Providers*, AEMO, *Metering Providers* and *Metering Data Providers*;
 - (2) specify in detail:
 - (i) the accuracy of *metering installations*;
 - (ii) inspection and testing standards;
 - (iii) *Metering Provider*, *Metering Data Provider* and *Embedded Network Manager* capabilities in accordance with Schedules 7.2, 7.3 and 7.7 respectively, and accreditation standards;
 - (iv) the standards and/or technical requirements for the *metering data services database*; and
 - (v) the technical standards for *metering* of a *market load* that is connected to a *network* where the operator or owner of that *network* is not a *Registered Participant*;

- (3) provide information on the application of the *Rules*, subject to a statement in the procedure that where any inconsistency arises between the *Rules* and the *metrology procedure*, the *Rules* prevail to the extent of that inconsistency;
 - (4) in relation to type 4A, 5, 6 and 7 *metering installations* specify in what circumstances *metering data* held in the *metering data services database* within the relevant *participating jurisdiction*, can be used by *Distribution Network Service Providers* to calculate charges for *distribution services* for the purposes of clause 6.20.1(e); and
 - (5) contain information to ensure consistency in practice between the *metrology procedure* and other instruments developed and *published* by AEMO, including the practices adopted in the *Market Settlement and Transfer Solution Procedures*.
- (b) The *metrology procedure* may not include information relating to consumer protection.

7.16.6 Requirements of the service level procedures

- (a) AEMO must establish, maintain and *publish* the *service level procedures* that will apply to the relevant categories of registration that apply to *Metering Providers* and *Metering Data Providers*, in accordance with this Chapter 7 and this clause 7.16.6.
- (b) AEMO must establish, maintain and *publish* the *service level procedures* in accordance with clause 7.16.1.
- (c) The *service level procedures* must include:
 - (1) the requirements for the provision, installation and maintenance of *metering installations* by *Metering Providers*;
 - (2) requirements for the systems and processes for the collection, processing and delivery of *metering data* by *Metering Data Providers*;
 - (3) the performance levels associated with the collection, processing and delivery of *metering data*;
 - (4) the data formats that must be used for the delivery of *metering data*;
 - (5) the requirements for the management of relevant *NMI Standing Data*;
 - (6) the requirements for the processing of *metering data* associated with *connection point* transfers and the alteration of *metering installations* where one or more devices are replaced;
 - (7) other matters in the *Rules* required to be included in the *service level procedures*; and

- (8) information to ensure consistency in practice between the *service level procedures* and other documents developed and *published* by AEMO, including the practices adopted in the *Market Settlement and Transfer Solutions Procedures*.
- (d) The *service level procedures* must include requirements for accreditation, and for *Metering Providers* and *Metering Data Providers* (the '**service providers**'), may include requirements relating to, without limitation:
 - (1) cooperation with AEMO;
 - (2) the confidentiality of information collected by the service providers;
 - (3) the resolution of disputes between AEMO and the service providers, including disputes associated with a breach of the *Rules* and procedures authorised under the *Rules*;
 - (4) the access of AEMO to and the inspection and audit by AEMO of any equipment or database maintained by the service providers;
 - (5) the insurance which must be taken out by or on behalf of the service providers;
 - (6) subcontracting by the service providers;
 - (7) the software and systems that are used by the service providers;
 - (8) maintenance of quality systems accreditation;
 - (9) the ownership of intellectual property that is developed or used by the service providers; and
 - (10) the delivery up to AEMO of data, works, material and other property that AEMO has the right to in the event of the deregistration of a service provider.

7.16.6A Requirements of the ENM service level procedures

- (a) AEMO must establish, maintain and *publish* the *ENM service level procedures* that apply to *Embedded Network Managers*, in accordance with this Chapter 7 and this clause 7.16.6A.
- (b) AEMO must establish and publish the *ENM service level procedures* in accordance with clause 7.16.7.
- (c) The *ENM service level procedures* must include:
 - (1) a list of *embedded network management services*;
 - (2) the requirements for the provision of *embedded network management services*;

- (3) the requirements for the management of relevant *EN wiring information*;
 - (4) the requirements for the assignment of the *parent connection point* and *child connection points* on an *embedded network*;
 - (5) application of *distribution loss factors* in relation to the *embedded network*;
 - (6) the requirements for the notification of *distribution loss factors* to *AEMO*; and
 - (7) information to ensure consistency in practice between the *ENM service level procedures* and other documents developed and published by *AEMO*, including the practices adopted in the *Market Settlement and Transfer Solutions Procedures*.
- (d) The *ENM service level procedures* must include requirements for accreditation and registration for *Embedded Network Managers*, including, without limitation:
 - (1) requirements relating to cooperation with *AEMO*, *Registered Participants*, *Metering Providers* and *Metering Data Providers*;
 - (2) the confidentiality of information collected by the *Embedded Network Managers*;
 - (3) the resolution of disputes between *AEMO* and the *Embedded Network Managers*, including disputes associated with a breach of the *Rules* and procedures authorised under the *Rules*;
 - (4) the access of *AEMO* to and the inspection and audit by *AEMO* of any relevant database maintained by the *Embedded Network Managers*;
 - (5) the insurance which must be taken out by or on behalf of the *Embedded Network Managers*;
 - (6) subcontracting by the *Embedded Network Managers*;
 - (7) the software and systems that are used by the *Embedded Network Managers*;
 - (8) the ownership of intellectual property that is developed or used by the *Embedded Network Managers*; and
 - (9) the delivery up to *AEMO* of data, works, material and other property that *AEMO* has the right to in the event of the deregistration of an *Embedded Network Manager*.
- (e) The *ENM service level procedures* must contain information to ensure consistency in practice between the procedures and other documents

developed and *published* by AEMO, including the practices adopted in the *Market Settlement and Transfer Solutions Procedures*.

Clause 7.16.6B Guide to embedded networks

AEMO must develop and *publish* a guide to *embedded networks* addressing, without limitation:

- (a) the nature of exemptions granted by the AER under section 13(3) of the *National Electricity Law* and clause 2.5.1(d) in respect of *embedded networks*;
- (b) which *retailers* and other persons are able to sell electricity to consumers whose premises are *supplied* with electricity conveyed through *embedded networks*; and
- (c) the roles, responsibilities and obligations of *Embedded Network Managers* under the *Rules* and procedures authorised under the *Rules*.

7.16.7 Amendment of procedures in the Metering Chapter

- (a) Any person (the '**proponent**') may submit to AEMO a proposal (the '**proposal**') to amend any procedure in this Chapter 7 including the *metrology procedure* except:
 - (1) in relation to the *jurisdictional metrology material* which is contained within the *metrology procedure*; and
 - (2) procedures specified in rule 7.17,and must include reasons for the proposed change.
- (b) For proposals submitted under paragraph (a), AEMO must:
 - (1) give notice of receipt of the proposal to the proponent; and
 - (2) advise the proponent of the action that AEMO proposes to undertake under paragraphs (c) or (e).
- (c) Where AEMO:
 - (1) accepts the proposal, AEMO must conduct the *Rules consultation procedures* in relation to that proposal;
 - (2) requests further information from the proponent in relation to a proposal, on receiving that information AEMO must either accept, or reject the proposal; or
 - (3) rejects a proposal, AEMO must advise the proponent of its decision and reasons for the decision in writing.

- (d) *AEMO* may at the conclusion of the *Rules consultation procedures* amend the procedure (if necessary).
- (e) Where, in *AEMO*'s reasonable opinion, a proposal referred to in paragraph (a) relates to amendments that are of a minor or administrative nature, *AEMO* is not required to undertake the *Rules consultation procedures* but must:
 - (1) *publish* the proposal including the accompanying reasons;
 - (2) issue a notice to *Registered Participants*, *Metering Providers*, *Metering Data Providers*, *Embedded Network Managers*, *Ministers* and the *AER* advising that the amendment to the procedure has been *published*;
 - (3) invite submissions on the proposal;
 - (4) allow 10 *business days* for the receipt of submissions;
 - (5) allow a reasonable extension of time for submissions if requested in writing by a *Registered Participant*, *Metering Provider*, *Metering Data Provider* or *Embedded Network Manager*;
 - (6) *publish* submissions as soon as practicable after submissions have been received;
 - (7) consider the submissions; and
 - (8) *publish*, on or before the day of *publication* of the procedure identified in paragraph (a), reasons for the amendments to the procedure.

7.16.8 National Measurement Act

- (a) *AEMO* in consultation with the National Measurement Institute must establish guidelines that clarify the application of the requirements of the *National Measurement Act* to *metering installations*.
- (b) For the avoidance of doubt, to the extent that there is an inconsistency between the *Rules* and the *National Measurement Act*, the Act prevails to the extent of that inconsistency.

Part H B2B Requirements

7.17 B2B Arrangements

7.17.1 B2B e-Hub

- (a) *AEMO* must provide and operate a *B2B e-Hub*.
- (b) The *B2B e-Hub* must:

- (1) have the capability to facilitate the *B2B Communications* in accordance with the *B2B Procedures*;
 - (2) have the capability to support a free-form method of communication between *B2B Parties*; and
 - (3) meet any minimum standards of performance specified in the *B2B Procedures*.
- (c) A person must not use the *B2B e-Hub* unless they are a *B2B e-Hub Participant*.
- (d) Each *B2B Party* and *AEMO* must comply with the *B2B Procedures*.
- (e) Subject to paragraph (f), each *B2B Party* must use the *B2B e-Hub* for *B2B Communications* in accordance with the *B2B Procedures*.
- (f) *B2B Parties* may, on such terms and conditions as agreed between them, communicate a *B2B Communication* on a basis other than through the *B2B e-Hub* provided the *B2B Communication* is otherwise made in accordance with the *B2B Procedures*.
- (g) Despite paragraphs (d) and (e), a person:
 - (1) appointed as a *Metering Coordinator* in respect of a *transmission network connection point*; and
 - (2) not accredited as a *B2B e-Hub Participant*,is not required to:
 - (3) comply with the *B2B Procedures*; and
 - (4) use the *B2B e-Hub* for *B2B Communications*,in respect of that *transmission network connection point*.

7.17.2 B2B e-Hub Participants

- (a) A *B2B e-Hub Participant* is a person so accredited with *AEMO*.
- (b) *AEMO* must establish and maintain an accreditation process for *B2B e-Hub Participants* (including circumstances under which accreditation can be revoked by *AEMO*) and *publish* information relating to the process by which parties can apply to be accredited as *B2B e-Hub Participants*.
- (c) To be eligible for accreditation as a *B2B e-Hub Participant*, a person must:
 - (1) satisfy *AEMO* that it is complying with and will comply with the *Rules* and the procedures authorised under the *Rules*; and
 - (2) satisfy such other requirements as reasonably determined by *AEMO*, which may include (but are not limited to):

- (i) systems and information technology requirements necessary for secure use of the *B2B e-Hub*; and
 - (ii) fee payment and credit support requirements.
- (d) *AEMO* may exempt persons or classes of persons from any one or more requirements of the accreditation process for *B2B e-Hub Participants* established under paragraph (b), subject to such conditions as *AEMO* deems appropriate.

7.17.3 Content of the B2B Procedures

- (a) The *B2B Procedures* may be constituted by one or more separate documents and:
 - (1) must provide for *B2B Communications* to support each of the services set out in the *minimum services specification*;
 - (2) may provide for any other *B2B Communications* determined in accordance with the Rules;
 - (3) may include obligations in relation to the information to be maintained and provided to support *B2B Communications*;
 - (4) must not restrict *B2B Parties* from communicating *B2B Communications* on a basis other than through the *B2B e-Hub* as permitted under clause 7.17.1(f); and
 - (5) may include minimum performance standards for the *B2B e-Hub*.
- (b) For each *B2B Communication*, the *B2B Procedures*:
 - (1) must specify:
 - (i) the required *B2B Data* inputs and *B2B Data* outputs;
 - (ii) the required business process flows and related timing requirements;
 - (iii) the required content and format;
 - (iv) the required delivery method; and
 - (v) the back-up delivery method to be used where the required delivery method cannot be used; and
 - (2) may specify:
 - (i) details for testing and certification;
 - (ii) provisions relating to contingency arrangements; and

- (iii) examples of how a *B2B Communication* may operate in practice.
- (c) *B2B Data* is confidential information and may only be disclosed as permitted by the *Rules*.

7.17.4 Changing B2B Procedures

Change date for B2B Procedures

- (a) Any change to the *B2B Procedures* must specify the date on which the change to the *B2B Procedures* will commence (**B2B change date**). The B2B change date must be not less than 10 *business days* after the *B2B Decision* to make the change is *published*.
- (b) The *Information Exchange Committee* may change the B2B change date to a date later than that previously specified by the *Information Exchange Committee* following consultation with *AEMO* and any affected *B2B Parties* and *B2B Change Parties*. If the B2B change date is changed by the *Information Exchange Committee*, the *Information Exchange Committee* must provide *AEMO* with that date and *AEMO* must *publish* that date
- (c) A change to the *B2B Procedures* may also include provisions relating to a date for the end of a process related to a *B2B Communication*. That date may be after the date of commencement of the change and may be left to the discretion of the *Information Exchange Committee*. If the date is set by the *Information Exchange Committee*, the *Information Exchange Committee* must provide *AEMO* with that date and *AEMO* must *publish* that date.

Minor and administrative changes to the B2B Procedures

- (d) If a change to the *B2B Procedures* is of a minor or administrative nature or is necessary to correct a manifest error in the *B2B Procedures*, the *Information Exchange Committee* may recommend the change to *AEMO* and need not consult on the change in accordance with the *Rules consultation procedures*. Paragraphs (a) to (c) and (n) to (q) (inclusive) and clause 7.17.5 apply to such a change (with any necessary modifications).
- (e) *AEMO* must publish its *B2B Decision* in relation to a change under paragraph (d) and notify all *B2B Parties* of the change to the *B2B Procedures*.

B2B Procedure change process

- (f) Any person (other than the *Information Exchange Committee*) may propose a change to the *B2B Procedures* by providing a change proposal to the *Information Exchange Committee* in writing. A change proposal must provide details of the proposed change to the *B2B Procedure* and supporting information, including reasons for the proposed change.
- (g) Within 25 *business days* of receipt by the *Information Exchange Committee* of a proposal under paragraph (f), the *Information Exchange Committee*

must meet to determine whether, on a prima facie basis, changing the *B2B Procedures* is warranted having regard to the *national electricity objective* and the *B2B factors* and considering the *B2B Principles*.

- (h) If, after its consideration under paragraph (g), the *Information Exchange Committee* decides that the proposal made under paragraph (f) should not be considered further, the *Information Exchange Committee* must within five *business days* provide written reasons for that decision to the person who made the proposal.
- (i) If, after its consideration under paragraph (g), the *Information Exchange Committee* decides that the proposal made under paragraph (f) should be considered further, the *Information Exchange Committee* must:
 - (1) develop the proposal into a *B2B Proposal* (which may differ from the proposal originally made) and an accompanying *B2B Procedures Change Pack* for consultation; and
 - (2) seek AEMO's advice on whether:
 - (i) a conflict with the *Market Settlement and Transfer Solution Procedures* arises from the *B2B Proposal*; and
 - (ii) changes are required to the *B2B e-Hub* in order to deliver the *B2B Proposal* and, if so, the likely costs of making such changes,

and include any such advice in the *B2B Procedures Change Pack*.

- (j) The *Information Exchange Committee* must comply with the *Rules consultation procedures* in relation to the *B2B Proposal*. For the purposes of rule 8.9(b), the nominated persons to whom notice must be given are *B2B Parties*, relevant *B2B Change Parties*, AEMO and such other persons who identify themselves to the *Information Exchange Committee* as interested in the *B2B Procedures*. For the purposes of the notice, the particulars of the matters under consultation must include a copy of the *B2B Procedures Change Pack*.
- (k) AEMO must publish the notice of consultation within 3 *business days* of its receipt and must notify all persons referred to in paragraph (j) of the consultation.
- (l) In addition to the matters which rule 8.9(g) requires be included in the draft report, the draft report must contain details of how the *Information Exchange Committee* has:
 - (1) had regard to the *national electricity objective* and the *B2B factors*; and
 - (2) sought to give effect to the *B2B Principles*,when considering the *B2B Proposal* and each valid written submission.

- (m) In addition to the matters which rule 8.9(k) requires be included in the final report, the final report must contain details of how the *Information Exchange Committee* has:
 - (1) had regard to the *national electricity objective* and the *B2B factors*; and
 - (2) sought to give effect to the *B2B Principles*,
when considering the *B2B Proposal* and each valid written submission.
- (n) The *Information Exchange Committee* may decide:
 - (1) not to recommend the proposed change to the *B2B Procedures*; or
 - (2) to recommend a change to the *B2B Procedures* to AEMO.
- (o) An *Information Exchange Committee Recommendation* may recommend a different change to the *B2B Procedures* than that originally proposed under paragraph (f).
- (p) The *Information Exchange Committee*'s decision under paragraph (n) must be included in the final report required under rule 8.9(k).
- (q) In making a decision under paragraph (n), the *Information Exchange Committee* must:
 - (1) have regard to the *national electricity objective* and the *B2B factors*; and
 - (2) seek to give effect to the *B2B Principles*.
- (r) For the purposes of paragraph (q), to the extent of any conflict between the *B2B Principles*, the *Information Exchange Committee* may determine the manner in which those principles can best be reconciled or which of them should prevail.

7.17.5 B2B Decision

- (a) If the *Information Exchange Committee* decides not to recommend a change to the *B2B Procedures* under clause 7.17.4(n)(1), AEMO must take no further action in respect of the proposal.
- (b) If the *Information Exchange Committee* makes an *Information Exchange Committee Recommendation*, AEMO must consider the *Information Exchange Committee Recommendation* and must approve that *Information Exchange Committee Recommendation*, unless it concludes that the *Information Exchange Committee Recommendation* would conflict with the *Market Settlement and Transfer Solution Procedures*.
- (c) In considering whether the *Information Exchange Committee Recommendation* would conflict with the *Market Settlement and Transfer*

Solution Procedures, AEMO must not otherwise consider the merits of the *Information Exchange Committee Recommendation*.

- (d) AEMO must not amend the *Information Exchange Committee Recommendation* and must not conduct any further consultation on the *Information Exchange Committee Recommendation* prior to making its *B2B Decision*.
- (e) AEMO must *publish* and make available on its website its *B2B Decision*, with reasons, within 10 *business days* of receiving an *Information Exchange Committee Recommendation* from the *Information Exchange Committee*.
- (f) If AEMO decides not to approve an *Information Exchange Committee Recommendation* (a **Vetoed Recommendation**), then:
 - (1) the reasons for the *B2B Decision* which are to be published and made available in accordance with paragraph (e) must include an explanation of how the Vetoed Recommendation would give rise to a conflict with the *Market Settlement and Transfer Solution Procedures*; and
 - (2) the *Information Exchange Committee* may:
 - (i) reconsider the proposal made under clause 7.17.4(f) in respect of which the Vetoed Recommendation was made; and
 - (ii) make a new *Information Exchange Committee Recommendation*, which may materially differ from the Vetoed Recommendation,

in accordance with clauses 7.17.4(i) to 7.17.4(r) (inclusive).

7.17.6 Establishment of Information Exchange Committee

- (a) AEMO must establish the *Information Exchange Committee* in accordance with the *Information Exchange Committee Election Procedures* and the *Rules*.
- (b) The *Information Exchange Committee* must consist of:
 - (1) one *Distribution Network Service Provider Member*;
 - (2) one *Retailer Member*;
 - (3) one *Metering Member*;
 - (4) one *Consumer Member*;
 - (5) one *AEMO Member*;
 - (6) if there is at least one person that is accredited by AEMO as a *B2B e-Hub Participant* and that person:

- (i) is a *Third Party B2B Participant*; and
 - (ii) nominates a representative for election as the *Third Party B2B Participant Member*,

one *Third Party B2B Participant Member*; and
- (7) at least two, but no more than four, *Discretionary Members*.
- (c) *AEMO* must maintain a register of *Members* which includes:
 - (1) the name of each current *Member* and their category of membership;
and
 - (2) in respect of each *Discretionary Member*, a description of the class or classes of persons that the *Discretionary Member* has been appointed by *AEMO* to represent under clause 7.17.10(d).
- (d) Subject to paragraph (e), the *AEMO Member* is the chairperson of the *Information Exchange Committee*.
- (e) If the *AEMO Member* is unable to act as chairperson at a meeting of the *Information Exchange Committee* because he or she has, or would reasonably be considered to have, a material conflict of interest in the matter to be decided or determined by the *Information Exchange Committee* at that meeting, then a *Member* chosen by an *ordinary majority* may preside as chairperson of the meeting for the relevant matter.
- (f) Each *Member* must serve on the *Information Exchange Committee* for the term specified in the *Information Exchange Committee Election Procedures* and must only be removed or replaced in accordance with the *Information Exchange Committee Election Procedures* and the *Rules*.
- (g) *B2B Parties* must ensure that the *Information Exchange Committee Election Procedures* include provisions in respect of:
 - (1) procedures for nominating *Members* and voting for *Members*;
 - (2) the term of a *Member*;
 - (3) procedures for the determination and publication of results of elections of a *Member*; and
 - (4) procedures for the removal or resignation of a *Member*.

7.17.7 Functions and powers of Information Exchange Committee

- (a) The functions and powers of the *Information Exchange Committee* include:
 - (1) developing, consulting on and making an *Information Exchange Committee Recommendation*;

- (2) managing the ongoing development of the *B2B Procedures* and any changes to them;
 - (3) establishing the *Information Exchange Committee Working Groups*;
 - (4) developing, consulting on and approving the *Information Exchange Committee Works Programme*;
 - (5) reviewing and considering work completed by the *Information Exchange Committee Working Groups*;
 - (6) developing proposed amendments to the *Information Exchange Committee Election Procedures*; and
 - (7) developing proposed amendments to the *Information Exchange Committee Operating Manual*.
- (b) The *Information Exchange Committee* must prepare an *Information Exchange Committee Annual Report* by 31 December each year. The *Information Exchange Committee* must provide the *Information Exchange Committee Annual Report* to AEMO by the following 31 March and AEMO must publish that *Information Exchange Committee Annual Report*.
- (c) The *Information Exchange Committee Annual Report* must contain the information required by the *Information Exchange Committee Operating Manual*.
- (d) By 28 February each year the *Information Exchange Committee* must prepare a draft budget for the following *financial year* in a form which is consistent with the budget procedures of AEMO. Following discussion with AEMO the *Information Exchange Committee* must prepare a budget by 31 March and provide that budget to AEMO. When AEMO publishes its budget pursuant to clause 2.11.3, AEMO must advise the *Information Exchange Committee* of the final budget for the *Information Exchange Committee* for that *financial year*.
- (e) The *Information Exchange Committee* must provide to AEMO the current version of the *B2B Procedures* and the *Information Exchange Committee Works Programme*.
- (f) AEMO must publish the *B2B Procedures* and the *Information Exchange Committee Works Programme* provided to it by the *Information Exchange Committee*.

7.17.8 Obligations of Members

- (a) Each *Member* in performing his or her duties or in exercising any right, power or discretion as a *Member* must:
 - (1) have regard to the *national electricity objective* and *B2B factors*; and
 - (2) seek to give effect to the *B2B Principles*,

and must:

- (1) at all times act honestly;
 - (2) exercise the degree of care and diligence that a reasonable person in a like position would exercise;
 - (3) not make improper use of information acquired by virtue of his or her position to gain, directly or indirectly, an advantage for himself or herself, or the parties by which he or she is employed and/or which nominated him or her to be a *Member*;
 - (4) not make improper use of his or her position to gain, directly or indirectly, an advantage for himself or herself or the parties by which he or she is employed and/or which nominated him or her to be a *Member*; and
 - (5) not take part in any decision or determination of the *Information Exchange Committee* where the *Member* has, or would reasonably be considered to have, a material conflict of interest in the matter to be decided or determined by the *Information Exchange Committee*.
- (b) For the purposes of subparagraph (a)(5), a conflict will be material if it detracts, or would reasonably be considered to be likely to detract, from the *Member's* capacity to exercise independent judgment in respect of the relevant decision or determination.
- (c) Notwithstanding subparagraph (a)(5) and paragraph (b), a *B2B Party* may take into account the interests of the persons it has been elected to represent in performing his or her duties or in exercising any right, power or discretion.
- (d) Notwithstanding subparagraph (a)(5) and paragraph (b), the *Consumer Member* may take into account the interests of *small customers* in performing his or her duties or in exercising any right, power or discretion.
- (e) Notwithstanding subparagraph (a)(5) and paragraph (b), the *Discretionary Member* may take into account the interests of the persons the *Discretionary Member* was appointed by *AEMO* to represent in performing his or her duties or in exercising any right, power or discretion.
- (f) Notwithstanding subparagraph (a)(5) and paragraph (b), the *AEMO Member* may take into account the interests of *AEMO* in performing his or her duties or in exercising any right, power or discretion.

7.17.9 Meetings of Information Exchange Committee

- (a) The *Information Exchange Committee* must meet at least once every three months.
- (b) The quorum for a meeting of the *Information Exchange Committee* consists of:

- (1) if there are less than nine *Members*, five *Members*; and
- (2) if there are nine *Members* or more, six *Members*,

and must include the *AEMO Member*, except where the *AEMO Member* is unable to attend the meeting because he or she has, or would reasonably be considered to have, a material conflict of interest in the matter to be decided or determined by the *Information Exchange Committee* at the meeting.

- (c) A decision of the *Information Exchange Committee* is not valid and enforceable unless, in respect of:
 - (1) an *Information Exchange Committee Recommendation*, it has the support of a *super majority*;
 - (2) any decision that a proposal under clause 7.17.4(f) should not be considered further after initial consideration under clause 7.17.4(g), and any decision to not recommend a change to the *B2B Procedures* for approval by *AEMO*, it has the support of a *super majority*;
 - (3) any decision to approve the *Information Exchange Committee Works Programme*, it has the support of a *super majority*; and
 - (4) any other decision by the *Information Exchange Committee*, it has the support of an *ordinary majority*.

7.17.10 Nomination, election and appointment of Members

- (a) A person may only be nominated and elected as a *Member* in accordance with the *Information Exchange Committee Election Procedures* and the *Rules* including, without limitation, this clause 7.17.10 and clause 7.17.11.
- (b) *AEMO* must appoint a *Consumer Member*. Prior to making such appointment, *AEMO* must consult with Energy Consumers Australia and may consult with any other person or persons determined by *AEMO*.
- (c) *AEMO* must appoint an *AEMO Member* and the *AEMO Member* must be a director of *AEMO*.
- (d) *AEMO* must appoint at least two, but may appoint up to four, *Discretionary Members* to represent a class or classes of persons who, in *AEMO*'s reasonable opinion, have an interest in the *B2B Procedures* and those interests are not adequately represented on the *Information Exchange Committee*. Prior to making such appointments, *AEMO* may consult with any person or persons determined by *AEMO*.
- (e) *Distribution Network Service Providers* must elect a *Distribution Network Service Provider Member*.
- (f) *Retailer Member Voters* must elect a *Retailer Member*.
- (g) *Metering Member Voters* must elect a *Metering Member*.

- (h) *Third Party B2B Participants* must elect a *Third Party B2B Participant Member*.
- (i) Any person who is:
 - (1) both a *retailer* and a *Local Retailer*, may nominate and vote only once in respect of the appointment of a *Retailer Member*; and
 - (2) registered with AEMO in two or more of the categories of *Metering Coordinator*, *Metering Provider* and *Metering Data Provider*, may nominate and vote only once in respect of the appointment of a *Metering Member*.
- (j) If two or more persons are *related bodies corporate* and belong to the same *Voter Category* (**related voters**) then only one of the related voters may nominate and vote in respect of an election for a *Distribution Network Service Provider Member*, a *Retailer Member*, *Metering Member* or *Third Party B2B Participant Member*, as the case may be.

7.17.11 Qualifications of Members

- (a) In this clause, being **Independent** of another person means:
 - (1) is not currently an employee or director of that person;
 - (2) is not:
 - (i) an employee of, or a partner in, any partnership; or
 - (ii) an employee of, or a director of, any company,which partnership or company is an adviser or consultant to that person, where such relationship is a significant source of income for that partnership or company; or
 - (3) an adviser or consultant to that person, where such relationship is a significant source of income for that adviser or consultant.
- (b) Each *B2B Party* must ensure that a person they nominate as a *Member* satisfies the requirements for that particular category of *Member* as set out in the *Information Exchange Committee Election Procedures* and the *Rules*.
- (c) A *B2B Party* must ensure that a person they nominate as a *Member*:
 - (1) has knowledge of and experience in the *National Electricity Market*;
 - (2) in relation to *Members* voted by a particular *Voter Category*, has experience with and skills in considering, issues that affect the relevant *Voter Category*.
 - (3) has knowledge of the subject matter of *B2B Procedures*; and

- (4) has knowledge and understanding of the *Rules* and the related legislative and regulatory framework.
- (d) *AEMO* must ensure that an appointee for a *Discretionary Member* or the *Consumer Member*:
 - (1) has knowledge of and experience with the *National Electricity Market*;
 - (2) has experience with and skills in considering issues that affect:
 - (i) in respect of a *Discretionary Member*, the class or classes of persons whom the *Discretionary Member* represents (as specified in the register kept pursuant to clause 7.17.6(c)); and
 - (ii) in respect of the *Consumer Member*, *small customers*;
 - (3) has knowledge of the subject matter of *B2B Procedures*;
 - (4) has knowledge and understanding of the *Rules* and the related legislative and regulatory framework; and
 - (5) in the case of the *Discretionary Member*, is Independent of *AEMO*.

7.17.12 Information Exchange Committee Election Procedures and Information Exchange Committee Operating Manual

- (a) The *Information Exchange Committee*, *AEMO* and *B2B Parties* must comply with the *Information Exchange Committee Election Procedures* and the *Information Exchange Committee Operating Manual*.
- (b) *B2B Parties* and *AEMO* are not obliged to comply with an amendment to the *Information Exchange Committee Election Procedures* unless that amendment is made in accordance with this clause.
- (c) The *Information Exchange Committee Election Procedures* may only be amended in accordance with the procedure set out in the *Information Exchange Committee Election Procedures* and with the support of not less than 75% of voters in each of at least three of the *Voter Categories* for the following *Members*:
 - (1) *Distribution Network Service Provider Member*;
 - (2) *Retailer Member*;
 - (3) *Metering Member*; and
 - (4) *Third Party B2B Participant Member*.
- (d) *AEMO* must *publish* the current version of the *Information Exchange Committee Election Procedures*.

- (e) *B2B Parties* and *AEMO* are not obliged to comply with an amendment to the *Information Exchange Committee Operating Manual* unless that amendment is made in accordance with this clause.
- (f) The *Information Exchange Committee Operating Manual* may only be amended in accordance with the procedure set out in the *Information Exchange Committee Election Procedures* and with the support of not less than 75% of voters in each of at least three of the *Voter Categories* for the following *Members*:
 - (1) *Distribution Network Service Provider Member*;
 - (2) *Retailer Member*;
 - (3) *Metering Member*; and
 - (4) *Third Party B2B Participant Member*.
- (g) *AEMO* must *publish* the current version of the *Information Exchange Committee Operating Manual*.

7.17.13 Cost Recovery

- (a) The *B2B costs* must be paid by *AEMO* in the first instance and recouped by *AEMO* as *Participant fees*.
- (b) Subject to paragraph (a), the costs of any *Member* relating to their participation in the *Information Exchange Committee* and the costs of individuals relating to their participation in the *Information Exchange Committee Working Groups* is not to be borne by *AEMO*.
- (c) The cost to a person of implementing and maintaining the necessary systems and processes to ensure compliance with *B2B Procedures* must be met by that person.

Schedule 7.1 Metering register

S7.1.1 General

- (a) The *metering register* forms part of the *metering database* and holds static *metering* information associated with *metering installations* defined by the *Rules* that determines the validity and accuracy of *metering data*.
- (b) The purpose of the *metering register* is to facilitate:
 - (1) the registration of *connection points*, *metering points* and affected *Registered Participants*;
 - (2) the verification of compliance with the *Rules*; and
 - (3) the auditable control of changes to the registered information.

S7.1.2 Metering register information

Metering information to be contained in the *metering register* should include, but is not limited to the following:

- (a) *Connection* and *metering point* reference details, including:
 - (1) agreed locations and reference details (eg drawing numbers);
 - (2) loss compensation calculation details;
 - (3) site identification names;
 - (4) details of *Market Participants* and *Local Network Service Providers* associated with the *connection point* and the *Embedded Network Manager* in relation to a *child connection point*;
 - (5) details of the *Metering Coordinator*; and
 - (6) transfer date for *Second-Tier Customer* and *Non-Registered Second-Tier Customer metering data* (i.e. to another *Market Customer*).
- (b) The identity and characteristics of *metering* equipment (ie *instrument transformers*, *metering installation* and *check metering installation*), including:
 - (1) serial numbers;
 - (2) *metering installation* identification name;
 - (3) *metering installation* types and models;
 - (4) *instrument transformer* ratios (available and connected);
 - (5) current test and calibration programme details, test results and references to test certificates;
 - (6) asset management plan and testing schedule;
 - (7) calibration tables, where applied to achieve *metering installation* accuracy;
 - (8) *Metering Provider(s)* and *Metering Data Provider(s)* details;
 - (9) summation scheme values and multipliers; and
 - (10) data register coding details.
- (c) Data communication details, including:
 - (1) telephone number(s) for access to *energy data*;

- (2) communication equipment type and serial numbers;
 - (3) communication protocol details or references;
 - (4) data conversion details;
 - (5) user identifications and access rights; and
 - (6) 'write' password (to be contained in a hidden or protected field).
- (d) Data validation, substitution and estimation processes agreed between affected parties, including:
 - (1) algorithms;
 - (2) data comparison techniques;
 - (3) processing and alarms (eg *voltage* source limits; phase angle limits);
 - (4) *check metering* compensation details; and
 - (5) alternate data sources.
- (e) Data processing prior to the *settlement* process, including algorithms for:
 - (1) *generation* half-hourly 'sent out' calculation;
 - (2) customer half-hourly *load* calculation; and
 - (3) *Local Retailer* net *load* calculation.

Schedule 7.2 Metering Provider

S7.2.1 General

- (a) A *Metering Provider* must be accredited by and registered by *AEMO*. *AEMO* must accredit and register a *Metering Provider* only for the type of work the *Metering Provider* is qualified to provide.
- (b) *AEMO* must establish a qualification process for *Metering Providers* that enables registration to be achieved in accordance with the requirements of this Schedule 7.2.
- (c) A *Metering Provider* must have the necessary licences in accordance with appropriate State and Territory requirements.
- (d) A *Metering Provider* must ensure that any *metering* equipment it installs is suitable for the range of operating conditions to which it will be exposed (e.g. temperature; impulse levels), and operates within the defined limits for that equipment.

S7.2.2 Categories of registration

- (a) Registrations for *Metering Providers* in relation to the provision, installation and maintenance of *metering installation* types 1, 2, 3, 4 and 4A must be categorised in accordance with Tables S7.2.2.1, S7.2.2.2 and S7.2.2.3, or other procedures approved by AEMO.
- (b) Registrations for *Metering Providers* in relation to the provision, installation and maintenance (unless otherwise specified) of *metering installation* types 5 and 6 must be categorised in accordance with Table S7.2.2.4 with the capabilities established in the *metrology procedures*.
- (c) Registration for *Metering Providers* in relation to the provision, installation and maintenance of *small customer metering installations* must be categorised in accordance with Tables S7.2.2.2 and satisfy the requirements in clause S7.2.5.
- (d) AEMO may establish *Accredited Service Provider categories* of registration for a *Metering Provider* in accordance with clause S7.2.6.

Table S7.2.2.1 Categories of registration for accreditation

Category	Competency
1C	Class 0.2 CTs with < 0.1% uncertainty.
1V	Class 0.2 VTs with < 0.1% uncertainty.
1M	Class 0.2 Wh meters with < 0.1/cosφ% uncertainty and class 0.5 varh meters with <0.3/sinφ uncertainty.
1A	Class 0.2 CTs, VTs, Wh meters; class 0.5 varh meters; the total installation to 0.5%. Wh with < 0.2% uncertainty at unity <i>power factor</i> ; 1.0% for varh with <0.4% uncertainty at zero <i>power factor</i> .
2C	Class 0.5 CTs with < 0.2% uncertainty.
2V	Class 0.5 VTs with < 0.2% uncertainty.
2M	Class 0.5 Wh meters with < 0.2/cosφ uncertainty and class 1.0 varh meters with <0.4/sinφ uncertainty.
2A	Class 0.5 CTs, VTs, Wh meters; class 1.0 varh meters; the total installation to 1.0%. Wh with < 0.4% uncertainty at unity <i>power factor</i> ; 2.0% for varh with <0.5% uncertainty at zero <i>power factor</i> .

Table S7.2.2.2 Categories of registration for accreditation

Category	Competency
3M	Class 1.0 Wh meters with $< 0.3/\cos\phi$ uncertainty and class 2.0 varh meters with $<0.5/\sin\phi\%$ uncertainty.
3A	Class 0.5 CTs, VTs; class 1.0 Wh meters; class 2.0% varh meters; the total installation to 1.5%. Wh with $< 0.5\%$ uncertainty at unity <i>power factor</i> ; 3.0% for varh with $<0.6\%$ uncertainty at zero <i>power factor</i> .
4M	Class 1.0 Wh meters and class 1.5 Wh meters with $<0.3/\cos\phi\%$ uncertainty.
4A	Class 1.0 Wh meters and class 1.5 Wh meters with $<0.3/\cos\phi\%$ uncertainty.
4S	Class 1.0Wh meters and class 1.5 Wh meters with $<0.3/\cos\phi\%$ uncertainty.

Table S7.2.2.3 Categories of registration for accreditation

Category	Competency
L	Approved <i>communications interface</i> installer

Table S7.2.2.4 Categories of registration for accreditation

Category	Competency
5A Installation only	Class 1.0 and class 1.5 whole current Wh meters with $<0.3/\cos\Phi\%$ uncertainty.
6A Installation only	Class 1.5 whole current Wh meters with $<0.3/\cos\Phi\%$ uncertainty.
5B	Class 1.0 and class 1.5 whole current or CT connected Wh meters with $<0.3/\cos\Phi\%$ uncertainty.
6B	Class 1.5 whole current or CT connected Wh meters with $0.3</\cos\Phi\%$ uncertainty.

S7.2.3 Capabilities of Metering Providers for metering installations types 1, 2, 3, 4 and 4A

Category 1A, 2A, 3A and 4M *Metering Providers* must be able to exhibit the following capabilities to the reasonable satisfaction of AEMO:

- (a) Detailed design and specification of *metering* schemes, including:
 - (1) knowledge and understanding of this Chapter 7;
 - (2) knowledge of equipment (*meters*, *current transformers* and where applicable *voltage transformers*);
 - (3) design experience including knowledge of *current transformers* and where applicable *voltage transformers* and the effect of burdens on performance;
 - (4) ability to calculate summation scheme values, multipliers, etc; and
 - (5) ability to produce documentation, such as single line diagrams, panel layouts and wiring diagrams.
- (b) Programming and certification requirements for *metering installations* to the required accuracy, including:
 - (1) licensed access to *metering* software applicable to all equipment being installed by the *Metering Provider*;
 - (2) ability to program requirements by setting variables in *meters*, summators, modems, etc;
 - (3) management of the testing of all equipment to the accuracy requirements specified in this Chapter 7;
 - (4) certifications that all calibration and other *meter* parameters have been set, verified and recorded prior to *meters*, and other components of the *metering installation* being released for installation;
 - (5) all reference/calibration equipment for the purpose of meeting test or inspection obligations must be tested to ensure full traceability to test certificates issued by a NATA accredited body or a body recognised by NATA under the International Laboratory Accreditation Corporation (ILAC) mutual recognition scheme and documentation of the traceability must be provided to AEMO on request; and
 - (6) compliance with ISO/IEC Guide 25 "General Requirements for the Competence of Calibration and Testing Laboratories" with regard to the calculation of uncertainties and accuracy.
- (c) Installation and commissioning of *metering installations* and, where necessary, the *communications interface* to facilitate the *remote acquisition* of *metering data*, including:
 - (1) the use of calibrated test equipment to perform primary injection tests and field accuracy tests;
 - (2) the availability of trained and competent staff to install and test *metering installations* to determine that installation is correct; and

- (3) the use of test procedures to confirm that the *metering installation* is correct and that *metering* constants are recorded and/or programmed correctly.
- (d) Inspection and maintenance of *metering installations* and equipment, including:
 - (1) regular readings of the measurement device where external recording is used (6 monthly) and verification with *AEMO* records;
 - (2) approved test and inspection procedures to perform appropriate tests as detailed in this Chapter 7;
 - (3) calibrated field test equipment for primary injection and *meter* testing to the required levels of uncertainty; and
 - (4) secure documentation system to maintain *metering* records for all work performed on a *metering installation*, including details of the security method used.
- (e) Verification of *metering data* and *check metering data*, as follows:
 - (1) on commissioning *metering data*, verification of all readings, constraints (adjustments) and multipliers to be used for converting raw data to consumption data; and
 - (2) on inspection, testing and/or maintenance, verification that readings, constants and multipliers are correct by direct conversion of *meter* readings and check against the *metering database*.
- (f) Quality System as AS 9000 series standards, including:
 - (1) a quality system to AS/NZ ISO 9000 series applicable to the work to be performed:
 - Type 1 full implementation of AS/NZ ISO 9002;
 - Type 2 full implementation of AS/NZ ISO 9002;
 - Type 3 – implementation of AS/NZ ISO 9002 to a level agreed with *AEMO*;
 - Type 4 implementation of AS/NZ ISO 9002 to a level agreed with *AEMO*;
 - Type 4A – implementation of AS/NZ ISO 9002 to a level agreed with *AEMO*;
 - (2) the calculations of accuracy based on test results are to include all reference standard errors;

- (3) an estimate of Testing Uncertainties which must be calculated in accordance with the ISO “Guide to the Expression of Uncertainty in Measurement”; and
 - (4) a knowledge and understanding of the appropriate standards and guides, including those in the *Rules*.
- (g) All of the capabilities relevant to that type of *metering installation* which are set out in the *Rules* and procedures authorised under the *Rules*.

S7.2.4 Capabilities of Metering Providers for metering installations types 5 and 6

Metering Providers, who apply for categories of *Metering Provider* accreditation of *metering installations* types 5 and/or 6, must be able to exhibit, to the reasonable satisfaction of *AEMO* all of the capabilities relevant to that type of *metering installation* which are set out in the *Rules* and procedures authorised under the *Rules*.

S7.2.5 Capabilities of Metering Providers for small customer metering installations

Category 4S *Metering Providers* must be able to exhibit, to the reasonable satisfaction of *AEMO*:

- (a) all of the capabilities in S7.2.3; and
- (b) the establishment of an appropriate security control management plan and associated infrastructure and communications systems for the purposes of preventing unauthorised local access or remote access to *metering installations*, services provided by *metering installations* and *energy data* held in *metering installations*.

S7.2.6 Capabilities of the Accredited Service Provider category

- (a) The *Accredited Service Providers categories* established by *AEMO* under clause S7.2.2(d) may perform work relating to the installation of any types 1, 2, 3, 4, 4A, 5 or 6 *metering installations*.
- (b) *AEMO* must include *Accredited Service Provider categories* in the accreditation guidelines prepared and *published* under clause 7.4.1(c).
- (c) *AEMO* may determine:
 - (1) the competencies of a *Metering Provider* registered in each *Accredited Service Provider category* provided that those competencies are consistent with any capabilities established in the *metrology procedure* in respect of the work performed under paragraph (a); and
 - (2) different competencies for each *Accredited Service Provider category* for each *participating jurisdiction*.

Schedule 7.3 Metering Data Provider

S7.3.1 General

- (a) A *Metering Data Provider* must be accredited by and registered by AEMO.
- (b) AEMO must accredit and register a *Metering Data Provider* only for the type of work the *Metering Data Provider* is qualified to provide.
- (c) AEMO must establish a qualification process for *Metering Data Providers* that enables registration to be achieved in accordance with the requirements of this Schedule 7.3.

S7.3.2 Categories of registration

Categories of registration are set out in Table S7.3.2.1.

Table S7.3.2.1 Categories of registration for accreditation

<i>Metering installation type</i>	<i>Categories of registration</i>	
1, 2 3 and/or 4	Category 1D, 2D, 3D and/or 4D (for <i>remote acquisition</i> , processing and delivery of <i>metering data</i> for <i>connection points</i>)	Category 4S (for <i>small customer metering installations</i> in relation to <i>remote acquisition</i> , processing and delivery of <i>metering data</i> for <i>connection points</i>)
4A, 5 and/or 6	Category 4AC, 5C and/or 6C (for manual collection or <i>remote acquisition</i> of <i>metering data</i>)	Category 4AD, 5D and/or 6D (for manual collection, processing and delivery of <i>metering data</i> or for <i>remote acquisition</i> , processing and delivery of <i>metering data</i>)
7	Category 7D (for processing and delivery of <i>calculated metering data</i>)	

S7.3.3 Capabilities of Metering Data Providers

Metering Data Providers must be able to exhibit to the reasonable satisfaction of AEMO the following capabilities, as applicable, for the categories of *Metering Data Provider* accreditation sought:

- (a) Detailed understanding of the *Rules*, and all procedures authorised under the *Rules* including the relevant *service level procedures* relating to the function of a *Metering Data Provider* and the carrying out of *metering data services*.

- (b) Detailed understanding of the participant role relationships and obligations that exist between the *Metering Data Provider*, *Metering Provider*, *financially responsible Market Participant*, *Local Network Service Provider*, *AEMO* and the *Metering Coordinator*.
- (c) An understanding of *metering* arrangements, including knowledge of *metering* equipment (*meters*, *current transformers* and *voltage transformers*).
- (d) Authorised access to *metering* software for the:
 - (1) collection of *metering data*;
 - (2) establishment, maintenance and operation of a *metering data services database* for the storage and management of *metering data* and *NMI Standing Data*; and
 - (3) the validation, substitution and estimation of *metering data*.
- (e) Processes and systems for the collection of *metering data* including:
 - (1) knowledge of manual collection and *remote acquisition* of *metering data* (as applicable);
 - (2) collection technologies and methodologies; and
 - (3) *metering* protocols and equipment.
- (f) Systems for the processing of *metering data* including:
 - (1) processes for the verification and commissioning of *metering data* and relevant *NMI Standing Data* pertaining to each *metering installation* into the *metering data services database*;
 - (2) processes for validation, substitution and estimation of *metering data*;
 - (3) processes for the storage, adjustment and aggregation of *metering data*; and
 - (4) the secure storage of historical data.
- (g) Processes for the delivery of *metering data* and relevant *NMI Standing Data* to *Registered Participants* and *AEMO* including:
 - (1) delivery performance requirements for *metering data*; and
 - (2) an understanding of the relevant *metering data* file formats.
- (h) The availability of trained and competent staff to:
 - (1) read or interrogate the *metering installation*;

- (2) collect and process *metering data* into the *metering data services database*;
 - (3) validate, substitute or estimate *metering data* as the case may be;
 - (4) maintain the physical and logical security of the *metering data services database* and only allow access to *metering data* by those persons entitled to receive *metering data*; and
 - (5) ensure the ongoing performance and availability of the collection process and the *metering data services database* are maintained inclusive of necessary system supports for backup, archiving and disaster recovery.
- (i) The establishment of a quality system which will:
- (1) underpin all operational documentation, processes and procedures;
 - (2) facilitate good change control management of procedures, IT systems and software;
 - (3) provide audit trail management of *metering data* and *NMI Standing Data*;
 - (4) maintain a security control management plan;
 - (5) maintain security controls and data integrity; and
 - (6) maintain knowledge and understanding of the *Rules* and relevant procedures, standards and guides authorised under the *Rules*.
- (j) Understanding of the required logical interfaces necessary to support the provision of *metering data services* including the interfaces needed to:
- (1) access *AEMO*'s systems for the management and delivery of *metering data*;
 - (2) support *B2B procedures*; and
 - (3) support *Market Settlement and Transfer Solution Procedures* for delivery and update of *NMI Standing Data*.

S7.3.4 Capabilities of Metering Data Providers for small customer metering installations

Category 4S *Metering Data Providers* must be able to exhibit, to the reasonable satisfaction of *AEMO*:

- (a) all the capabilities in S7.3.3; and
- (b) the establishment of an appropriate security control management plan and associated infrastructure and communications systems for the purposes of

preventing unauthorised local access or remote access to *metering installations*, services provided by *metering installations* and *energy data* held in *metering installations*.

Schedule 7.4 Types and Accuracy of Metering installations

S7.4.1 General requirements

- (a) This Schedule 7.4 sets out the minimum requirements for *metering installations*.

S7.4.2 Metering installations commissioned prior to 13 December 1998

- (a) This clause provides conditions that are to apply to *metering installations* that were commissioned prior to 13 December 1998.
- (b) The use of *metering class current transformers* and *voltage transformers* that are not in accordance with Table S7.4.3.1 are permitted provided that where necessary to achieve the overall accuracy requirements:
 - (1) *meters* of a higher class accuracy are installed; and/or
 - (2) calibration factors are applied within the *meter* to compensate for *current transformer* and *voltage transformer* errors.
- (c) Protection *current transformers* are acceptable where there are no suitable *metering class current transformers* available and the overall accuracy and performance levels can be met.
- (d) Where the requirements of paragraph (b) and (c) cannot be achieved then the *Metering Coordinator* is required to comply with transitional arrangements or obtain an exemption from *AEMO* or upgrade the *metering installation* to comply with this Schedule 7.4.
- (e) The arrangements referred to in paragraph (d) may remain in force while the required accuracy and performance can be maintained within the requirements of the *Rules*.
- (f) The purchase of new *current transformers* and *voltage transformers* must comply with the *Rules*.

S7.4.3 Accuracy requirements for metering installations

Table S7.4.3.1 Overall Accuracy Requirements of Metering Installation Components

Type	Volume limit per annum per connection point	Maximum allowable overall error ($\pm\%$) at full load (Item 6) active reactive		Minimum acceptable class or standard of components	Metering installation clock error (seconds) in reference to EST
1	greater than 1000GWh	0.5	1.0	0.2CT/VT/meter Wh 0.5 meter varh	± 5
2	100 to 1000GWh	1.0	2.0	0.5CT/VT/meter Wh 1.0 meter varh	± 7
3	0.75 to less than 100 GWh	1.5	3.0	0.5CT/VT 1.0 meter Wh 2.0 meter varh (Item 1)	± 10
4	less than 750 MWh (Item 2)	1.5	n/a	Either 0.5 CT and 1.0 meter Wh; or whole current general purpose meter Wh: - meets requirements of clause 7.8.2(a)(9); and - meets the requirements of clause 7.10.7(a). (Item 1)	± 20 (Item 2a)
4A	less than x MWh Item 3	1.5	3.0	Either 0.5 CT and 1.0 meter Wh; or whole current general purpose meter Wh: meets the requirements of clause 7.8.2(a)(10); and	± 20 (Item 2a)

Type	Volume limit per annum per connection point	Maximum allowable overall error ($\pm\%$) at full load (Item 6) active reactive		Minimum acceptable class or standard of components	Metering installation clock error (seconds) in reference to EST
				- has the capability, if remote access is activated, of providing the services in table S7.5.1.1; and - meets the requirements of clause 7.10.7(d).	
5	less than x MWh (Item 3)	1.5 (Item 3b)	n/a	Either 0.5 CT and 1.0 meter Wh; or whole current connected general purpose meter wh: - meets requirements of clause 7.8.2(a)(10); and - meets the requirements of clause 7.10.7(d). (Item 1)	' $\pm/-20'$ (Item 3a)
6	less than y MWh (Item 4)	2.0 (Item 4b)	n/a	CT or whole current general purpose <i>meter</i> Wh recording <i>accumulated energy data</i> only. Processes used to convert the <i>accumulated metering data</i> into <i>trading interval metering data</i> and <i>estimated metering data</i> where necessary are included in the <i>metrology procedure</i>. (Item 1)	(Item 4a)

Type	Volume limit per annum per connection point	Maximum allowable overall error ($\pm\%$) at full load (Item 6) active reactive		Minimum acceptable class or standard of components	Metering installation clock error (seconds) in reference to EST
7	volume limit not specified (Item 5)	(Item 6)	n/a	No meter. The metering data is calculated metering data determined in accordance with the metrology procedure.	n/a

- Item 1:
- (a) For a type 3, 4, 4A and 5 and 6 metering installation, whole current meters may be used if the meters meet the requirements of the relevant Australian Standards and International Standards which must be identified in the metrology procedure.
 - (b) The metering installation types referred to in paragraph (a) must comply with any applicable specifications or guidelines (including any transitional arrangements) specified by the National Measurement Institute under the National Measurement Act.
- Item 2: High voltage customers that require a VT and whose annual consumption is below 750 MWh, must meet the relevant accuracy requirements of Type 3 metering for active energy only.
- Item 2a: For the purpose of clarification, the clock error for a type 4 and 4A metering installation may be relaxed in the metrology procedure to accommodate evolving whole current technologies.
- Item 3: The following requirements apply in relation to a type 4A and type 5 metering installation:
- (1) the value of "x" must be determined by each Minister of a participating jurisdiction and:
 - (i) the "x" value must be provided to AEMO; and
 - (ii) AEMO must record the "x" value in the metrology procedure;
 - (2) the maximum acceptable value of "x" determined under subparagraph (1) must be 750 MWh per annum; and
- Item 3a: For the purpose of clarification, the clock error for a type 5 metering installation may be relaxed in the metrology procedure to accommodate evolving whole current technologies.

- Item 3b: The maximum allowable error of a type 5 *metering installation* may be relaxed in the *metrology procedure* to accommodate evolving technologies providing that such relaxation is consistent with any regulations published under the *National Measurement Act*.
- Item 4: The following requirements apply in relation to a type 6 *metering installation*:
- (1) a *metrology procedure* must include a procedure relating to converting *active energy* into *metering data*;
 - (2) the value of "y" must be determined by each *Minister* of a *participating jurisdiction* and:
 - (i) the "y" value must be provided to *AEMO*; and
 - (ii) *AEMO* must record the "y" value in the *metrology procedure*;
 - (3) the maximum acceptable value of "y" determined under subparagraph (2) must be 750 MWh per annum;
 - (4) devices within the *metering installation* may record *accumulated energy data* in pre determined daily time periods where such time periods are contained in the *metrology procedure*.
- Item 4a: Any relevant clock errors for a type 6 *metering installation* are to be established in the *metrology procedure*.
- Item 4b: The maximum allowable error of a type 6 *metering installation* may be relaxed in the *metrology procedure* providing that such relaxation is consistent with any regulations published under the *National Measurement Act*.
- Item 5:
- (a) A type 7 *metering installation* classification applies where a *metering installation* does not require a *meter* to measure the flow of electricity in a power conductor and accordingly there is a requirement to determine by other means the *metering data* that is deemed to correspond to the flow of electricity in the power conductor.
 - (b) The condition referred to in paragraph (a) will only be allowed for *connection points* where *AEMO* in consultation with the *Metering Coordinator* determines:
 - (1) the *load* pattern is predictable;
 - (2) for the purposes of *settlements*, the *load* pattern can be reasonably calculated by a relevant method set out in the *metrology procedure*; and
 - (3) it would not be cost effective to meter the *connection point* taking into account:
 - (i) the small magnitude of the *load*;

- (ii) the *connection* arrangements; and
 - (iii) the geographical and physical location.
- (c) The *metrology procedure* must include arrangements for type 7 *metering installations* that have been classified as *market loads*.
- (d) A *connection point* that meets the condition for classification as a type 7 *metering installation* does not prevent that *connection point* from being subject to *metering* in the future.

Item 6: The maximum allowable overall error ($\pm\%$) at different *loads* and *power factors* is set out in Table S7.4.3.2 to Table S7.4.3.6.

Table S7.4.3.2 Type 1 Installation – Annual Energy Throughput greater than 1,000 GWh

% Rated Load	Power Factor					
	Unity	0.866 lagging		0.5 lagging		Zero
	active	active	reactive	active	reactive	reactive
10	1.0%	1.0%	2.0%	n/a	n/a	1.4%
50	0.5%	0.5%	1.0%	0.7%	1.4%	1.0%
100	0.5%	0.5%	1.0%	n/a	n/a	1.0%

Table S7.4.3.3 Type 2 Installation – Annual Energy Throughput between 100 and 1,000 GWh

% Rated Load	Power Factor					
	Unity	0.866 lagging		0.5 lagging		Zero
	active	active	reactive	active	reactive	reactive
10	2.0%	2.0%	4.0%	n/a	n/a	2.8%
50	1.0%	1.0%	2.0%	1.5%	3.0%	2.0%
100	1.0%	1.0%	2.0%	n/a	n/a	2.0%

Table S7.4.3.4 Type 3 Installation – Annual Energy Throughput from 0.75 GWh to less than 100 GWh and Type 4A Installation - Annual Energy Throughput less than 0.75 GWh

% Rated Load	Power Factor					
	Unity	0.866 lagging		0.5 lagging		Zero
	active	active	reactive	active	reactive	reactive

% Rated Load	Power Factor					
	Unity	0.866 lagging		0.5 lagging		Zero
	active	active	reactive	active	reactive	reactive
10	2.5%	2.5%	5.0%	n/a	n/a	4.0%
50	1.5%	1.5%	3.0%	2.5%	5.0%	3.0%
100	1.5%	1.5%	3.0%	n/a	n/a	3.0%

Table S7.4.3.5 Type 4 or 5 Installation – Annual Energy Throughput less than 0.75 GWh

% Rated Load	Power Factor		
	Unity	0.866 lagging	0.5 lagging
	active	active	active
10	2.5%	2.5%	n/a
50	1.5%	1.5%	2.5%
100	1.5%	1.5%	n/a

Table S7.4.3.6 Type 6 Installation – Annual Energy Throughput less than 0.75 GWh

% Rated Load	Power Factor		
	Unity	0.866 lagging	0.5 lagging
	active	active	active
10	3.0%	n/a	n/a
50	2.0%	n/a	3.0%
100	2.0%	n/a	n/a

Note:

All measurements in Tables S7.4.3.2 – S7.4.3.6 are to be referred to 25 degrees Celsius.

- (a) The method for calculating the overall error is the vector sum of the errors of each component part (that is, $a + b + c$) where:

a = the error of the *voltage transformer* and wiring;

b = the error of the *current transformer* and wiring; and

c = the error of the *meter*.

- (b) If compensation is carried out then the resultant *metering data* error shall be as close as practicable to zero.

S7.4.4 Check metering

- (a) *Check metering* is to be applied in accordance with the following Table:

Metering Installation Type in accordance with Table S7.2.3.1	Check Metering Requirements
1	<i>Check metering installation</i>
2	Partial <i>check metering</i>
3	No requirement
4, 4A, 5 and 6	No requirement

- (b) A *check metering installation* involves either:
- (1) the provision of a separate *metering installation* using separate *current transformer* cores and separately fused *voltage transformer* secondary circuits, preferably from separate secondary windings: or
 - (2) if in AEMO's absolute discretion it is considered appropriate, in the case of a *metering installation* located at the *facility* at one end of the *two-terminal link*, a *metering installation* located at the *facility* at the other end of a *two-terminal link*.
- (c) Where the *check metering installation* duplicates the *metering installation* and accuracy level, the average of the two validated data sets will be used to determine the *energy* measurement.
- (d) Partial *check metering* involves the use of other *metering data* or operational data available to AEMO in 30 min electronic format as part of a validation process in accordance with the *metrology procedure*.
- (e) The physical arrangement of partial *check metering* shall be agreed between the *Metering Coordinator* and AEMO.
- (f) *Check metering installations* may be supplied from secondary circuits used for other purposes and may have a lower level of accuracy than the *metering installation*, but must not exceed twice the level prescribed for the *metering installation*.

S7.4.5 Resolution and accuracy of displayed or captured data

Programmable settings available within a *metering installation* or any peripheral device, which may affect the resolution of displayed or stored data, must:

- (a) meet the requirements of the relevant *Australian Standards* and *International Standards* which must be identified in the *metrology procedure*; and
- (b) comply with any applicable specifications or guidelines (including any transitional arrangements) specified by the National Measurement Institute under the *National Measurement Act*.

S7.4.6 General design standards

S7.4.6.1 Design requirements

Without limiting the scope of detailed design, the following requirements must be incorporated in the design of each *metering installation*:

- (a) For *metering installations* greater than 1000 GWh pa per *connection point*, the *current transformer* core and secondary wiring associated with the *meter(s)* shall not be used for any other purpose unless otherwise agreed by AEMO.
- (b) For *metering installations* less than 1000 GWh pa per *connection point* the *current transformer* core and secondary wiring associated with the *meter(s)* may be used for other purposes (e.g. local *metering* or protection) provided the *Metering Coordinator* demonstrates to the satisfaction of AEMO that the accuracy of the *metering installation* is not compromised and suitable procedures/measures are in place to protect the security of the *metering installation*.
- (c) Where a *voltage transformer* is required, if separate secondary windings are not provided, then the *voltage* supply to each *metering installation* must be separately fused and located in an accessible position as near as practical to the *voltage transformer* secondary winding.
- (d) Secondary wiring must be by the most direct route and the number of terminations and links must be kept to a minimum.
- (e) The incidence and magnitude of burden changes on any secondary winding supplying the *metering installation* must be kept to a minimum.
- (f) *Meters* must:
 - (1) meet the requirements of relevant *Australian Standards* and *International Standards* which must be identified in the *metrology procedure*; and
 - (2) have a valid pattern approval issued under the authority of the National Measurement Institute or, until relevant pattern approvals exist, a valid type test certificate.
- (g) New *instrument transformers* must:

- (1) meet the requirements of relevant *Australian Standards* and *International Standards* which must be identified in the *metrology procedure*; and
- (2) have a valid pattern approval issued under the authority of the National Measurement Institute or, until relevant pattern approvals exist, a valid type test certificate.
- (h) Suitable *isolation* facilities are to be provided to facilitate testing and calibration of the *metering installation*.
- (i) Suitable drawings and supporting information, detailing the *metering installation*, must be available for maintenance and auditing purposes.

S7.4.6.2 Design guidelines

In addition to the above design requirements, the following guidelines should be considered for each *metering installation*:

- (a) The provision of separate secondary windings for each *metering installation* where a *voltage transformer* is required.
- (b) A *voltage* changeover scheme where more than one *voltage transformer* is available.

Schedule 7.5 Requirements of minimum services specification

S7.5.1 Minimum services specification

A *metering installation* meets the *minimum services specification* if it:

- (a) subject to paragraph (d), is capable of providing the services listed in table S7.5.1.1 in accordance with the procedures made under clause 7.8.3;
- (b) is connected to a *telecommunications network* which enables remote access to the *metering installation*;
- (c) achieves the maximum allowable overall error ($\pm\%$) at rates not exceeding the rates set out in table S7.4.3.4; and
- (d) in relation to a *metering installation* that is connected to a *current transformer*, is capable of providing the services listed in items (c) to (f) in table S7.5.1.1 in accordance with procedures made under clause 7.8.3.

Table S7.5.1.1 Minimum Services Specification – services and access parties

1. Service	2. Description	3. Access Party
(a) remote <i>disconnection</i> service	The remote <i>disconnection</i> of a <i>small customer's</i> premises via the <i>metering installation</i> .	<i>Local Network Service Provider</i>

1. Service	2. Description	3. Access Party
		<i>financially responsible Market Participant</i>
(b) remote <i>reconnection</i> service	The remote <i>reconnection</i> of a <i>small customer's</i> premises via the <i>metering installation</i> .	<i>Local Network Service Provider</i> <i>financially responsible Market Participant</i> <i>Incoming Retailer</i>
(c) remote on-demand <i>meter</i> read service	The remote retrieval of <i>metering data</i> including quality flags for a specified point or points in time and the provision of such data to the requesting party. The service includes the retrieval and provision of: • <i>reactive energy metering data</i> and/or <i>active energy metering data</i> (for imports and/or exports of <i>energy</i> measured by the <i>meter</i>); • <i>interval metering data</i> and cumulative total <i>energy</i> measurement for the <i>metering installation</i>; and • <i>accumulated metering data</i> at the start and the end of the period specified in the request.	<i>Registered Participants</i> with a financial interest in the <i>metering installation</i> or the <i>energy</i> measured by that <i>metering installation</i> A person to whom a <i>small customer</i> has given its consent under clause 7.15.4(b)(3)(ii)
(d) remote scheduled <i>meter</i> read service	The remote retrieval of <i>metering data</i> including quality flags on a regular and ongoing basis and the provision of such data to the requesting party. The service includes the retrieval and provision of: • <i>reactive energy metering data</i> and/or	<i>Registered Participants</i> with a financial interest in the <i>metering installation</i> or the <i>energy</i> measured by that <i>metering installation</i> A person to whom a <i>small customer</i> has given its consent under clause 7.15.4(b)(3)(ii)

1. Service	2. Description	3. Access Party
	<i>active energy metering data</i> (for imports and/or exports of <i>energy</i> measured by the <i>meter</i>); • <i>interval metering data</i> and cumulative total <i>energy</i> measurement for the <i>metering installation</i>; and • <i>accumulated metering data</i> at the start and the end of the period specified in the request.	
(e) <i>metering installation inquiry service</i>	The remote retrieval of information from, and related to, a specified <i>metering installation</i> and the provision of such information to the requesting party. The <i>metering installation</i> must be capable of providing the following information, as a minimum, when requested: • the status of the switch used to effect the <i>disconnection</i> and <i>reconnection</i> services; • the <i>voltage</i> as measured by the <i>metering installation</i>, with a date and <i>time stamp</i> for that reading; • the current as measured by the <i>metering installation</i>, with a date and <i>time stamp</i> for that reading; • the power (watts) as measured by the <i>metering installation</i>, with a date and <i>time stamp</i> for that reading;	<i>Local Network Service Provider</i> <i>financially responsible Market Participant</i> A person to whom a <i>small customer</i> has given its consent under clause 7.15.4(b)(3)(ii)

1. Service	2. Description	3. Access Party
	- the supply frequency (Hertz) as measured by the <i>metering installation</i>, with a date and <i>time stamp</i> for that reading; - the average <i>voltage</i> and current over a nominated <i>trading interval</i> for one or more nominated <i>trading intervals</i>; and - events that have been recorded in <i>meter</i> log (or logs) including recorded information in the tamper detection alarm, reverse energy flow alarm and <i>metering</i> device temperature alarm.	
(f) advanced <i>meter</i> reconfiguration service	The remote setting of the operational parameters of the <i>meter</i>. The operational parameters that must be capable of being set are, as a minimum, the following: - the activation or deactivation of a data stream or data streams; and - altering the method of presenting <i>energy data</i> and associated information on the <i>meter</i> display.	<i>Local Network Service Provider</i> <i>financially responsible Market Participant</i>

Schedule 7.6 Inspection and Testing Requirements

S7.6.1 General

- (a) The *Metering Coordinator* must ensure that equipment comprised in a purchased *metering installation* has been tested to the required class accuracy with less than the uncertainties set out in Table S7.6.1.1.
- (b) The *Metering Coordinator* must ensure appropriate test certificates of the tests referred to in paragraph (a) are retained.
- (c) The *Metering Coordinator* (or any other person arranging for testing) must ensure that testing of the *metering installation* is carried out:
 - (1) in accordance with clause 7.9.1 and this Schedule 7.6; or
 - (2) in accordance with an asset management strategy that defines an alternative testing practice (other than time based) determined by the *Metering Coordinator* and approved by *AEMO*,and:
 - (3) in accordance with a test plan which has been registered with *AEMO*;
 - (4) to the same requirements as for new equipment where equipment is to be recycled for use in another site; and
 - (5) so as to include all data storage and processing components included in the *metrology procedure*, including algorithms used to prepare agreed *load patterns*.
- (d) *AEMO* must review the prescribed testing requirements in this Schedule 7.6 every 5 years in accordance with equipment performance and industry standards.
- (e) The testing intervals may be increased if the equipment type/experience proves favourable.
- (f) The maximum allowable level of testing uncertainty ($\pm$) for all *metering* equipment must be in accordance with Table S7.6.1.1.

Table S7.6.1.1 Maximum Allowable Level of Testing Uncertainty ($\pm$)

Description		Metering Equipment Class				
		Class 0.2	Class 0.5	Class 1.0	General Purpose	Class 2.0
In Laboratory	CTs ratio	0.05%	0.1%	n/a	n/a	n/a
	phase	0.07 crad	0.15 crad			

Description		Metering Equipment Class				
		Class 0.2	Class 0.5	Class 1.0	General Purpose	Class 2.0
	VTs ratio	0.05%	0.1%	n/a	n/a	n/a
	Phase	0.05 crad	0.1 crad			
	Meters Wh	0.05/cosφ%	0.1/cosφ%	0.2/cosφ%	0.2/cosφ%	n/a
	Meters varh	n/a	0.2/sinφ%	0.3/sinφ%	n/a	0.4/sinφ%
In Field	CTs ratio	0.1%	0.2%	n/a	n/a	n/a
	Phase	0.15 crad	0.3 crad			
	VTs ratio	0.1%	0.2%	n/a	n/a	n/a
	Phase	0.1 crad	0.2 crad			
	Meters Wh	0.1/cosφ%	0.2/cosφ%	0.3/cosφ%	0.3/cosφ%	n/a
	Meters varh	n/a	0.3/sinφ%	0.4/sinφ%	n/a	0.5/sinφ%

Where cosφ is the *power factor* at the test point under evaluation.

Table S7.6.1.2 Maximum Period Between Tests

Unless the *Metering Coordinator* has developed an asset management strategy that defines practices that meet the intent of this Schedule 7.6 and is approved by AEMO, the maximum period between tests must be in accordance with this Table S7.6.1.2.

Description	Metering Installation Type				
	Type 1	Type 2	Type 3	Type 4 & 4A	Types 5 & 6
CT	10 years	10 years	10 years	10 years	10 years
VT	10 years	10 years	10 years		n/a
Burden tests	When <i>meters</i> are tested or when changes are made				
CT connected Meter (electronic)	5 years	5 years	5 years	5 years	5 years
CT connected Meter (induction)	2.5 years	2.5 years	5 years	5 years	5 years
Whole current	The testing and inspection requirements must be in accordance with an asset management strategy. Guidelines for the development of the asset				

Description	Metering Installation Type				
	Type 1	Type 2	Type 3	Type 4 & 4A	Types 5 & 6
Meter	management strategy must be recorded in the <i>metrology procedure</i> .				

Table S7.6.1.3 Period Between Inspections

Unless the *Metering Coordinator* has developed an asset management strategy that meets the intent of this Schedule 7.6 and is approved by *AEMO*, the period between inspections must be in accordance with this Table S7.6.1.3.

Description	Metering Installation Type			
	Type 1	Type 2	Type 3	Type 4, 4A, 5 & 6
<i>Metering installation equipment inspection</i>	2.5 years	12 months (2.5 years if <i>check metering installed</i>)	> 10 GWh: 2 years 2 ≤ GWh ≤ 10: 3 years <2 GWh: when <i>meter</i> is tested.	When <i>meter</i> is tested.

S7.6.2 Technical Guidelines

- Current transformer* and *voltage transformer* tests are primary injection tests or other testing procedures as approved by *AEMO*.
- The calculations of accuracy based on test results are to include all reference standard errors.
- An “estimate of testing uncertainties” must be calculated in accordance with the ISO “Guide to the Expression of Uncertainty for Measurement”.
- Where operational *metering* is associated with *settlements metering* then a shorter period between inspections is recommended.
- For $\sin\phi$ and $\cos\phi$ refer to the ISO “Guide to the Expression of Uncertainty in Measurement”, where $\cos\phi$ is the *power factor*.
- A typical inspection may include:
 - check the seals;
 - compare the pulse counts;
 - compare the direct readings of *meters*;
 - verify *meter* parameters and physical connections; and

- (5) *current transformer* ratios by comparison.

Schedule 7.7 Embedded Network Managers

S7.7.1 General

- (a) An *Embedded Network Manager* must be accredited and registered by AEMO.
- (b) AEMO must establish a qualification process for *Embedded Network Managers* that enables accreditation and registration to be achieved in accordance with the requirements of this schedule 7.7.
- (c) An *Embedded Network Manager* must ensure that *embedded network management services* are carried out in accordance with the *Rules* and procedures authorised under the *Rules*.

S7.7.2 Capabilities of Embedded Network Managers

Embedded Network Managers must be able to exhibit to the reasonable satisfaction of AEMO the following capabilities:

- (a) detailed understanding of the *Rules* including this Chapter 7, and all procedures authorised under the *Rules* including the *ENM service level procedures*.
- (b) detailed understanding of:
 - (1) the terms and conditions on which the AER grants exemptions under section 13 of the *National Electricity Law* to persons who engage in the activity of owning, controlling or operating *embedded networks*; and
 - (2) any related guidelines developed and issued by the AER under clause 2.5.1.
- (c) detailed understanding of the participant role relationships and obligations that exist between *Embedded Network Managers*, *Metering Data Providers*, *Metering Providers*, *financially responsible Market Participants*, *Local Network Service Providers*, AEMO and *Metering Co-ordinators*.
- (d) the establishment of a system which will:
 - (1) underpin all operational documentation, processes and procedures;
 - (2) facilitate good change control management of procedures, IT systems and software;
 - (3) provide audit trail management of *EN wiring information*;
 - (4) maintain security controls and data integrity; and

- (5) maintain knowledge and understanding of the *Rules* and relevant procedures, standards and guides authorised under the *Rules*.
- (e) understanding of the required logical interfaces necessary to support the provision of *embedded network management services* including the interfaces needed to:
 - (1) access *AEMO*'s systems; and
 - (2) support the *metrology procedure*, *B2B Procedures*, *service level procedures*, *ENM service level procedures* and *Market Settlement and Transfer Solution Procedures*.

CHAPTER 8

8. Administrative Functions

Part A Introductory

8.1 Administrative functions

8.1.1 [Deleted]

8.1.2 [Deleted]

8.1.3 Structure of this Chapter

- (a) This Chapter describes some of the key processes and obligations associated with the administration of the *Rules* and deals also with *augmentations*.
- (b) It is divided into Parts as follows:
 - (1) this Part is introductory;
 - (2) Part B deals with dispute resolution;
 - (3) Part C deals with the obligations of *Registered Participants* to maintain confidentiality;
 - (4) Part D deals with monitoring and reporting;
 - (5) Part E deals with the structure and responsibilities of the *Reliability Panel*;
 - (6) Part F sets out the *Rules consultation procedures*;
 - (7) Part G deals with funding for the Consumer Advocacy Panel;
 - (8) Part H deals with *augmentations*.
- (c) [Deleted]
- (d) [Deleted]
- (e) [Deleted]
- (f) [Deleted]
- (g) [Deleted]

Part B Disputes

8.2 Dispute Resolution

8.2.1 Application and guiding principles

- (a) This rule 8.2 applies to any dispute which may arise between two or more *Registered Participants* about:
- (1) the application or interpretation of the *Rules*;
 - (2) the failure of any *Registered Participants* to reach agreement on a matter where the *Rules* require agreement or require the *Registered Participants* to negotiate in good faith with a view to reaching agreement;
 - (3) **[Deleted]**
 - (4) the proposed access arrangements or *connection agreements* of an *Intending Participant* or a *Connection Applicant*, for *connection* and access to a *distribution network* or *declared transmission system*;
 - (5) the payment of moneys under or concerning any obligation under the *Rules*;
 - (6) any other matter relating to or arising out of the *Rules* to which a contract between two or more *Registered Participants* provides that the dispute resolution procedures under the *Rules* are to apply;
 - (7) any other matter relating to or arising out of the *Rules* in respect of which two or more *Registered Participants* have agreed in writing that this rule 8.2 should apply; or
 - (8) any other matter that the *Rules* provide may or must be dealt with under this rule 8.2,

but does not apply to those disputes described in clause 8.2.1(h).

- (a1) For the purposes of this rule 8.2 only, "**Registered Participant**" is deemed to include not just *Registered Participants* but also *AEMO*, *Connection Applicants*, *Metering Providers*, *Metering Data Providers*, *Embedded Network Managers* and *NMAS providers* (including *NSCAS preferred tenderers*) who are not otherwise *Registered Participants*, except that this will not be the case where the term "*Registered Participant*":
- (1) is used in clauses 8.2.2(b)(4), 8.2.2(d), 8.2.3(a), 8.2.3(b)(5) and 8.2.5(e); or
 - (2) first occurs in clauses 8.2.3(b), 8.2.3(b)(3), 8.2.3(b)(4) or 8.2.3(c); or
 - (3) last occurs in clauses 8.2.4(a) or 8.2.9(c).

- (b) **[Deleted]**
- (c) **[Deleted]**
- (d) The dispute resolution regime in this rule 8.2 provides procedures to resolve disputes between parties, not sanctions for breach of the *Rules*. The dispute resolution processes may indicate that a breach of the *Rules* has occurred and the resolution or determination of the dispute may take account of the damage thereby caused to a party. Any action for breach of the *Rules* may only be taken by the *AER* acting in accordance with the *National Electricity Law*.
- (e) It is intended that the dispute resolution regime set out in or implemented in compliance with the *Rules* and described in detail in this rule 8.2 should to the extent possible:
 - (1) be guided by the *national electricity objective*;
 - (2) be simple, quick and inexpensive;
 - (3) preserve or enhance the relationship between the parties to the dispute;
 - (4) take account of the skills and knowledge that are required for the relevant procedure;
 - (5) observe the rules of natural justice;
 - (6) place emphasis on conflict avoidance; and
 - (7) encourage resolution of disputes without formal legal representation or reliance on legal procedures.
- (f) Except as provided in the *National Electricity Law* and clause 8.2.1(g), where any dispute of a kind set out in clause 8.2.1(a) arises, the parties concerned must comply with the procedures set out in clauses 8.2.4 to 8.2.10 and 8.2.12 and, where the dispute is referred to a *DRP*, a determination of the *DRP* is final and binding on the parties.
- (g) Notwithstanding clause 8.2.1(f), a party may seek an urgent interlocutory injunction from a court of competent jurisdiction.
- (h) Rule 8.2 does not apply to:
 - (1) a decision by *AEMO* regarding an exemption under clause 2.2.1(c);
 - (2) a decision by *AEMO* under clause 2.2.2 not to approve the classification of a *generating unit* as a *scheduled generating unit*;
 - (3) a decision by *AEMO* under clause 2.2.3 not to approve the classification of a *generating unit* as a *non-scheduled generating unit*;

- (3A) a decision by *AEMO* under clause 2.5.1A(d) not to approve the classification of a *dedicated connection asset* as a *small dedicated connection asset* or *large dedicated connection asset*;
- (4) a decision by *AEMO* under clause 2.9.2(c);
- (5) a decision by *AEMO* to reject a notice from a *Market Customer* under clause 2.10.1(d);
- (5A) a decision by *AEMO* with regard to the preparation or publication of a budget;
- (5B) the formulation by *AEMO* of its revenue methodology or an amendment to its revenue methodology;
- (5C) a decision by *AEMO* to reject a notice from a *Market Small Generation Aggregator* under clause 2.10.1(d1);
- (6) a determination by *AEMO* under clause 3.3.8 of the minimum amount of *credit support* a *Market Participant* must provide to *AEMO* for the relevant time period, as determined by *AEMO* in accordance with clause 3.3.8 ;
- (7) a decision by *AEMO* under clause 3.8.3 to refuse an application for aggregation;
- (8) a decision by *AEMO* under clause 3.15.11 to reject a *reallocation request*;
- (9) a decision by *AEMO* to issue a notice under clause 4.11.1(d);
- (10) a decision by *AEMO* under clause 7.2.1(b) to refuse to permit a *Market Participant* to participate in the *market* in respect of a *connection point*;
- (11) a decision by *AEMO* whether or not to deregister a *Metering Provider*, *Metering Data Provider* or *Embedded Network Manager* under clause 7.4.4(d) or to suspend a *Metering Provider*, *Metering Data Provider* or *Embedded Network Manager* from a category of registration under clause 7.4.4(d) or to impose agreed constraints on the continued operation of a *Metering Provider*, *Metering Data Provider* or *Embedded Network Manager*;
- (12) a dispute concerning the price of a *SRAS* agreement or a tender conducted by *AEMO* for the acquisition of *system restart ancillary services* under clause 3.11.9;
- (13) a dispute of a kind referred to in clause 5.16.5 or 5.17.5;
- (14) a *transmission services access dispute* and *large DCA services access dispute* to which rule 5.5 applies;

- (14A) a decision by a *Co-ordinating Network Service Provider* with regard to the provision of an estimate of the *modified load export charge* payable to each *Transmission Network Service Provider* as referred to in clause 6A.29A.2.
- (15) a *distribution services access dispute* to which Part L of Chapter 6 applies;
- (16) a decision by *AEMO* under clause 2.2.7 not to approve the classification of a *semi-scheduled generating unit*; or
- (17) a decision by *AEMO* regarding an exemption under clause 2.4A.1(b); or
- (18) a decision by *AEMO* regarding an exemption under clause 7.8.4(a).

8.2.2 The Dispute Resolution Adviser

- (a) The *AER* must appoint a person or persons from time to time to perform the functions of the Dispute Resolution Adviser (the *Adviser*), on such terms and conditions as the *AER* may determine.
- (b) The *Adviser* must:
 - (1) have a detailed understanding and experience of dispute resolution practice and procedures which do not involve litigation (**alternative dispute resolution**);
 - (2) have the capacity to determine the most appropriate alternative dispute resolution procedures in particular circumstances;
 - (3) have an understanding of the electricity industry or the capacity to quickly acquire such an understanding; and
 - (4) not be a *Registered Participant* or *AEMO* or be associated, directly or indirectly, with a *Registered Participant*, *AEMO* or the *AER*.
- (c) The primary function of the *Adviser* is to attend to any matters necessary to ensure the effective operation of:
 - (1) the Stage 1 dispute resolution process set out in clause 8.2.4;
 - (2) the Stage 2 dispute resolution process set out in clauses 8.2.5 and 8.2.6A to 8.2.6D; and
 - (3) the *Independent Engineer* process set out in rule 5.4.
- (d) The *Adviser* must take reasonable steps to keep *Registered Participants* and *AEMO* informed, and in any case must report at least quarterly to *Registered Participants* and *AEMO*, about the operation of the dispute resolution processes established under the *Rules*.

- (e) The *Adviser* must establish and maintain a pool of persons from which members of a *dispute resolution panel (DRP)* may be selected in accordance with clause 8.2.6A.
- (f) In selecting persons for the pool, the *Adviser* must have regard to:
 - (1) the need for members of a *DRP* to have an appropriate range of skills; and
 - (2) the need for persons in the pool to be drawn from all *participating jurisdictions*.
- (g) The *Adviser* must review the composition of the pool at least every two years.
- (h) The *Adviser* may issue guidance notes relating to:
 - (1) the form and content of a *dispute management system (DMS)*; and
 - (2) the use and conduct of mediation in the Stage 1 dispute resolution process.

8.2.3 Dispute management systems of Registered Participants and AEMO

- (a) Each *Registered Participant* and *AEMO* must adopt and implement a *DMS*.
- (b) The *DMS* of a *Registered Participant* or *AEMO* must:
 - (1) be consistent with guidance notes of the *Adviser* relating to the form and content of a *DMS*;
 - (2) nominate a *DMS Contact* to be the first point of contact for the notification of disputes;
 - (3) provide that the *Registered Participant* or *AEMO* (as the case may be) must respond to a request for information (being information that is relevant to any of the matters set out in clause 8.2.1(a)) from another *Registered Participant* within 5 *business days* of receiving the request;
 - (4) set out the procedures of the *Registered Participant* or *AEMO* (as the case may be) for responding to requests for information from other *Registered Participants*; and
 - (5) set out any requirements and procedures necessary to ensure that the *Registered Participant* or *AEMO* (as the case may be) is able to comply with the requirements and time limits set out in clause 8.2.4.
- (c) A *Registered Participant* or *AEMO* must provide a copy of its *DMS* upon being requested to do so by another *Registered Participant* or the *Adviser*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

8.2.4 Stage 1 - dispute resolution through Registered Participants' DMS

- (a) A *Registered Participant* may activate the dispute resolution mechanisms in this clause by serving a *DMS referral notice* on the *DMS Contact* of one or more other *Registered Participants* or AEMO (as the case may be).
- (b) Except where the *Rules* provides for another time period to apply, and subject to clause 8.2.4(k), a *DMS referral notice* must be served no later than 60 *business days* after the date on which the making of a disputed decision or the occurrence of disputed conduct could reasonably have become known to a *Registered Participant* affected by it.
- (c) A *DMS referral notice*:
 - (1) must be in a form approved and *published* by the *Adviser*;
 - (2) must contain a statement setting out the circumstances giving rise to the dispute; and
 - (3) may request the person on whom it is to be served to provide information that is relevant to any of the matters set out in clause 8.2.1(a).
- (d) Within 5 *business days* of service of a *DMS referral notice*, representatives of:
 - (1) the *Registered Participant* that served the notice; and
 - (2) every person on whom the notice was served,must meet to determine, by agreement, the further conduct of the dispute.
- (e) A meeting of *Registered Participants'* representatives:
 - (1) may be conducted in person, by telephone, video-conference or like method of real time communication;
 - (2) may agree that the dispute should be conducted by any consensual means, including by direct discussions between *Registered Participants* or by mediation; and
 - (3) must consider whether any other *Registered Participant* should be served with a *DMS referral notice*.
- (f) Subject to clause 8.2.4(g), a meeting of *Registered Participants'* representatives may agree to keep confidential:

- (1) the fact that a dispute exists between them; and
 - (2) any information exchanged between them for the purposes of attempting to resolve the dispute.
- (g) *AEMO* must immediately notify the *Adviser* if:
- (1) it serves a *DMS referral notice* on the *DMS Contact* of another *Registered Participant*, or
 - (2) it is served with a *DMS referral notice* by another *Registered Participant*.

The notification to the *Adviser* must include a list setting out each *Registered Participant* that *AEMO* considers may have an interest in the dispute, together with an indication as to whether *AEMO* has served a *DMS referral notice* in relation to the dispute on that *Registered Participant*, or has otherwise made the *Registered Participant* aware of the dispute.

- (h) If *Registered Participants'* representatives, meeting in accordance with clauses 8.2.4(d) and (e), all agree that a *Registered Participant* that was not previously a party to the dispute should be served with a *DMS referral notice*, any one or more of them may serve a *DMS referral notice* on that other *Registered Participant*. Where a *Registered Participant* is served with such a notice, that *Registered Participant* must meet with the other parties to the dispute to determine the further conduct of the dispute in accordance with clauses 8.2.4(d), (e) and (f).
- (i) If:
- (1) a *Registered Participant* on whom a *DMS referral notice* is served does not agree to become a party to the dispute; or
 - (2) the dispute is not resolved within 20 *business days* (or such lesser period as is agreed by all the parties) after the day on which a *DMS referral notice* was last served on a *Registered Participant*,

any *Registered Participant* that has served a *DMS referral notice* in relation to the dispute or that has agreed to become a party to the dispute may, no later than 60 *business days* after the day on which a *DMS referral notice* was last served on a *Registered Participant*, refer the matter to the *Adviser* in accordance with clause 8.2.5.

- (j) If the dispute has not been referred to the *Adviser* within 60 *business days* after the day on which a *DMS referral notice* was last served on a *Registered Participant*, any obligations or requirements arising under this clause 8.2.4 in relation to that dispute cease to have effect.
- (k) Despite clauses 8.2.4(b) and 8.2.4(i) and any other provision of the *Rules* that specifies a time limit for the raising of a dispute, where:

- (1) a *DMS referral notice* has not been served within the period specified in clause 8.2.4(b);
- (2) a dispute has not been referred to the *Adviser* within the time specified in clause 8.2.4(i); or
- (3) any other dispute to which rule 8.2 applies has not been raised within the time limit specified in the *Rules* for the raising of such a dispute,

the dispute may be referred to the *Adviser*, and a *DRP* may determine the dispute if, in the opinion of the *DRP*, any prejudice suffered by any *Registered Participant* as a result of the dispute being referred outside the specified period would not, having regard to the circumstances giving rise to the failure to refer the dispute within the specified period, be unreasonable.

8.2.5 Stage 2 - dispute resolution process

- (a) A dispute may be referred to the *Adviser* by serving on the *Adviser* an *Adviser referral notice* in accordance with this clause 8.2.5. An *Adviser referral notice* must:
 - (1) be in a form approved and published by the *Adviser*;
 - (2) contain the names of all the parties to the dispute; and
 - (3) if the *Registered Participant* serving the *Adviser referral notice* does not agree to the *Adviser* attempting to resolve the dispute in accordance with clause 8.2.5(c)(1) and requires the *Adviser* to refer the dispute to a *DRP* for determination, must contain a statement to that effect.
- (b) Where a dispute is referred to the *Adviser*, the *Adviser* must immediately notify each *Registered Participant* that is party to the dispute of that fact. Each *Registered Participant* must, within 5 *business days* of being so notified, provide to the *Adviser* a statement setting out:
 - (1) a brief history of the dispute and the circumstances giving rise to it; and
 - (2) a statement of its issues in relation to the dispute.
- (c) The *Adviser* must, within 10 *business days* of being served with the *Adviser referral notice*, either:
 - (1) if the parties so agree, attempt to resolve the dispute by any means the *Adviser*, having regard to the principles set out in clause 8.2.1(e), considers appropriate; or
 - (2) if the parties do not agree to the *Adviser* attempting to resolve the dispute in accordance with clause 8.2.5(c)(1), refer the dispute to a *DRP* for determination in accordance with clauses 8.2.6A to 8.2.6D.

- (d) If the *Adviser*, having attempted to resolve the dispute in accordance with clause 8.2.5(c)(1), considers that such attempt is unlikely to result in resolution of the dispute within a reasonable time, the *Adviser* may, at any time, refer the dispute to a *DRP* for determination in accordance with clauses 8.2.6A to 8.2.6D.
- (e) Where the *Adviser* refers a dispute to a *DRP*, the *Adviser* must promptly *publish* to all *Registered Participants*, as well as promptly notify *AEMO*, the *AER* and the *AEMC* of, the fact that the referral has been made.

8.2.6A Establishment of Dispute Resolution Panel

- (a) Where the *Adviser* decides to refer a dispute for resolution by a *DRP*, the *Adviser* must establish the *DRP* to determine the dispute.
- (b) **[Deleted]**
- (c) The *Adviser* must consult with the parties to the Stage 1 dispute resolution process on the composition of the *DRP*. For the avoidance of doubt, the requirement to consult on the composition of the *DRP* does not apply with respect to a party that is later joined as, or that later opts to become, a party to the dispute.
- (d) Despite the requirement to consult set out in clause 8.2.6A(c), a decision of the *Adviser* as to the composition of the *DRP* is final and binding upon all parties to the dispute.
- (e) A *DRP* must comprise three members or, if the parties agree that the circumstances and nature of the dispute warrant a panel comprised of one or two members, the number so agreed.
- (f) The *Adviser* may appoint as a member of the *DRP* any person who is a member of the pool established under clause 8.2.2(e) and who in the reasonable opinion of the *Adviser* is either:
 - (1) expert in the field to which the dispute relates; or
 - (2) experienced or trained in dispute resolution techniques.
- (g) A person, whether a member of the pool established under clause 8.2.2(e) or not, is not eligible for appointment to a *DRP* if that person has any interest which may conflict with, or which may be seen to conflict with, the impartial resolution of the dispute. Where a person becomes aware of such a conflict after the *DRP* commences the determination of a dispute, the person must advise the parties to that effect.
- (h) Where:
 - (1) a *Registered Participant* who is a party to the dispute believes that a person appointed to a *DRP* has an interest which may conflict with the impartial resolution of the dispute; or

- (2) a person appointed to a *DRP* discloses the existence of such an interest:

the person must not continue as a member of the *DRP*, except with the written consent of all parties to the dispute.

- (i) The *Adviser* may, if in his or her reasonable opinion no member of the pool established under clause 8.2.2(e) is:

- (1) eligible for appointment to a *DRP*; or
- (2) sufficiently skilled and experienced to resolve the dispute,

appoint to the *DRP* another person whom he or she considers to be eligible and sufficiently skilled and experienced, but who is not a member of the pool. A person so appointed is deemed to be a member of the pool on and from his or her appointment to the *DRP*.

- (j) Any person who has previously been a member of a *DRP* is eligible for appointment to another *DRP*.
- (k) The *Adviser* must nominate one of the *DRP* members to be the chairperson.

8.2.6B Parties to *DRP* Proceedings

- (a) The following persons are parties to the dispute before a *DRP*:
 - (1) the parties to the Stage 1 dispute resolution process referred by the *Adviser* to the *DRP*;
 - (2) any other *Registered Participant* that the *DRP* directs to become a party to the dispute in accordance with clause 8.2.6B(b); and
 - (3) any other *Registered Participant* that has opted to become a party to the dispute in accordance with clause 8.2.6B(c).
- (b) If the *DRP* considers that a *Registered Participant* should become a party to the dispute, it may direct the *Registered Participant* to become a party by giving that *Registered Participant*'s *DMS Contact* written notice setting out:
 - (1) the names of the other parties to the dispute;
 - (2) a brief history of the dispute and the circumstances giving rise to it;
 - (3) the results of any previous dispute resolution processes undertaken pursuant to the *Rules* in respect of the dispute; and
 - (4) the grounds on which the *DRP* considers the *Registered Participant* should be made a party to the dispute.
- (c) Any *Registered Participant* that has an interest in a dispute may opt to become a party to the dispute by giving notice to the *DRP* that it wishes to

do so. When a *Registered Participant* opts to become a party to the dispute in accordance with this clause 8.2.6B(c), the *DRP* must give that *Registered Participant's DMS Contact* written notice setting out:

- (1) the names of the other parties to the dispute;
- (2) a brief history of the dispute and the circumstances giving rise to it; and
- (3) the results of any previous dispute resolution processes undertaken pursuant to the *Rules* in respect of the dispute.

8.2.6C Proceedings of the *DRP*

- (a) The *DRP* may give to the parties such directions as it considers necessary for the proper conduct of the proceedings, including, without limitation, a direction:
 - (1) that the proceedings be conducted at a specified venue or venues (including the premises of a party) at a specified time or times;
 - (2) requiring the parties to prepare and exchange written submissions;
 - (3) requiring the parties to exchange documents; and
 - (4) limiting or prohibiting the cross examination of witnesses.
- (b) The *DRP* may direct the parties that the proceedings, or part of the proceedings, are to be conducted solely on the basis of documentary evidence and written submissions.
- (c) The *DRP* may give to the parties such directions relating to the use and disclosure of information obtained from other parties to the dispute (including a direction to keep information confidential) as it considers necessary in the circumstances.
- (d) At any time before it determines a dispute, the *DRP* may, with the consent of all parties, refer the dispute for mediation.
- (e) A *DRP*:
 - (1) must determine the real questions in controversy between the parties; and
 - (2) is not bound by the parties' formulation of those questions.
- (f) A *DRP*:
 - (1) is not bound by the rules of evidence and may inform itself in any way it thinks fit; but
 - (2) must observe the rules of natural justice.

8.2.6D Decisions of the DRP

- (a) A decision of a *DRP* on any matter may be made by a majority of the members comprising the *DRP*. Where a *DRP* comprising two members is unable to reach a unanimous decision, the decision of the chairperson will be the decision of the *DRP*.
- (b) Subject to clause 8.2.6D(c), a *DRP* must determine a dispute as quickly as possible, and in any case must do so:
 - (1) in the case of disputes involving two parties, within 30 *business days* after the dispute is referred to the *DRP*; and
 - (2) in the case of disputes involving more than two parties, within 70 *business days* after the dispute is referred to the *DRP*.
- (c) A *DRP* may extend either of the periods specified in clause 8.2.6D(b) for determination of a dispute if:
 - (1) all parties to the dispute agree in writing;
 - (2) the *AER* agrees in writing; or
 - (3) the dispute is referred to mediation under clause 8.2.6C(d).
- (d) A determination of the *DRP* may, without limitation of the *DRP*'s power, require a party to do any or all of the following in such manner and within such time or times as is specified in the determination:
 - (1) take specified action;
 - (2) refrain from taking specified action; or
 - (3) pay a monetary amount to another party.
- (e) Each party to a dispute that is required by a determination of the *DRP* to take specified action, to refrain from taking specified action or to pay a monetary amount must:
 - (1) do so within such period after being notified of the determination as is specified in the determination; and
 - (2) report to the *Adviser* as soon as practicable after doing so.

8.2.6 [Deleted]

8.2.7 Legal representation

- (a) In any meeting, negotiation or mediation forming part of the Stage 1 dispute resolution process, a party is entitled to be legally represented.
- (b) A *DRP* may give any direction it considers appropriate in relation to the role the parties' legal representatives may take in the proceedings.

8.2.8 Cost of dispute resolution

- (a) The costs of any dispute resolution processes (other than legal costs of one or more parties), including the costs incurred by the *Adviser* in performing functions of the *Adviser* under clauses 8.2.5, 8.2.6A, 8.2.6B, 8.2.6C or 8.2.6D and the costs of the *DRP* and its members, are to be borne equally by the parties to the dispute unless:
 - (1) clause 8.2.8(b) applies; or
 - (2) otherwise agreed between the parties.
- (b) Costs of the dispute resolution processes (including legal costs of one or more parties) may be allocated by the *DRP* for payment by one or more parties as part of any determination. Subject to clause 8.2.8(c), in deciding to allocate costs against one or more parties to a dispute, the *DRP* may have regard to any relevant matters, including (but not limited to) whether the conduct of that party or those parties unreasonably prolonged or escalated the dispute or otherwise increased the costs of the *DRP* proceedings.
- (c) A party that disagrees with another party about the number of persons comprising a *DRP* is not to be taken, by reason only of that disagreement, to have unreasonably prolonged or escalated a dispute or otherwise increased the costs of the *DRP* proceedings.

8.2.9 Effect of resolution

- (a) Where the parties to a dispute reach agreement (whether or not the matter is before a *DRP*), the parties may execute a written agreement recording that a party has or parties have agreed:
 - (1) to take certain action;
 - (2) not to take certain action; or
 - (3) to make a monetary payment.
- (b) An agreement that is recorded in accordance with clause 8.2.9(a) and a determination of the *DRP* are binding on the parties to the dispute.
- (c) A requirement that a *Registered Participant* pay moneys, imposed on the *Registered Participant* under:
 - (1) a determination of the *DRP*; or
 - (2) an agreement that is recorded in accordance with clause 8.2.9(a),

is an obligation under the *Rules* to pay such amounts. A *Registered Participant* or *AEMO* entitled to such amount may recover the amount in accordance with section 72 of the *National Electricity Law*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) A *Registered Participant* must comply with a requirement or determination of the *DRP* and any agreement that is recorded in accordance with clause 8.2.9(a). Failure to do so is a breach of the *Rules* in respect of which the *AER* may take action in accordance with the *National Electricity Law*.

8.2.10 Recording and publication

- (a) Where a *DRP* makes a determination, a copy of the determination must be forwarded to the *Adviser*.
- (b) The *DRP* must provide a copy of its determination (save to the extent that it contains confidential information), to the *AER* for publication.
- (c) The *AER* must, in accordance with the *Rules consultation procedures*, develop and issue guidelines relating to the confidentiality of information obtained, used or disclosed for the purposes of resolving a dispute to which rule 8.2 applies.

8.2.11 Appeals on questions of law

A party to a dispute may appeal on a question of law against a decision or determination of a *DRP* in accordance with section 71 of the *National Electricity Law*.

8.2.12 [Deleted]

8.2A B2B Determination Disputes

8.2A.1 Application of rule 8.2

Rule 8.2 applies to *B2B Determination Disputes* but with the modifications set out in clause 8.2A.2.

8.2A.2 How rule 8.2 applies

For the purposes of its application to a *B2B Determination Dispute*, rule 8.2 is modified as follows:

- (a) For clause 8.2.1(a) substitute:
"(a) This clause 8.2 applies to a *B2B Determination Dispute*."
- (b) In clause 8.2.1(a1):
 - (1) delete "*Connection Applicants*"; and

- (2) omit “*Embedded Network Managers and NMAS providers (including NSCAS preferred tenderers)*” and substitute “*Third Party B2B Participants and B2B Change Parties*”.
- (c) For clause 8.2.1(e)(1) substitute:

"(1) be guided by the *national electricity objective* and the *B2B Principles*;"
- (d) In clause 8.2.1(f):
 - (1) omit “set out in clauses 8.2.4 to 8.2.10 and 8.2.12” and substitute “set out in clauses 8.2.5 to 8.2.10 and 8.2.12 (in each case, as those clauses are amended by clause 8.2A.2)”; and
 - (2) insert a new sentence at the end of the clause as follows:

"The subject matter of a *B2B Determination Dispute* which has been determined by the *DRP* cannot be the subject of further review."
- (e) For the avoidance of doubt, clause 8.2.3 does not apply to the *Information Exchange Committee*.
- (f) The contact for the *Information Exchange Committee* in relation to disputes will be the *DMS Contact* for AEMO.
- (g) Clause 8.2.4 does not apply.
- (h) Clauses 8.2.5(a), (b), (c) and (d) do not apply.
- (i) Insert new clauses 8.2.5(d1) to (d4) as follows:

"(d1) A *B2B Party* or *B2B Change Party* adversely affected by an *Information Exchange Committee Recommendation* or a *B2B Decision* may apply to the *Adviser* for review of that *Information Exchange Committee Recommendation* or that *B2B Decision*. The application must be made within 10 *business days* of publication of the *Information Exchange Committee Recommendation* or the *B2B Decision*, state grounds for the review and give full particulars of where the applicant believes the *Information Exchange Committee Recommendation* or *B2B Decision* is in error.

(d2) Where an application for review of an *Information Exchange Committee Recommendation* is made, AEMO must not take any further action in relation to that *Information Exchange Committee Recommendation* until the *DRP* has made its decision in relation to the dispute.

(d3) An application for review of a *B2B Decision* stays the *B2B Decision*.

(d4) On receiving the application the *Adviser* must refer the dispute to a *DRP* for determination in accordance with clauses 8.2.6A to 8.2.6D."
- (j) In clause 8.2.6A(a), for “decides to refer” substitute “refers”.

- (k) In clause 8.2.6A(c), for “the parties to the Stage 1 dispute resolution process” substitute “the parties to the dispute”.
- (l) In clause 8.2.6A(h)(1) before “a *Registered Participant*” insert “the *Information Exchange Committee* or”.
- (m) For clause 8.2.6B(a)(1) substitute:

“(1) the *Registered Participant* making application for a review of the *Information Exchange Committee Recommendation* or the *B2B Decision*, a *Registered Participant* affected by the *Information Exchange Committee Recommendation* or the *B2B Decision* the subject of the application for review and the *Information Exchange Committee* or, if the *Information Exchange Committee* is unable to act as a party, any other *Registered Participant* wishing to support the position of the *Information Exchange Committee*;”.
- (n) At the end of clause 8.2.6B(a) insert:

“AEMO is a party to an application for review of a *B2B Decision* and may be a party, in accordance with clause 8.2.6B(b), to an application for review of an *Information Exchange Committee Recommendation*. In addition:

 - (1) where the *Information Exchange Committee* is unable to act as a party to a *B2B Determination Dispute*, and another *Registered Participant* is a party to support the position of the *Information Exchange Committee*, the *Information Exchange Committee* must give to that party all assistance including access to both documents and *Members*. A *Registered Participant* of which a *Member* is an employee must ensure that *Member* is available to provide such assistance; and
 - (2) where AEMO is a party to a *B2B Determination Dispute*, the *Information Exchange Committee* must give AEMO all assistance including access to both documents and *Members*. A *Registered Participant* of which a *Member* is an employee must ensure that *Member* is available to provide such assistance.”.
- (o) Clause 8.2.6C(d) does not apply.
- (p) Insert a new clause 8.2.6C(g) as follows:

“(g) In considering a *B2B Determination Dispute*, the *DRP* must conduct a full reconsideration of the *Information Exchange Committee Recommendation* or *B2B Decision* and:

 - (1) can rely on any material available and is not confined to only considering material that was before the *Information Exchange Committee* in relation to an *Information Exchange Committee Recommendation* or AEMO in relation to a *B2B Decision*; and
 - (2) may exercise all powers and discretions that are conferred on the *Information Exchange Committee* in relation to an *Information*

Exchange Committee Recommendation or AEMO in relation to a B2B Decision.”.

(q) Insert a new clause 8.2.6D(da) as follows:

"(da) The *DRP* must make a decision in writing:

- (1) affirming the *Information Exchange Committee Recommendation* or the *B2B Decision*;
- (2) varying the *Information Exchange Committee Recommendation* or the *B2B Decision*; or
- (3) setting aside the *Information Exchange Committee Recommendation* or the *B2B Decision* and substituting its own decision.”.

(r) Clause 8.2.7(a) does not apply.

(s) In clause 8.2.8(a) after “8.2.6D” insert “(as modified by clause 8.2A.2)”.

(t) Clauses 8.2.9(a), (b) and (c)(2) do not apply.

(u) In clause 8.2.9(d) after “*Registered Participant*” insert “and the *Information Exchange Committee*”, and delete “and any agreement that is recorded in accordance with clause 8.2.9(a)”.

(v) In clause 8.2.8(a), insert “(in each case, as modified by clause 8.2A.2)” after “8.6.2D”.

8.3 Power to make Electricity Procedures

(a) *AEMO* may make *Electricity Procedures*.

(b) *Electricity Procedures* may govern:

- (1) the operation of the *national electricity market*; or
- (2) the sale and supply of electricity to *retail customers*.

(c) *Electricity Procedures* may amend or revoke procedures formerly made under this Part or *AEMO*’s general administrative powers to regulate electricity *markets*.

8.4 [Deleted]

8.5 [Deleted]

Part C Registered Participants' confidentiality obligations

8.6 Confidentiality

8.6.1 Confidentiality

- (a) Each *Registered Participant* must use all reasonable endeavours to keep confidential any *confidential information* that comes into the possession or control of the *Registered Participant* or of which the *Registered Participant* becomes aware.

- (b) A *Registered Participant*:

- (1) must not disclose *confidential information* to any person except as permitted by the *Rules*;

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (2) must only use or reproduce *confidential information* for the purpose for which it was disclosed or another purpose contemplated by the *Rules*; and

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (3) must not permit unauthorised persons to have access to *confidential information*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) Each *Registered Participant* must use all reasonable endeavours:

- (1) to prevent unauthorised access to *confidential information* which is in the possession or control of that *Registered Participant*; and
- (2) to ensure that any person to whom it discloses *confidential information* observes the provisions of this rule 8.6 in relation to that information.

- (d) The officers of a *Transmission Network Service Provider* participating in *transmission service* pricing must not be involved in or associated with competitive electricity trading activities of any other *Registered Participant*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (e) A *Transmission Network Service Provider* participating in *transmission service* pricing must provide to any *Transmission Network Service Provider* or *Registered Participant* which supplies information for *transmission service* pricing an undertaking that the *Transmission Network Service Provider* to which that information was supplied will comply with the confidentiality requirements set out in 6.9.2A.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

8.6.1A Application

For the purposes of this Part C only, "*Registered Participant*" is deemed to include not just *Registered Participants* but also *Metering Providers*, *Metering Data Providers*, *Embedded Network Managers* and *Third Party B2B Participants*.

8.6.2 Exceptions

This rule 8.6 does not prevent:

- (a) **(public domain)**: the disclosure, use or reproduction of information if the relevant information is at the time generally and publicly available other than as a result of breach of confidence by the *Registered Participant* who wishes to disclose, use or reproduce the information or any person to whom the *Registered Participant* has disclosed the information;
- (b) **(employees and advisers)**: the disclosure of information by a *Registered Participant* or the *Registered Participant's Disclosees* to:
- (1) an employee or officer of the *Registered Participant* or a *related body corporate* of the *Registered Participant*; or
 - (2) a legal or other professional adviser, auditor or other consultant (in this clause 8.6.2(b) called **Consultants**) of the *Registered Participant*,

which require the information for the purposes of the *Rules*, or for the purpose of advising the *Registered Participant* or the *Registered Participant's Disclosee* in relation thereto;
- (b1) **(service providers)**: the disclosure of *NMI Standing Data* or the provision of means to gain electronic access to that data by a *Customer* or the

Customer's Disclosees to a person who requires the *NMI Standing Data* for the purposes of providing services in connection with the *Customer's* sale of electricity to end users.

- (c) **(consent)**: the disclosure, use or reproduction of information with the consent of the person or persons who provided the relevant information under the *Rules*;
- (d) **(law)**: the disclosure, use or reproduction of information to the extent required by law or by a lawful requirement of:
 - (1) any government or governmental body, authority or agency having jurisdiction over a *Registered Participant* or its *related bodies corporate*; or
 - (2) any stock exchange having jurisdiction over a *Registered Participant* or its *related bodies corporate*;
- (d1) **[Deleted]**
- (e) **(disputes)**: the disclosure, use or reproduction of information if required in connection with legal proceedings, arbitration, expert determination or other dispute resolution mechanism relating to the *Rules*, or for the purpose of advising a person in relation thereto;
- (f) **(trivial)**: the disclosure, use or reproduction of information which is trivial in nature;
- (g) **(safety)**: the disclosure of information if required to protect the safety of personnel or equipment;
- (h) **(potential investment)**: the disclosure, use or reproduction of information by or on behalf of a *Registered Participant* to the extent reasonably required in connection with the *Registered Participant's* financing arrangements, investment in that *Registered Participant* or a disposal of that *Registered Participant's* assets;
- (i) **(regulator)**: the disclosure of information to the *AER*, the *AEMC* or the *ACCC* or any other regulatory authority having jurisdiction over a *Registered Participant*, pursuant to the *Rules* or otherwise;
- (j) **(reports)**: the disclosure, use or reproduction of information of an historical nature in connection with the preparation and giving of reports under the *Rules*;
- (k) **(aggregate sum)**: the disclosure, use or reproduction of information as an unidentifiable component of an aggregate sum; and
- (l) **(profile)**: the publication of a *profile*.
- (m) **[Deleted]**

(n) **[Deleted]**

(o) **[Deleted]**

8.6.3 Conditions

In the case of a disclosure under clauses 8.6.2(b), 8.6.2(b1), 8.6.2(h), prior to making the disclosure the *Registered Participant* that wishes to make the disclosure must inform the proposed recipient of the confidentiality of the information and must take appropriate precautions to ensure that the proposed recipient keeps the information confidential in accordance with the provisions of this rule 8.6 and does not use the information for any purpose other than that permitted under clause 8.6.1.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

8.6.4 **[Deleted]**

8.6.5 Indemnity to AER, AEMC and AEMO

Each *Registered Participant* must indemnify the AER, the AEMC and AEMO against any claim, action, damage, loss, liability, expense or outgoing which the AER, the AEMC or AEMO pays, suffers, incurs or is liable for in respect of any breach by that *Registered Participant* or any officer, agent or employee of that *Registered Participant* of this rule 8.6.

8.6.6 AEMO information

AEMO must develop and, to the extent practicable, implement a policy:

- (a) to protect information which it acquires pursuant to its various functions from use or access which is contrary to the provisions of the *Rules*;
- (b) to disseminate such information in accordance with its rights, powers and obligations in a manner which promotes the orderly operation of any *market*; and
- (c) to ensure that AEMO, in undertaking any trading activity except the procurement of *ancillary services*, does not make use of such information unless the information is also available to other *Registered Participants*.

8.6.7 Information on Rules Bodies

AEMO must, in consultation with the AEMC, develop and implement policies concerning:

- (a) the protection of information which *Rules bodies* acquire pursuant to their various functions from use or access by *Registered Participants* or *Rules bodies* which is contrary to the provisions of the *Rules*; and
- (b) the dissemination of such information where appropriate to *Registered Participants*.

Part D Monitoring and reporting

8.7 Monitoring and Reporting

8.7.1 Monitoring

- (a) **[Deleted]**
- (b) The *AER* must, for the purpose of performing its monitoring functions:
 - (1) determine whether *Registered Participants* and *AEMO* are complying with the *Rules*;
 - (2) assess whether the dispute resolution and *Rules* enforcement mechanisms are working effectively in the manner intended; and
 - (3) **[Deleted]**
 - (4) collect, analyse and disseminate information relevant and sufficient to enable it to comply with its reporting and other obligations and powers under the *Rules*.
- (c) The *AER* must ensure that, to the extent practicable in light of the matters set out in clause 8.7.1(b), the monitoring processes which it implements under this rule 8.7:
 - (1) are consistent over time;
 - (2) do not discriminate unnecessarily between *Registered Participants*;
 - (3) are cost effective to both the *AER*, all *Registered Participants* and *AEMO*; and
 - (4) subject to confidentiality obligations, are publicised or available to the public.

8.7.2 Reporting requirements and monitoring standards for Registered Participants and AEMO

- (a) For the purpose of performing its monitoring functions, the *AER* must establish:
 - (1) reporting requirements which apply to all or particular categories of *Registered Participants* in relation to matters relevant to the *Rules*;

- (2) reporting requirements for *AEMO* in relation to matters relevant to the *Rules*;
 - (3) procedures and standards generally applicable to *Registered Participants* relating to information and data received by them in relation to matters relevant to the *Rules*;
 - (4) procedures and standards applicable to *AEMO* relating to information and data received by it in relation to matters relevant to the *Rules*; and
 - (5) procedures and standards applicable to the *AER* relating to information and data received by the *AER* from *Registered Participants* or *AEMO* in relation to matters relevant to the *Rules*.
- (b) The *AER* must:
 - (1) after consultation with the *AEMC*, *AEMO* and *Registered Participants* in accordance with the *Rules consultation procedures*, establish the requirements and standards and procedures referred to in clause 8.7.2(a)(1), (3), (4) and (5); and
 - (2) after consultation with the *AEMC*, *AEMO* and such *Registered Participants* as the *AER* considers appropriate, establish the requirements referred to in clause 8.7.2(a)(2).

In formulating such requirements or procedures and standards, the *AER* must take into consideration the matters set out in clause 8.7.1(c).
- (c) Subject to clause 8.7.2(d), the *AER* must notify to *AEMO* and all *Registered Participants* particulars of the requirements and procedures and standards which it establishes under this clause 8.7.2.
- (d) For the purpose of performing its monitoring functions, the *AER* may establish additional or more onerous requirements or procedures and standards which do not apply to all or a particular category of *Registered Participants*. In formulating such requirements or procedures and standards, the *AER* must take into consideration the matters set out in clause 8.7.1(c) and is not required to consult in accordance with the *Rules consultation procedures* but must consult with the relevant *Registered Participants*. In such a case, and if the *AER* considers it appropriate to do so, the *AER* may choose to notify only those *Registered Participants* to whom these additional or more onerous requirements or procedures and standards apply.
- (e) Each *Registered Participant* and *AEMO* must comply with all requirements, procedures and standards established by the *AER* under this rule 8.7 to the extent that they are applicable to it within the time period specified for the requirement, procedure or standard or, if no such time period is specified, within a reasonable time. Each *Registered Participant* and *AEMO* must bear its own costs associated with complying with these requirements, procedures and standards.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (f) In complying with its obligations or pursuing its rights under the *Rules*, neither a *Registered Participant* nor *AEMO* must recklessly or knowingly provide, or permit any other person to provide on behalf of that *Registered Participant* or *AEMO* (as the case may be), misleading or deceptive data or information to any other person (including the *AER*).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (g) Any *Registered Participant* or *AEMO* may ask the *AER* to impose additional or more onerous requirements, procedures or standards under clause 8.7.2(d) on a *Registered Participant* in order to monitor or assess compliance with the *Rules* by that *Registered Participant*. When such a request is made, the *AER* may but is not required to impose the additional or more onerous requirements, procedures or standards.

If the *AER* decides to impose additional or more onerous requirements, procedures or standards on a *Registered Participant*, the *AER* may determine the allocation of costs of any additional compliance monitoring undertaken between the relevant *Registered Participants* and/or *AEMO* (as the case may be). The relevant *Registered Participants* and (to the extent relevant) *AEMO* must pay such costs as allocated. In the absence of such allocation, the *Registered Participant* which is subject to the additional or more onerous requirements, procedures or standards must bear its own costs of compliance.

- (h) The *AER* must develop and implement guidelines in accordance with the *Rules consultation procedures* governing the exercise of the powers conferred on it by clause 8.7.2(g) which guidelines must set out the matters to which the *AER* must have regard prior to deciding the allocation of costs of any additional or more onerous requirements, procedures or standards imposed pursuant to clause 8.7.2(g) between the relevant *Registered Participants* and/or *AEMO* (as the case may be).

8.7.3 Consultation required for making general regulatory information order (Section 28H of the NEL)

- (a) Before the *AER* makes a *general regulatory information order*, it must publish:
 - (1) the proposed order;
 - (2) an explanatory statement that sets out objectives of the proposed order; and

- (3) an invitation for written submissions on the proposed order.
- (b) The invitation must allow no less than 30 *business days* for the making of submissions (and the *AER* is not required to consider any submission made after the period has expired).
- (c) The *AER* may *publish* such issues, consultation and discussion papers, and hold such conferences and information sessions, in relation to the proposed order as it considers appropriate.
- (d) Within 80 *business days* of *publishing* the documents referred to in paragraph (a), the *AER* must:
 - (1) consider any submissions made in response to the invitation within the period allowed in the invitation;
 - (2) make a final decision on the order; and
 - (3) *publish* the final decision including:
 - (i) a statement of the reasons for the final decision (including a summary of each material issue raised in the submissions and the *AER*'s response to it); and
 - (ii) if the final decision is to make the order (either in the terms in which it was proposed or in modified terms) – the order in its final form.
- (e) The *AER* may extend the time within which it is required to publish its final decision if:
 - (1) the consultation involves questions of unusual complexity or difficulty; or
 - (2) the extension has become necessary because of circumstances beyond the *AER*'s control.

8.7.4 Preparation of network service provider performance report (Section 28V of the NEL)

- (a) Before the *AER* embarks on the preparation of *network service provider performance reports*, the *AER* must consult with:
 - (1) *network service providers*; and
 - (2) bodies representative of the *network service providers* and network service users; and
 - (3) the public generally;
- in order to determine appropriate priorities and objectives to be addressed through the preparation of *network service provider performance reports*.

- (b) In the course of preparing a *network service provider performance report*, the *AER*:
 - (1) must consult with the *network service provider* or *network service providers* to which the report is to relate; and
 - (2) must consult with the authority responsible for the administration of relevant *jurisdictional electricity legislation* about relevant safety and technical obligations; and
 - (3) may consult with any other persons who have, in the *AER*'s opinion, a proper interest in the subject matter of the report; and
 - (4) may consult with the public.
- (b1) In preparing a *network service provider performance report*, the *AER* must have regard to the *Distribution Reliability Measures Guidelines*.
- (c) A *network service provider* to which the report is to relate:
 - (1) must be allowed an opportunity, at least 30 *business days* before publication of the report, to submit information and to make submissions relevant to the subject matter of the proposed report; and
 - (2) must be allowed an opportunity to comment on material of a factual nature to be included in the report.

8.7.5 [Deleted]

8.7.6 Recovery of reporting costs

Where, under the *Rules*, *AEMO* is entitled or required to publish or give information, notices or reports to:

- (a) any *Registered Participant*, any court, the *ACCC* or the *AER*, unless the context otherwise requires, *AEMO* must not charge those persons a separate fee for providing them with a copy of the information or report and the costs in providing that service must be recovered through the *Participant fees* described in rule 2.12;
- (b) any other person, *AEMO* may charge that person a fee which is appropriate to cover the costs of providing that service.

Part E Reliability panel

8.8 Reliability Panel

8.8.1 Purpose of Reliability Panel

- (a) The functions of the *Reliability Panel* are to:

- (1) monitor, review and report on the performance of the *market* in terms of *reliability* of the *power system*;
 - (1a) on the advice of *AEMO*, determine the *system restart standard*;
 - (1b) review and make recommendations on the *reliability standard* and *reliability settings* under clause 3.9.3A;
- (2) review and, on the advice of *AEMO*, determine the *power system security standards*;
 - (2a) for the purposes of clause 4.2.6(b), develop and *publish* principles and guidelines that determine how *AEMO* should maintain *power system security* while taking into account the costs and benefits to the extent practicable;
 - (2b) determine, and modify as necessary, and *publish* the *template for generator compliance programs*;
 - (2c) on the advice of *AEMO*, determine which *non-credible contingency events* are to be *protected events* and any conditions applicable to the determination, in accordance with clause 8.8.4;
 - (2d) if the *Reliability Panel* considers it necessary or desirable, determine guidelines for *power system frequency reviews* conducted by *AEMO* under clause 5.20A.1; requests for *protected event* declaration by *AEMO* under clause 5.20A.4; or the *Reliability Panel's* determination of *protected events* under clause 8.8.4;
- (3) while *AEMO* has power to issue *directions* in connection with maintaining or re-establishing the *power system* in a *reliable operating state*, determine guidelines governing the exercise of that power;
- (4) while *AEMO* has power to enter into contracts for the provision of *reserves*, determine policies and guidelines governing *AEMO's* exercise of that power;
- (5) report to the *AEMC* and *participating jurisdictions* on overall *power system reliability* matters concerning the *power system* and on the matters referred to in clauses 8.8.1(a)(1b), (2), (2c) and (3), and make recommendations on *market* changes or changes to the *Rules* and any other matters which the *Reliability Panel* considers necessary;
- (6) monitor, review and *publish* a report on the *system standards* in terms of whether they appropriately and adequately describe the expected technical performance conditions of the *power system*;
- (7) monitor, review and *publish* a report on the implementation of *automatic access standards* and *minimum access standards* as *performance standards* in terms of whether:

- (i) their application is causing, or is likely to cause, a material adverse effect on *power system security*; and
 - (ii) the *automatic access standards* and *minimum access standards* should be amended or removed;
- (8) consider requests made in accordance with clause 5.3.3(b2) and, if appropriate, determine whether an existing Australian or international standard, or a part thereof, is to be adopted as a *plant standard* for a particular class of *plant*; and
- (9) determine guidelines identifying or providing for the identification of operating incidents and other incidents that are of significance for the purposes of the definition of “Reviewable operating incident” in clause 4.8.15.
- (b) In performing its functions set out in clause 8.8.1(a)(1) the *Reliability Panel* must not monitor, review or report on the performance of the *market* in terms of *reliability* of *distribution networks*, although it may collate, consider and report information in relation to the *reliability* of *distribution networks* as measured against the relevant standards of each *participating jurisdiction* in so far as the *reliability* of those *networks* impacts on overall *power system reliability*.
- (c) The principles and guidelines *published* under clause 8.8.1(a)(2a):
 - (1) must be developed, and may only be amended, in accordance with the consultation process set out in clause 8.8.3;
 - (2) must include transitional arrangements which take into account the need to allow for the development and testing of an appropriate methodology by *AEMO*; and
 - (3) must take into account the results of any decision to revise *network constraints*.
- (d) A request for declaration of a *protected event*, or revocation of a declaration, may only be made, and must be determined, in accordance with clause 8.8.4.

8.8.2 Constitution of the Reliability Panel

- (a) The *Reliability Panel* must consist of:
 - (1) a commissioner of the *AEMC* appointed by the *AEMC* to act as chairperson for a period of up to three years;
 - (2) the chief executive officer or a delegate of *AEMO*; and
 - (3) at least 5 but not more than 8 other persons appointed by the *AEMC* for a period of up to three years, such persons to include:

- (A) a person representing *Generators*;
 - (B) a person representing *Market Customers*;
 - (C) a person representing *Transmission Network Service Providers*;
 - (D) a person representing *Distribution Network Service Providers*;
 - (E) a person representing the interests of end use customers for electricity; and
 - (F) at the *AEMC*'s discretion, up to 3 other persons representing interests not otherwise represented, in order to achieve the broad representation described in clause 8.8.2(c)(1).
- (b) Subject to clause 8.8.2(d) any person who has previously served on the *Reliability Panel* is eligible for reappointment to the *Reliability Panel* in accordance with this clause 8.8.2.
- (c) In making appointments to the *Reliability Panel* under clause 8.8.2(a)(3), the *AEMC* must, to the extent reasonably practicable and subject to clause 8.8.2(c1), give effect to the intention that the persons so appointed:
- (1) should be broadly representative, both geographically and by reference to *Registered Participants* and *participating jurisdictions*, of those persons with direct interests in the *reliability* and safety of electricity *supply* under the *market* arrangements and in *power system security*;
 - (2) may include *Registered Participants* or their *representatives* or *participating jurisdictions*;
 - (3) must be independent of *AEMO*; and
 - (4) must, except in the case of the persons representing *Network Service Providers* appointed under clauses 8.8.2(a)(3)(C) and (D), be independent of all *System Operators*,

and if at any time:

- (5) a person on the *Reliability Panel*, other than the chief executive officer or a delegate of *AEMO*, ceases to be independent of *AEMO*; or
- (6) a person on the *Reliability Panel*, other than the persons representing *Network Service Providers* appointed under clauses 8.8.2(a)(3)(C) and (D), ceases to be independent of any *System Operator*,

the *AEMC* must remove that person from the *Reliability Panel*.

- (c1) The persons referred to in clauses 8.8.2(a)(3)(A), (B), (C) and (D) must be appointed and removed by the *AEMC* after consultation with the class of *Registered Participants* the person is to represent, and the *AEMC* must:

- (1) appoint a person agreed to by at least one third in number of the relevant class of *Registered Participants*, having regard to the preference expressed by the majority of the *Registered Participants* in the relevant class who responded in writing to the consultation by the *AEMC*; and
 - (2) commence consultation on the removal of such a person if requested to do so by a member of the relevant class of *Registered Participants*, and must remove that person if so agreed by at least one third in number of the relevant class of *Registered Participants*.
- (d) The *AEMC* may remove any member of the *Reliability Panel*, including the chairperson, at any time during his or her term in the following circumstances:
 - (1) the person becomes of unsound mind or his or her estate is liable to be dealt with in any way under a law relating to mental health; or
 - (2) the person fails to discharge the obligations of that office imposed by the *Rules*.
- (d1) The persons referred to in clauses 8.8.2(a)(3)(E) and (F) must be appointed and removed by the *AEMC* after such consultation as the *AEMC* considers appropriate with the classes of interests those persons represent and, subject to such consultation, may be removed at any time for any reason.
- (e) A person may resign from the *Reliability Panel* by giving notice in writing to that effect to the *AEMC*.
- (f) The *Reliability Panel* must meet and regulate its meetings and conduct its business in accordance with the *Rules*.
- (g) A decision of the *Reliability Panel* on any matter may be made by a majority of the members comprising the *Reliability Panel*. Where the members of the *Reliability Panel* are equally divided on any matter, the chairperson has a casting vote.
- (h) The *AEMC* may appoint a commissioner of the *AEMC* (other than the chairperson of the *AEMC* or the chairperson of the *Reliability Panel*) as the acting chairperson of the *Reliability Panel* on a standing basis. If the chairperson of the *Reliability Panel* is unable to perform the obligations of that office for an extended period of time (including any period in which a scheduled meeting of the *Reliability Panel* is held), the chairperson must notify the acting chairperson. The acting chairperson has the powers and functions of the chairperson of the *Reliability Panel* for such periods of time.

8.8.3 Reliability Panel review process

- (a) As soon as practicable, the *Reliability Panel* must determine:
 - (1) the *power system security standards*;

- (2) the guidelines referred to in clause 8.8.1(a)(3);
 - (3) the policies and guidelines referred to in clause 8.8.1(a)(4);
 - (4) the guidelines referred to in clause 8.8.1(a)(9);
 - (5) the *system restart standard*; and
 - (6) the *template for generator compliance programs*,
- in accordance with this clause 8.8.3.

(aa) The *system restart standard* must:

- (1) be reviewed and determined by the *Reliability Panel* in accordance with the *SRAS Objective*;
- (2) identify the maximum amount of time within which *system restart ancillary services* are required to restore *supply* in an *electrical sub-network* to a specified level, under the assumption that *supply* (other than that provided under a *system restart ancillary services* agreement acquired by AEMO for that *electrical sub-network*) is not available from any neighbouring *electrical sub-network*;
- (3) include the aggregate required reliability of *system restart ancillary services* for each *electrical sub-network*;
- (4) apply equally across all *regions*, unless the *Reliability Panel* varies the *system restart standard* between *electrical sub-networks* to the extent necessary:
 - (A) to reflect any technical system limitations or requirements; or
 - (B) to reflect any specific economic circumstances in an *electrical sub-network*, including but not limited to the existence of one or more *sensitive loads*;
- (5) specify that a *system restart ancillary service* can only be acquired by AEMO under a *system restart ancillary services* agreement for one *electrical sub-network* at any one time;
- (6) include guidelines to be followed by AEMO in determining *electrical sub-networks*, including the determination of the appropriate number of *electrical sub-networks* and the characteristics required within an *electrical sub-network* (such as the amount of *generation* or *load*, or electrical distance between *generation centres*, within an *electrical sub-network*); and
- (7) include guidelines specifying the diversity and strategic locations required of *system restart ancillary services*.

- (b) At least once each *financial year* and at such other times as the *AEMC* may request, the *Reliability Panel* must conduct a review of the performance of the *market* in terms of *reliability* of the *power system*, the *reliability standard*, the *power system security standards*, the *system restart standard*, the guidelines referred to in clause 8.8.1(a)(3), the policies and guidelines referred to in clause 8.8.1(a)(4) and the guidelines referred to in clause 8.8.1(a)(9). The *Reliability Panel* must conclude each annual review under this clause by the end of the *financial year* following the *financial year* to which the review relates.
- (ba) At least every 5 years from the date the *template for generator compliance programs* is determined pursuant to clause 8.8.3(a) and at such other times as the *AEMC* may request, the *Reliability Panel* must conduct a review of the *template for generator compliance programs* in accordance with this clause 8.8.3. Following such a review, the *Reliability Panel* may amend the *template for generator compliance programs* in accordance with its report to the *AEMC* submitted under clause 8.8.3(j).
- (c) Subject to paragraph (c1), the *AEMC* must advise the *Reliability Panel* of the terms of reference for any determination or review by the *Reliability Panel*.
 - (c1) The *AEMC*:
 - (1) may advise the *Reliability Panel* of standing terms of reference in relation to the reviews described in clauses 8.8.3(b) and 8.8.3(ba) from time to time; and
 - (2) may, but is not required to, advise the *Reliability Panel* of terms of reference in relation to the review described in clause 8.8.1(a)(1b).
- (c2) The *Reliability Panel* must follow the consultation process in paragraphs (d) to (l) when carrying out its functions, unless otherwise specified in this paragraph or elsewhere in the *Rules*. The *Reliability Panel* is not required to follow the process in paragraphs (d) to (l) for the purposes of its functions under clauses 8.8.1(a)(1b), 8.8.1(a)(2c), 8.8.1(a)(8) or 8.8.3(b).
- (d) The *Reliability Panel* must give notice to all *Registered Participants* of the commencement of a determination or review by requesting the *AEMC* to publish the notice pursuant to paragraph (k). The notice must give particulars of the terms of reference for the determination or review (as the case may be) and the deadline for the receipt of any submissions to the *Reliability Panel*.
- (e) The deadline for receipt of submissions must not be earlier than 4 weeks following publication of the notice required under paragraph (d) or such other time specified by the *AEMC* in any request for a review.
- (f) The *Reliability Panel* may hold a meeting open to the public for any determination or review by the *Reliability Panel*, and must hold such a

meeting if an interested party requests one in writing. The *Reliability Panel* must give reasonable notice of any such meeting.

- (g) The meeting referred to in paragraph (f):
 - (1) may be conducted in person, by telephone, video conference or other method of communication selected by the *Reliability Panel*; and
 - (2) if conducted in person, must be held in the capital city of one of the *participating jurisdictions* as selected by the *Reliability Panel*.
- (h) The *Reliability Panel* may obtain such technical advice or assistance from time to time as it thinks appropriate including, without limitation, advice or assistance from *AEMO* and any *Registered Participant*.
- (i) In undertaking any review and preparing any report and recommendations, the *Reliability Panel* must take into consideration the policy statements, directions or guidelines published by the *AEMC* from time to time.
- (j) Following the conclusion of the meeting (if any) conducted pursuant to paragraph (f) and consideration by the *Reliability Panel* of any submissions or comments made to it, the *Reliability Panel* must submit a written report to the *AEMC* on the review setting out its recommendations or determinations, its reasons for those recommendations or determinations and the procedure followed by the *Reliability Panel* in undertaking the review or determination. The report must be submitted to the *AEMC* by the deadline for reporting specified by the *AEMC* in any request for a review.
- (k) The *AEMC* must, within 10 days of receiving from the *Reliability Panel* a notice, report or other document pursuant to this clause 8.8.3, publish that document on the *AEMC* website (with the exclusion of material that cannot be disclosed consistently with the *AEMC*'s obligations of confidentiality).
- (l) The recommendations of the *Reliability Panel* may include (without limitation) recommended *changes* to the *Rules* in relation to matters concerning *reliability* of the power system.

8.8.4 Determination of protected events

- (a) A request for declaration of a *non-credible contingency event* as a *protected event* or for the revocation of such a declaration may only be submitted by *AEMO*. The request must be in accordance with clause 5.20A.4 or clause 5.20A.5 as applicable.
- (b) The *Reliability Panel* must comply with the *Rules consultation procedures* in relation to the determination of each request under paragraph (a).
- (c) In determining the request, the *Reliability Panel* must have regard to the information provided by *AEMO* in the request and may request further information or obtain such technical advice or assistance from time to time as it thinks appropriate including, without limitation, information, advice or assistance from *AEMO* and any *Registered Participant*.

- (d) In determining the request, the *Reliability Panel* may undertake its own assessment of the costs and benefits of managing the *non-credible contingency event* as a *protected event*, including:
 - (1) costs to operate the *power system* in a *secure operating state* if the event is declared;
 - (2) costs associated with any proposal for a new or modified *emergency frequency control scheme* or other *network* investment in connection with managing the event;
 - (3) the benefits of mitigating the consequences of the event occurring by managing it as a *protected event*.
- (e) In making a determination that declares a *non-credible contingency event* to be a *protected event* or revokes that declaration, the *Reliability Panel* must have regard to the *national electricity objective*.
- (f) When the *Reliability Panel* makes a determination under this clause, then subject to the provisions in the *Rules* applicable to *protected events*, the *Reliability Panel* may at the same time determine any other matters that the *Reliability Panel* considers necessary or appropriate in relation to the *protected event*, which may include:
 - (1) provision for the declaration of the *protected event* or the revocation of a declaration to come into effect at a future time, which may be a specified date or may be determined by reference to matters specified in the determination, such as the commissioning of a new or modified *emergency frequency control scheme* or the satisfaction of other conditions specified in the determination;
 - (2) matters relating to the availability and operation of an *emergency frequency control scheme*;
 - (3) matters relating to *AEMO*'s operation of the *power system* for that *protected event*; and
 - (4) changes to the principles and guidelines published under clause 8.8.1(a)(2a) to apply in respect of the *protected event* for the purposes of clause 4.2.6(b).
- (g) When the *Reliability Panel* makes a determination under this clause that provides for the availability and operation of a new or modified *emergency frequency control scheme* in connection with a *protected event*, the *Reliability Panel* must at the same time determine the *protected event EFCS standard* applicable to the scheme.
- (h) The final report of the *Reliability Panel* under the *Rules consultation procedures* must include:

- (1) if the *Reliability Panel* has determined to make a declaration, the terms of the declaration, any conditions applicable to it and any other matters determined under paragraph (f) or (g);
 - (2) the rationale for the determination, including the costs and benefits that the *Reliability Panel* had regard to and the rationale for any *protected event EFCS standard* determined by the *Reliability Panel*; and
 - (3) where applicable, any other options considered and the corresponding expected *power system security* outcomes and costs and benefits.
- (i) The *Reliability Panel* must maintain and publish a list of all *protected events* (including events that will be *protected events* when the relevant declaration comes into effect) and each *protected event EFCS standard*.

Part F Rules consultation procedures

8.9 Rules Consultation Procedures

- (a) These provisions apply wherever in the *Rules* any person (the *consulting party*) is required to comply with the *Rules consultation procedures*. For the avoidance of doubt, the *Rules consultation procedures* are separate from, and do not apply to, the process for changing the *Rules* under Part 7 of the *National Electricity Law*.
- (b) The *consulting party* must give a notice to all persons nominated (including *Intending Participants* in the class of persons nominated) by the relevant provision as those with whom consultation is required or, if no persons are specifically nominated, *AEMO*, all *Registered Participants* and interested parties, (**Consulted Persons**) giving particulars of the matter under consultation, by publishing the notice in accordance with rule 8.9(c).
- (c) Except where the *consulting party* is the *AEMC* or the *AER*, the *consulting party* must provide a copy of the notice referred to in rule 8.9(b) to *AEMO*, or to the *AEMC* where the *consulting party* is the *Reliability Panel*. Within 3 *business days* of receiving the notice *AEMO* must *publish* the notice on its website. Where the *AEMC* or the *Reliability Panel* is the *consulting party*, the *AEMC* must *publish* the notice referred to in rule 8.9(b) on its website. Where the *AER* is the *consulting party*, the *AER* must *publish* the notice referred to in rule 8.9(b) on its website.
- (d) The notice must invite interested *Consulted Persons* to make written submissions to the *consulting party* concerning the matter.
- (e) A written submission may state whether a *Consulted Person* considers that a meeting is necessary or desirable in connection with the matter under consultation and, if so, the reasons why such a meeting is necessary or desirable. To be valid, a submission must be received not later than the date specified in the notice (not to be less than 25 *business days* after the notice referred to in rule 8.9(b) is published).

- (f) The *consulting party* must consider all valid submissions within a period of not more than a further 20 *business days*. If the *consulting party*, after having considered all valid submissions, concludes that it is desirable or necessary to hold any meetings, the *consulting party* must use its best endeavours to hold such meetings with Consulted Persons who have requested meetings within a further 25 *business days*.
- (g) Following the conclusion of any meetings held in accordance with rule 8.9(f) and the *consulting party*'s consideration of a matter under consultation, the *consulting party* must publish a draft report in accordance with rule 8.9(h), available to all Consulted Persons, setting out:
 - (1) the conclusions and any determinations of the *consulting party*;
 - (2) its reasons for those conclusions;
 - (3) the procedure followed by the *consulting party* in considering the matter;
 - (4) summaries of each issue, that the *consulting party* reasonably considers to be material, contained in valid written submissions received from Consulted Persons or in meetings, and the *consulting party*'s response to each such issue; and
 - (5) in a notice at the front of the draft report, an invitation to Consulted Persons to make written submissions to the *consulting party* on the draft report,

and, subject to its confidentiality obligations, the *consulting party* must make available to all Consulted Persons, on request, copies of any material submitted to the *consulting party*.

- (h) Except where the *consulting party* is the AEMC or the AER, the *consulting party* must provide a copy of the draft report referred to in rule 8.9(g) to AEMO, or to the AEMC where the *consulting party* is the Reliability Panel. Within 3 *business days* of receiving the draft report AEMO must *publish* the draft report on its website. Where the AEMC or the Reliability Panel is the *consulting party*, the AEMC must *publish* the draft report referred to in rule 8.9(g) on its website. Where the AER is the *consulting party*, the AER must *publish* the draft report referred to in rule 8.9(g) on its website.
- (i) To be valid, a submission invited in a notice referred to in rule 8.9(g)(5) must be received not later than the date specified in the notice (not to be less than 10 *business days* after the publication of the draft report pursuant to rule 8.9(h) or such longer period as is reasonably determined by the *consulting party* having regard to the complexity of the matters and issues under consideration).
- (j) The *consulting party* must consider all valid submissions within a period of not more than a further 30 *business days*.

- (k) Following the conclusion of the *consulting party*'s consideration of all valid submissions the *consulting party* must publish a final report in accordance with rule 8.9(l), available to all Consulted Persons, setting out:
 - (1) the conclusions and any determinations of the *consulting party* on the matter under consultation;
 - (2) its reasons for those conclusions;
 - (3) the procedure followed by the *consulting party* in considering the matter;
 - (4) summaries required pursuant to rule 8.9(g)(4); and
 - (5) summaries of each issue, that the *consulting party* reasonably considers to be material, contained in valid written submissions received from Consulted Persons on the draft report and the *consulting party*'s response to each such submission,and, subject to its confidentiality obligations, the *consulting party* must make available to all Consulted Persons, on request, copies of any material submitted to the *consulting party*.
- (l) Except where the *consulting party* is the *AEMC* or the *AER*, the *consulting party* must provide a copy of the final report referred to in rule 8.9(k) to *AEMO*, or to the *AEMC* where the *consulting party* is the *Reliability Panel*. Within 3 *business days* of receiving the final report *AEMO* must *publish* the final report on its website. Where the *AEMC* or the *Reliability Panel* is the *consulting party*, the *AEMC* must *publish* the final report referred to in rule 8.9(k) on its website. Where the *AER* is the *consulting party*, the *AER* must *publish* the final report referred to in rule 8.9(k) on its website.
- (m) The *consulting party* must not make the decision or determination in relation to which the *Rules consultation procedures* apply until the *consulting party* has completed all the procedures set out in this clause.
- (n) Notwithstanding rule 8.9(m), substantial compliance by a *consulting party* with the procedures set out in this clause is sufficient.

Part G Consumer advocacy funding

8.10 Consumer advocacy funding obligation

- (a) *AEMO* must pay to *ECA* the amount of its consumer advocacy funding obligation for each financial year.
- (b) *AEMO* may recover the costs of meeting its consumer advocacy funding obligation from *Participant fees* and may allocate the costs to *Market Customers*;

- (c) The amount to be paid by *AEMO* to *ECA* under paragraph (a) is to be made available under a scheme agreed between *AEMO* and *ECA* or, in default of an agreement, on a quarterly basis;

- (d) In this rule:

consumer advocacy funding obligation means *ECA*'s total projected expenses for a financial year, in so far as those expenses are allocated to electricity in its final Annual Budget for that financial year, and including but not limited to:

- (1) all operational and administrative costs relating to the performance of *ECA*'s activities relevant to consumers of electricity; and
- (2) grant funding for any current or proposed grants relevant to consumers of electricity.

final Annual Budget means *ECA*'s final Annual Budget for a financial year, as issued by *ECA* in accordance with its constitution to *AEMO*.

Part H Augmentations

8.11 Augmentations

8.11.1 Application

This Part applies only to, and in relation to, the *declared transmission system* of an *adoptive jurisdiction* in which *AEMO* is authorised to exercise its *declared network functions*.

8.11.2 Object

The objects of this rule are:

- (1) to establish the distinction between *contestable augmentations* and *augmentations* that are not contestable; and
- (2) to regulate the process for calling, receiving and evaluating tenders for the construction and operation of a *contestable augmentation*; and
- (3) to facilitate the construction and operation of *augmentations*; and
- (4) to provide guidance on risk allocation and other commercial principles to be reflected in *network agreements* and *augmentation connection agreements*; and
- (5) to make provision for certain matters with respect to *AEMO*'s planning of the *declared shared network*.

8.11.3 Definitions

In this Part:

augmentation connection agreement has the meaning given in the *National Electricity Law*.

augmentation direction means a direction given by AEMO to an incumbent declared transmission system operator to construct an augmentation of a declared shared network that is not a contestable augmentation.

contestable augmentation means an augmentation classified as a contestable augmentation under clause 8.11.6.

contestable provider means a person responsible for the construction or operation of a contestable augmentation.

incumbent declared transmission system operator means the declared transmission system operator that owns or operates the part of the transmission system to which the augmentation will connect.

potential contestable provider means a person who responds positively to a call for expressions of interest in constructing and operating a contestable augmentation under clause 8.11.7(b).

relevant limit means \$10 million.

separable augmentation means an augmentation that satisfies both the following criteria:

- (a) the augmentation will result in a distinct and definable service to be provided by the contestable provider to AEMO;
- (b) the augmentation will not have a material adverse effect on the incumbent declared transmission system operator's ability to provide services to AEMO under any relevant network agreement.

8.11.4 Planning criteria

- (a) AEMO must publish the planning criteria that it proposes to use in performing its declared network functions.
- (b) The planning criteria:
 - (1) must outline the principles on which AEMO will carry out a cost benefit analysis of a proposed augmentation under section 50F of the *National Electricity Law*; and
 - (2) must describe how AEMO proposes to apply a probabilistic approach in determining the benefit of a proposed augmentation; and

- (3) must describe the kind of circumstances in which a probabilistic approach will be regarded as inappropriate; and
- (4) may deal with any other aspect of planning inherent in, or related to, *AEMO's declared network functions*.

8.11.5 Construction of augmentation that is not a contestable augmentation

- (a) An incumbent *declared transmission system operator* must, at *AEMO's* written request, provide *AEMO* with information and assistance that *AEMO* reasonably requires to decide:
 - (1) whether to give an *augmentation* direction; and
 - (2) if so, the terms of the direction.
- (b) If *AEMO* gives an *augmentation* direction, *AEMO* and the incumbent *declared transmission system operator* must negotiate in good faith with a view to reaching agreement on the terms of an appropriate amendment to the operator's *network agreement* covering:
 - (1) the operation of the *augmentation*; and
 - (2) the use of the *augmentation* to provide *shared network capability services*; and
 - (3) the basis on which *AEMO* will pay for *shared network capability services* provided by means of the *augmentation*.

Note:

If there is a dispute about the proposed amendment, the *AER* may resolve the dispute and determine the terms of the amendment under section 50H and 50J of the *National Electricity Law*.

- (c) An incumbent *declared transmission system operator* that is required by, or agrees with, a *Connection Applicant* to construct an *augmentation* that is not a *contestable augmentation*, must negotiate with the *Connection Applicant* in good faith with a view to reaching agreement on the terms of an appropriate amendment to their *connection agreement*.
- (d) However, if the incumbent *declared transmission system operator* applies for revocation and substitution of its *revenue determination* on the basis of an *augmentation* direction, or a requirement by or agreement with a *Connection Applicant* to construct an *augmentation* that is not a *contestable augmentation*, negotiations are not required on a matter to which the application relates.

8.11.6 Contestable augmentations

- (a) Subject to paragraph (b), an *augmentation* of a *declared shared network* is a *contestable augmentation* if:

- (1) the capital cost of the *augmentation* is reasonably expected to exceed the relevant limit; and
 - (2) the *augmentation* is a separable *augmentation*.
- (b) An *augmentation* of a *declared shared network* is not a *contestable augmentation* if:
 - (1) AEMO classifies the *augmentation* as non-contestable because the delay in implementation that would necessarily result from treating the *augmentation* as a *contestable augmentation* would unduly prejudice system security; or
 - (2) AEMO classifies the *augmentation* as non-contestable because it does not consider it economical or practicable to treat the *augmentation* as a *contestable augmentation*.

8.11.7 Construction and operation of contestable augmentation

- (a) For the purpose of procuring the construction and operation of a *contestable augmentation*, AEMO must:
 - (1) publish a generally applicable tender and evaluation process that accords with best practice as currently understood and may include, but need not be limited to:
 - (i) typical timetables for the tender and evaluation process; and
 - (ii) details of typical evaluation criteria; and
 - (iii) indications of the way in which different matters are to be or might be weighted for evaluation purposes; and
 - (iv) provision for declaration and management of conflicts of interest; and
 - (v) provision for the debriefing of unsuccessful tenderers; and
 - (2) *publish* a register of persons who have from time to time expressed interest in being *contestable* providers and keep the register up to date to reflect the developing market.
- (b) For each *contestable augmentation*, AEMO must:
 - (1) call for expressions of interest from persons who may be interested in constructing and operating the proposed *contestable augmentation*; and
 - (2) prepare, in consultation with the incumbent *declared transmission system operator*, a timetable allowing AEMO and the incumbent *declared transmission system operator* a reasonable time to comply with their respective obligations and allowing a reasonable

- construction period having regard to the nature and extent of the *augmentation*; and
- (3) prepare, in consultation with the incumbent *declared transmission system operator*, a detailed tender specification setting out the scope of the work involved in the *augmentation*, including details of the technical interface required for the *augmentation*; and
 - (4) prepare and issue an invitation to tender setting out details of the *contestable augmentation* and the tender and evaluation process - details that must (without limitation):
 - (i) provide as much certainty as is reasonably practicable to tenderers regarding the terms and conditions subject to which they are invited to tender for the work involved in the *contestable augmentation*; and
 - (ii) identify the relevant land (if any) that is available for or in connection with the *contestable augmentation*, including (to the extent reasonably practicable) details of current usage and, if available, a geotechnical and environmental report on the land; and
 - (iii) specify (to the extent reasonably practicable) the services to be provided under the *network agreement*;
 - (5) make available to potential *contestable* providers a copy of any proposed *augmentation connection agreement* or *network agreement*.
- (c) The incumbent *declared transmission system operator* must:
- (1) provide, within a reasonable period specified by *AEMO*, information and assistance reasonably required by *AEMO* for the preparation of the tender documents such as information about the technical interface and information required for the preparation of the tender specification; and
 - (2) negotiate in good faith with a potential *contestable* provider about changes to the proposed *augmentation connection agreement* that are sought or suggested by that potential *contestable* provider.
- (d) The incumbent *declared transmission system operator* may tender for work involved in a *contestable augmentation*.
- (e) *AEMO* must evaluate, assess and negotiate responses to the invitation to tender in accordance with the published tender and evaluation process.
- (f) After completing the tender and evaluation process, *AEMO* must notify all persons who submitted tenders of the successful tender.

- (g) *AEMO* may only proceed with a *contestable augmentation* on the basis of a tender accepted after evaluation and assessment in accordance with the published tender and evaluation process.
- (h) The successful tenderer:
 - (1) must enter into an agreement with *AEMO*, based on the successful tender, for the construction of the *augmentation*; and
 - (2) must (unless the incumbent *declared transmission system operator* is itself the successful tenderer) enter into an *augmentation connection agreement* with the incumbent *declared transmission system operator*.
- (i) This clause does not apply to a *funded augmentation* unless *AEMO* and the *Connection Applicant* agree to the conduct of a tender process.

8.11.8 Funded augmentations that are not subject to the tender process

- (a) This clause applies to a *contestable augmentation* that is a *funded augmentation* except in the case where *AEMO* and the *Connection Applicant* agree to the conduct of a tender process in accordance with clause 8.11.7.
- (b) For each *contestable augmentation* to which this clause applies, *AEMO* must:
 - (1) prepare, in consultation with the incumbent *declared transmission system operator* and the *Connection Applicant*, a timetable allowing *AEMO* and the incumbent *declared transmission system operator* a reasonable time to comply with their respective obligations and allowing a reasonable construction period having regard to the nature and extent of the *augmentation*; and
 - (2) prepare, in consultation with the incumbent *declared transmission system operator* and the *Connection Applicant*, a detailed specification setting out the scope of the work involved in the *augmentation*, including details of the technical interface required for the *augmentation*; and
 - (3) make available to the incumbent *declared transmission system operator* and the *Connection Applicant* a copy of any proposed *augmentation connection agreement*.
- (c) The incumbent *declared transmission system operator* must:
 - (1) provide, within a reasonable period specified by *AEMO*, information and assistance reasonably required by *AEMO* for the preparation of an agreement for the construction of proposed *contestable augmentation*; and

- (2) negotiate in good faith with the *Connection Applicant* about any changes to the proposed *augmentation connection agreement* that are sought or suggested by the *Connection Applicant*; and
- (3) enter into an *augmentation connection agreement* with the *Connection Applicant*.
- (d) The *Connection Applicant* must enter into an agreement with AEMO for the construction of the *augmentation*.

8.11.9 Contractual requirements and principles

- (a) A *network agreement* or an *augmentation connection agreement* related to a *contestable augmentation* should be consistent with the requirements and principles set out in Schedule 8.11 to this Chapter.
- (b) If a person submits a tender for a *contestable augmentation* proposing a *network agreement* or an *augmentation connection agreement* that is not consistent with the requirements and principles set out in Schedule 8.11 to this Chapter, the person must, in responding to the invitation to tender, include a statement drawing AEMO's attention to the inconsistency and explaining the reasons for it.
- (c) Despite the provisions of this clause and Schedule 8.11:
 - (1) AEMO and the other party or parties to a *network agreement* may agree terms and conditions of an amendment that differ from the requirements and principles set out in Schedule 8.11; and
 - (2) the parties to an *augmentation connection agreement* may, with AEMO's consent, agree terms and conditions that differ from the requirements and principles set out in Schedule 8.11.

8.11.10 Annual planning review

AEMO must in its annual planning review indicate:

- (a) which *augmentations* commenced in the previous year are *contestable augmentations*; and
- (b) which *augmentations* planned to commence in the present or future years are likely to be *contestable augmentations*.

Schedule 8.11 Principles to be reflected in agreements relating to contestable augmentations

S8.11.1 Risk allocation

- (a) This clause sets out the risk allocation principles.
- (b) **Site/Construction Risk**

Site/construction risk is the risk that unanticipated difficulties or liabilities associated with the site or the construction work will adversely affect the *contestable* provider's ability to deliver network services at the price agreed with AEMO. This risk comprises (for example) the risk of contamination of the land and the risk that unforeseen difficulties (such as difficulties in sourcing necessary materials) will impede the construction of the *augmentation*.

Site/construction risk is allocated to the *contestable* provider.

(c) **Statutory approval risk**

This is the risk that a necessary planning, environmental, building or other approval will be refused or granted on conditions adversely affecting the costs of constructing or operating the *contestable augmentation*.

This risk is allocated to the *contestable* provider.

(d) **Native title risk**

This is the risk that actual or potential native title claims will adversely affect the cost of the *augmentation*.

This risk is allocated to the *contestable* provider.

(e) **Output specification risk**

This is the risk that inadequacies in the output specification will cause or contribute to design inadequacies. This risk is allocated to AEMO to the extent the inadequacies in the output specification are attributable to AEMO. To the extent the inadequacies are attributable to incorrect information provided by the incumbent *declared transmission system operator*, the risk is allocated to the operator.

(f) **Design, construction and commissioning risk**

This is the risk that an unanticipated increase in the costs of the *augmentation* will have a significant adverse impact on the viability or profitability of the *contestable augmentation*.

This risk is allocated to the *contestable* provider.

(g) **Operating risk**

This is the risk that the *contestable* provider will fail, for a reason other than force majeure or inadequate financial resources, to deliver the electricity network services purchased by AEMO. It includes (for example) the risk of systems failure.

This risk is allocated to the *contestable* provider.

(h) **Network and interface risk**

This is the risk that the interface between the *augmentation* and the *declared transmission system* will not be constructed or operated in accordance with the tender specification or to a satisfactory standard with the result that the safety, reliability or security of the supply of electricity or the national electricity system (or both) will be adversely affected.

This risk is allocated to the party whose system affects the other in an adverse way. If, however, the adverse result is directly caused by the provision of incorrect information, the risk is allocated to the party that provided the incorrect information.

(i) **Industrial relations risk**

This is the risk that industrial action will adversely affect the construction of the *augmentation* or the delivery of electricity network services by means of the *augmentation*.

This risk is allocated to the *contestable* provider. If, however, industrial action directed at the incumbent *declared transmission system operator* causes the adverse effect, the risk is allocated to the operator.

S8.11.2 Minimum requirements for agreements relating to contestable augmentation

- (a) An *augmentation connection agreement* must specify:
 - (1) the technical and other details of *connection* (including the *connection point*); and
 - (2) the *performance standards* that apply to the *contestable* provider.
- (b) There should be no material difference between *performance standards* that apply to the *incumbent declared transmission system operator* and those that apply to the *contestable* provider.

S8.11.3 Matters to be dealt with in relevant agreements

- (a) A relevant agreement should (in addition to the other requirements of the *National Electricity Law* and these *Rules*) contain provisions with respect to:
 - (1) the risks set out in clause S8.11.1; and
 - (2) force majeure events; and
 - (3) project financing risks; and
 - (4) liabilities and indemnities; and
 - (5) any relevant *regulatory obligation or requirement*.
- (b) In this clause:

relevant agreement means:

- (a) a *network agreement*; or
- (b) an *augmentation connection agreement*.

Part I Values of customer reliability

8.12 Development of methodology and publication of values of customer reliability

- (a) For the purposes of this rule 8.12:

jurisdictional regulator means:

- (1) the Independent Pricing and Regulatory Tribunal of New South Wales established by section 5(1) of the *Independent Pricing and Regulatory Tribunal Act 1992* of New South Wales;
- (2) the Essential Services Commission established by section 7(1) of the *Essential Services Commission Act 2001* of Victoria;
- (3) the Queensland Competition Authority established by section 7 of the *Queensland Competition Authority Act 1997* of Queensland;
- (4) the Essential Services Commission established by section 4(1) of the *Essential Services Commission Act 2002* of South Australia;
- (5) the Independent Competition and Regulatory Commission for the Australian Capital Territory established by section 5(1) of the *Independent Competition and Regulatory Commission Act 1997* of the Australian Capital Territory;
- (6) the Utilities Commission of the Northern Territory established by section 5(1) of the *Utilities Commission Act* of the Northern Territory; and
- (7) any successors and assigns of a body referred to in paragraphs (1) to (6).

VCR methodology has the meaning given in clause 8.12(b).

VCR objective is that the VCR methodology and values of customer reliability should be fit for purpose for any current or potential uses of values of customer reliability that the *AER* considers to be relevant.

- (b) The *AER* must, in accordance with the *Rules consultation procedures*:
 - (1) develop a methodology to be used by the *AER* to calculate values of customer reliability (**VCR methodology**); and

- (2) review and update the VCR methodology in accordance with paragraph (f).
- (c) Notwithstanding paragraph (b), the *AER* may make minor and administrative amendments to the VCR methodology without complying with the *Rules consultation procedures*.
- (d) The VCR methodology must:
 - (1) include a mechanism for directly engaging with:
 - (i) *retail customers*; and
 - (ii) *Customers* (other than *retailers*),which may include the use of surveys;
 - (2) include a mechanism for adjusting the values of customer reliability on an annual basis; and
 - (3) be *published* promptly after it has been developed under paragraph (b).
- (e) The *AER* must ensure that the VCR methodology developed under paragraph (b), and any values of customer reliability calculated in accordance with that methodology, are consistent with the VCR objective.
- (f) The *AER* must, prior to each date on which the values of customer reliability are updated under subparagraph (g)(2):
 - (1) review the VCR methodology; and
 - (2) following such review, *publish* either:
 - (i) an updated VCR methodology; or
 - (ii) a notice stating that the existing VCR methodology was not varied as a result of the review.
- (g) The *AER* must:
 - (1) *publish* the first values of customer reliability, calculated in accordance with the VCR methodology, on or before 31 December 2019;
 - (2) update the values of customer reliability at least once every five years, with the updated values to be *published* promptly thereafter; and
 - (3) maintain on its website the values of customer reliability as updated from time to time.
- (h) For the purpose of complying with the *Rules consultation procedures* under paragraph (b), the *AER* must consult with:

- (1) the *Reliability Panel*;
- (2) *AEMO*;
- (3) each jurisdictional regulator;
- (4) *Registered Participants*; and
- (5) such other persons who, in the *AER*'s reasonable opinion, have, or have identified themselves to the *AER* as having, an interest in the VCR methodology and values of customer reliability.

CHAPTER 8A

8A. Participant Derogations

Note:

This Chapter contains the *participant derogations* for the purposes of the *National Electricity Law* and the *Rules*.

Part 1 Derogations Granted to TransGrid

8A.1 [Deleted]

Part 2 Derogations Granted to EnergyAustralia

8A.2 [Deleted]

8A.2A [Deleted]

Part 3 [Deleted]

Part 4 [Deleted]

Part 5 [Deleted]

Part 6 Derogations Granted to Victorian Market Participants

[Deleted]

Part 7 [Deleted]

Part 8 [Deleted]

Part 9 [Deleted]

Part 10 [Deleted]

Part 11 [Deleted]

Part 12 [Deleted]

Part 13 Derogation granted to Aurora Energy (Tamar Valley) Pty Ltd

8A.13 [Deleted]

Part 14 Derogations granted to Ausgrid, Endeavour Energy and Essential Energy

8A.14 Derogations from Chapter 6 for the current regulatory control period and subsequent regulatory control period

8A.14.1 Definitions

In this *participant derogation*, rule 8A.14:

2015 determination, in respect of each NSW DNSP, means the following applicable distribution determination:

- (a) the distribution determination for the current regulatory control period published by the *AER* on 30 April 2015 in respect of Ausgrid;
- (b) the distribution determination for the current regulatory control period published by the *AER* on 30 April 2015 in respect of Endeavour Energy; and
- (c) the distribution determination for the current regulatory control period published by the *AER* on 30 April 2015 in respect of Essential Energy.

adjustment amount, in respect of a NSW DNSP, means an amount that operates as if it were:

- (a) a revenue increase; or
- (b) a revenue decrease,

to the total annual revenue for distribution standard control services that may be earned by that NSW DNSP for the final regulatory year of the current regulatory control period in accordance with:

- (c) the formulae that give effect to the applicable control mechanism; and
 - (d) the applicable *annual revenue requirement*,
- under the remade 2015 determination.

adjustment determination, in respect of a NSW DNSP, means the *AER's* determination:

- (a) if clause 8A.14.4 applies, of whether there is, and the relevant amounts of, an adjustment amount (including any adjustments made under clause 8A.14.4(d)(1)(ii) or 8A.14.4(d)(2)(ii)) and a subsequent adjustment amount; or
- (b) if clause 8A.14.5 or 8A.14.6 applies, of the relevant amounts of the distribution variation amount and transmission variation amount.

Ausgrid means the Ausgrid Operator Partnership (ABN 78 508 211 731), which comprises of:

- (a) Blue Op Partner Pty Ltd (ACN 615 217 500) as trustee for the Blue Op Partner Trust;
- (b) ERIC Alpha Operator Corporation 1 Pty Ltd (ACN 612 975 096) as trustee for ERIC Alpha Operator Trust 1;
- (c) ERIC Alpha Operator Corporation 2 Pty Ltd (ACN 612 975 121) as trustee for ERIC Alpha Operator Trust 2;
- (d) ERIC Alpha Operator Corporation 3 Pty Ltd (ACN 612 975 185) as trustee for ERIC Alpha Operator Trust 3; and
- (e) ERIC Alpha Operator Corporation 4 Pty Ltd (ACN 612 975 210) as trustee for ERIC Alpha Operator Trust 4.

current regulatory control period, for each NSW DNSP, means the period of five years that commenced on 1 July 2014 and ends on 30 June 2019, which includes the 'transitional regulatory control period' and 'subsequent regulatory control period' as those terms are defined in clause 11.55.1.

distribution standard control services, in respect of a NSW DNSP, means *standard control services* provided by that NSW DNSP other than *transmission standard control services*.

distribution variation amount, in respect of a NSW DNSP, means an amount equal to:

- (a) the sum of the total annual revenue for distribution standard control services for that NSW DNSP for each regulatory year of the current regulatory control period in accordance with:
 - (1) the formulae that give effect to the applicable control mechanism; and

- (2) the applicable *annual revenue requirement*,
under the remade 2015 determination; minus
- (b) the sum of:
 - (1) the total annual revenue for distribution standard control services for that NSW DNSP for the first and second regulatory years of the current regulatory control period in accordance with:
 - (i) the formulae that give effect to the applicable control mechanism; and
 - (ii) the applicable *annual revenue requirement*,
under the 2015 determination; plus
 - (2) the total annual revenue for distribution standard control services for that NSW DNSP for the third, fourth and final regulatory years of the current regulatory control period under the undertakings that apply for those regulatory years,

provided that such amount includes any adjustments necessary for the *AER* to be satisfied that the amount achieves the revenue recovery principle under clause 8A.14.5(d) or 8A.14.6(d) (as the case may be).

Endeavour Energy means the Endeavour Energy Network Operator Partnership (ABN 11 247 365 823), which comprises of:

- (a) Edwards O Pty Limited (ACN 618 643 486) as trustee for the Edwards O Trust;
- (b) ERIC Epsilon Operator Corporation 1 Pty Ltd (ACN 617 221 735) as trustee for ERIC Epsilon Operator Trust 1;
- (c) ERIC Epsilon Operator Corporation 2 Pty Ltd (ACN 617 221 744) as trustee for ERIC Epsilon Operator Trust 2;
- (d) ERIC Epsilon Operator Corporation 3 Pty Ltd (ACN 617 221 753) as trustee for ERIC Epsilon Operator Trust 3; and
- (e) ERIC Epsilon Operator Corporation 4 Pty Ltd (ACN 617 221 771) as trustee for ERIC Epsilon Operator Trust 4.

Essential Energy means Essential Energy, the energy services corporation of that name (formerly known as Country Energy), which is constituted under section 7 of the *Energy Services Corporations Act 1995* (NSW) and specified in Part 2 of Schedule 1 of that Act, or any successor to its business.

NSW DNSP means each of the following *Distribution Network Service Providers*:

- (a) Ausgrid;
- (b) Endeavour Energy; and
- (c) Essential Energy.

NUOS charges, in respect of a NSW DNSP, means charges comprising that NSW DNSP's prices for distribution standard control services, *designated pricing proposal charges* and *jurisdictional scheme amounts*.

regulatory year means each consecutive period of 12 calendar months in the current regulatory control period or subsequent regulatory control period (as the case may be) (the current regulatory control period and subsequent regulatory control period each being a **regulatory control period**), the first such 12 month period commencing at the beginning of the regulatory control period and the final 12 month period ending at the end of the regulatory control period.

remade 2015 determination, in respect of each NSW DNSP, means the 2015 determination of that NSW DNSP as remade by the AER following the Tribunal's decision.

revenue recovery principle, in respect of a NSW DNSP, means the principle that the NSW DNSP must be given the ability to recover the same, but no more, revenue (in net present value equivalent terms) as it would have recovered if:

- (a) the remade 2015 determination had been in force from the commencement of the current regulatory control period; and
- (b) the formulae giving effect to the control mechanisms specified in the remade 2015 determination had been applied in each regulatory year of the current regulatory control period.

scheme, in respect of a NSW DNSP, means any applicable *efficiency benefit sharing scheme*, *capital expenditure sharing scheme*, *service target performance incentive scheme*, *demand management incentive scheme*, *demand management innovation allowance mechanism* and *small-scale incentive scheme*.

subsequent adjustment amount, in respect of a NSW DNSP, means an amount that:

- (a) is equivalent in net present value terms to the adjustment amount, incorporating any adjustments made under clause 8A.14.4(d)(1)(ii) or 8A.14.4(d)(2)(ii) (as the case may be); and
- (b) represents a revenue increase (where the adjustment amount is a negative amount) or a revenue decrease (where the adjustment amount is a positive amount) to the *annual revenue requirement* of the first regulatory year of the subsequent regulatory control period.

subsequent distribution determination, in respect of each NSW DNSP, means the distribution determination for that NSW DNSP that is made by the AER for the subsequent regulatory control period.

subsequent regulatory control period, in respect of a NSW DNSP, means the *regulatory control period* for that NSW DNSP that immediately follows the current regulatory control period.

substituted total annual revenue amount has the meaning given in clause 8A.14.4(d).

total annual revenue, in respect of a NSW DNSP, means the total revenue that the NSW DNSP is entitled to earn from the provision of distribution standard control services or *transmission standard control services* (as the case may be) for the relevant regulatory year.

transmission variation amount, in respect of a NSW DNSP, means an amount equal to:

- (a) the sum of the total annual revenue for *transmission standard control services* for that NSW DNSP for each regulatory year of the current regulatory control period in accordance with:
 - (1) the formulae that give effect to the applicable control mechanism; and
 - (2) the applicable *annual revenue requirement*,
under the remade 2015 determination; minus
- (b) the sum of:
 - (1) the total annual revenue for *transmission standard control services* for that NSW DNSP for the first, second and third regulatory years of the current regulatory control period in accordance with:
 - (i) the formulae that give effect to the applicable control mechanism; and
 - (ii) the applicable *annual revenue requirement*,
under the 2015 determination; plus
 - (2) the total annual revenue for *transmission standard control services* for that NSW DNSP for the fourth and final regulatory years of the current regulatory control period under the undertakings that apply for those regulatory years,

provided that such amount includes any adjustments necessary for the *AER* to be satisfied that the amount achieves the revenue recovery principle under clause 8A.14.5(d) or 8A.14.6(d) (as the case may be).

Tribunal means the Australian Competition Tribunal.

Tribunal's decision means the decision of the Tribunal in relation to the 2015 determination of each NSW DNSP delivered on 26 February 2016 to remit the matter back to the *AER* pursuant to section 71P(2)(c) of the *National Electricity*

Law, as varied as a consequence of the outcome of judicial review of that decision.

undertaking, in respect of a NSW DNSP, means an undertaking given to, and accepted by, the *AER* under section 59A of the *National Electricity Law* in respect of the revenue earned and/or prices charged by that NSW DNSP for the relevant regulatory year.

8A.14.2 Expiry date

This *participant derogation* expires on the date that immediately follows the end of the subsequent regulatory control period.

8A.14.3 Application of Rule 8A.14

- (a) This *participant derogation* prevails to the extent of any inconsistency with:
 - (1) any other provision of the *Rules*; and
 - (2) a remade 2015 determination.
- (b) Nothing in this *participant derogation* has the effect of:
 - (1) changing the application of the *Rules* to the making of a remade 2015 determination; or
 - (2) rendering a change, in whole or in part, to the terms of a distribution determination that applies in respect of the current regulatory control period.

8A.14.4 Recovery of revenue across the current regulatory control period and subsequent regulatory control period

General

- (a) This clause 8A.14.4 applies in respect of a NSW DNSP if a remade 2015 determination is made by the *AER* in respect of that NSW DNSP prior to 1 March 2018.

Adjustment determination

- (b) The *AER* may determine at the time of making the remade 2015 determination for the relevant NSW DNSP:
 - (1) an adjustment amount; and
 - (2) a subsequent adjustment amount,if the *AER* is satisfied that the application of the adjustment amount and subsequent adjustment amount under paragraphs (d) and (e), respectively, would:

- (3) be reasonably likely to minimise variations in NUOS charges:
 - (i) between the fourth and final regulatory years of the current regulatory control period; and
 - (ii) between the final regulatory year of the current regulatory control period and the first regulatory year of the subsequent regulatory control period,for the relevant NSW DNSP; and
- (4) achieve the revenue recovery principle in respect of the relevant NSW DNSP.

Note:

When determining the adjustment amount and subsequent adjustment amount, the *AER* must also take into account the *national electricity objective* and may take into account the revenue and pricing principles: see *National Electricity Law*, s.16(1)(a) and (2)(b).

- (c) Paragraphs (d) and (e) do not apply in respect of a NSW DNSP if the *AER* has not determined an adjustment amount and subsequent adjustment amount under paragraph (b) for that NSW DNSP.

Recovery in current regulatory control period

- (d) A *pricing proposal* submitted by a NSW DNSP, and approved by the *AER*, for the final regulatory year of the current regulatory control period must, in respect of revenue for distribution standard control services, only provide for the recovery of:
 - (1) where the applicable adjustment amount operates as if it were a revenue increase:
 - (i) the NSW DNSP's total annual revenue for distribution standard control services in accordance with the formulae that give effect to the applicable control mechanism, and the applicable *annual revenue requirement*, under the remade 2015 determination; plus
 - (ii) the adjustment amount, incorporating any adjustments that the *AER* considers necessary to achieve the revenue recovery principle in accordance with subparagraph (b)(4); or
 - (2) where the applicable adjustment amount operates as if it were a revenue decrease:
 - (i) the NSW DNSP's total annual revenue for distribution standard control services in accordance with the formulae that give effect to the applicable control mechanism, and the applicable *annual revenue requirement*, under the remade 2015 determination; minus

- (ii) the adjustment amount, incorporating any adjustments that the *AER* considers necessary to achieve the revenue recovery principle in accordance with subparagraph (b)(4),

(such amount being the **substituted total annual revenue amount**).

Recovery in subsequent regulatory control period

- (e) The *AER* must include the subsequent adjustment amount determined for a NSW DNSP under paragraph (b) as:
 - (1) if subparagraph (d)(1) applies, a revenue decrease; or
 - (2) if subparagraph (d)(2) applies, a revenue increase,to the *annual revenue requirement* determined under rule 6.4 for the first regulatory year of that NSW DNSP's subsequent regulatory control period.
- (f) Any subsequent adjustment amount included as a revenue increase or revenue decrease under paragraph (e) must not be considered by the *AER* when determining whether any amount is payable or recoverable by the relevant NSW DNSP under any scheme that applies to that NSW DNSP in respect of the subsequent regulatory control period.

8A.14.5 Recovery of revenue in subsequent regulatory control period only and no reopening of subsequent distribution determination required

General

- (a) This clause 8A.14.5 applies in respect of a NSW DNSP if a remade 2015 determination is made by the *AER* in respect of that NSW DNSP on or after 1 March 2018, but prior to 1 May 2019.

Adjustment determination

- (b) If paragraph (a) applies, the *AER* must determine at the time of making the remade 2015 determination:
 - (1) the distribution variation amount; and
 - (2) the transmission variation amount,for the relevant NSW DNSP.

Recovery in subsequent regulatory control period

- (c) The *AER* must include an amount equivalent in net present value terms to:
 - (1) the distribution variation amount; and
 - (2) the transmission variation amount,determined for a NSW DNSP under paragraph (b) as:

- (3) if the applicable distribution variation amount or transmission variation amount (as the case may be) is a positive amount, a revenue increase; or
- (4) if the applicable distribution variation amount or transmission variation amount (as the case may be) is a negative amount, a revenue decrease; or
- (5) if the applicable distribution variation amount or transmission variation amount is zero, no adjustment,

to the *annual revenue requirement* determined under rule 6.4 for the first regulatory year of that NSW DNSP's subsequent regulatory control period.

- (d) When making an adjustment determination under this clause 8A.14.5 in respect of a NSW DNSP, the *AER* must be satisfied that the application of the distribution variation amount and transmission variation amount under paragraph (c) achieves the revenue recovery principle in respect of that NSW DNSP.
- (e) A distribution variation amount or transmission variation amount included as a revenue increase or revenue decrease under paragraph (c), must not be considered by the *AER* when determining whether any amount is payable or recoverable by the relevant NSW DNSP under any scheme that applies to that NSW DNSP in respect of the subsequent regulatory control period.

8A.14.6 Recovery of revenue in subsequent regulatory control period only and reopening of distribution determination is required

General

- (a) This clause 8A.14.6 applies in respect of a NSW DNSP if a remade 2015 determination is made by the *AER* in respect of that NSW DNSP on or after 1 May 2019, but prior to 1 December of the fourth last regulatory year of the subsequent regulatory control period.

Adjustment determination

- (b) If paragraph (a) applies, the *AER* must determine at the time of making the remade 2015 determination:
 - (1) the distribution variation amount; and
 - (2) the transmission variation amount,for the relevant NSW DNSP.

Recovery in subsequent regulatory control period

- (c) If paragraph (a) applies in respect of a NSW DNSP, the *AER* must revoke the subsequent distribution determination of that NSW DNSP and make a

new distribution determination in substitution for that revoked determination, that:

(1) applies to the remaining regulatory years of the subsequent regulatory control period; and

(2) includes an amount equivalent in net present value terms to:

(i) the distribution variation amount; and

(ii) the transmission variation amount,

determined for that NSW DNSP as:

(iii) if the applicable distribution variation amount or transmission variation amount (as the case may be) is a positive amount, a revenue increase; or

(iv) if the applicable distribution variation amount or transmission variation amount (as the case may be) is a negative amount, a revenue decrease; or

(v) if the applicable distribution variation amount or transmission variation amount (as the case may be) is zero, no adjustment,

to the *annual revenue requirement* of one or more of the regulatory years in the remainder of the subsequent regulatory control period, subject to the sum of all such increases or decreases for the relevant regulatory years being equivalent in net present value terms to the sum of the distribution variation amount and transmission variation amount.

(d) When making an adjustment determination under this clause 8A.14.6 in respect of a NSW DNSP, the *AER* must be satisfied that the application of the distribution variation amount and transmission variation amount under paragraph (c) achieves the revenue recovery principle in respect of that NSW DNSP.

(e) The substituted distribution determination made under paragraph (c) must only:

(1) vary from the revoked distribution determination to the extent necessary to reflect the increase or decrease (as the case may be) to the *annual revenue requirement* of one or more of the regulatory years of the subsequent regulatory control period under paragraph (c); and

(2) be made after the *AER* has first consulted with the relevant NSW DNSP and such other persons as the *AER* considers appropriate.

(f) If the *AER* revokes and substitutes the subsequent distribution determination under paragraph (c), that revocation and substitution must take effect from the commencement of the next regulatory year.

- (g) A distribution variation amount or transmission variation amount included as a revenue increase or revenue decrease under paragraph (c), must not be considered by the *AER* when determining whether any amount is payable or recoverable by the relevant NSW DNSP under any scheme that applies to that NSW DNSP in respect of the subsequent regulatory control period.

8A.14.7 Requirements for adjustment determination

The *AER* must in respect of an adjustment determination made for a NSW DNSP:

- (a) make the adjustment determination after consulting with the relevant NSW DNSP and any other persons as the *AER* considers appropriate;
- (b) *publish* its adjustment determination at the time of publication of the remade 2015 determination; and
- (c) include in its adjustment determination, the reasons for the *AER*'s determination of:
 - (1) if clause 8A.14.4 applies, the adjustment amount (including any adjustment made under clause 8A.14.4(d)(1)(ii) or 8A.14.4(d)(2)(ii)) and subsequent adjustment amount or, where the *AER* has not determined an adjustment amount and subsequent adjustment amount, the reasons for that decision; or
 - (2) if clause 8A.14.5 or 8A.14.6 applies, the distribution variation amount and transmission variation amount.

8A.14.8 Application of Chapter 6 under participant derogation

- (a) Except as otherwise specified in this rule 8A.14 or Chapter 11, Chapter 6 applies to:
 - (1) the remainder of the current regulatory control period; and
 - (2) the making of the subsequent distribution determination,in respect of each NSW DNSP.
- (b) If clause 8A.14.4 applies in respect of a NSW DNSP, the reference to 'any applicable distribution determination' in clauses 6.18.2(b)(7), 6.18.2(b)(8), 6.18.8(a)(1) and 6.18.8(c) will be taken to be the applicable distribution determination as supplemented by the requirements for the NSW DNSP's *pricing proposal* under clause 8A.14.4(d).
- (c) For the purposes of the application of clauses 8A.14.4, 8A.14.5 and 8A.14.6 (as applicable) in respect of a NSW DNSP, Chapter 6 and 6A are amended for the remainder of the current regulatory control period and the subsequent regulatory control period as follows:
 - (1) the requirement under the *Rules* for pricing for *direct control services* in a *pricing proposal* to comply with the *tariff structure statement*

does not apply to the extent necessary to allow for the submission of a *pricing proposal* by a NSW DNSP, and subsequent approval of such *pricing proposal* by the AER, in accordance with this *participant derogation*;

- (2) if any variation in proposed tariffs occurs as a result of:

- (i) the remade 2015 determination; or
- (ii) the application of this *participant derogation*,

such variations will be taken to be explained by the relevant NSW DNSP for the purposes of clauses 6.18.2(b)(7A) and 6.18.8(a)(2);

- (3) to the extent that a NSW DNSP's tariffs vary from tariffs which would result from complying with the pricing principles in clause 6.18.5(e) to (g) due to the application of this *participant derogation*, such variation is taken to be a variation from the pricing principles permitted under clause 6.18.5(c);
- (4) to the extent that a NSW DNSP's *tariff structure statement* varies from a *tariff structure statement* which would result from complying with the *pricing principles for direct control services* due to the application of this *participant derogation*, such variation is permitted under the *Rules*;
- (5) clause 6.18.6 does not apply to the extent that a NSW DNSP's tariffs vary from tariffs which would otherwise result from complying with clause 6.18.6, due to the application of this *participant derogation*;
- (6) if the AER amends a *pricing proposal* under clause 6.18.8(b)(2) or 6.18.8(c), then in addition to the requirements in clause 6.18.8(c1), the AER must also have regard to:
- (i) any variation in proposed tariffs that result from the remade 2015 determination; and
 - (ii) any variation in proposed tariffs that result from the application of this *participant derogation*;
- (7) if clause 8A.14.6 applies, clause 6.5.9(b)(2) does not apply to the extent necessary to include a revenue increase or revenue decrease (as the case may be) to the *annual revenue requirement* of one or more regulatory years for the subsequent regulatory control period for the relevant NSW DNSP under clause 8A.14.6(c);
- (8) if clause 8A.14.4 applies, the reference to 'the other revenue increments or decrements' in clauses 6.4.3(a)(6) and 6.4.3(b)(6) is taken to include such increments or decrements as adjusted to the extent necessary to take into account the application of the substituted total annual revenue amount under clause 8A.14.4(d); and

- (9) if clause 8A.14.5 or 8A.14.6 applies, clauses 6A.23.3(e)(5), (f) and (g) do not apply in respect of any transmission variation amount.

Part 15 Derogations granted to ActewAGL

8A.15 Derogations from Chapter 6 for the current regulatory control period and subsequent regulatory control period

8A.15.1 Definitions

In this *participant derogation*, rule 8A.15:

2015 determination means the distribution determination for the current regulatory control period published by the *AER* on 30 April 2015 in respect of ActewAGL.

ActewAGL means ActewAGL Distribution, the joint venture between Icon Distribution Investments Limited ACN 073 025 224 and Jemena Networks (ACT) Pty Ltd ACN 008 552 663, which is registered by *AEMO* as a *Network Service Provider* in accordance with section 12(1) of the *National Electricity Law* and clause 2.5.1 of the *Rules* to own, control and operate the *distribution system* in the Australian Capital Territory, or any successor to its business.

adjustment amount means an amount that operates as if it were:

- (a) a revenue increase; or
- (b) a revenue decrease,

to the total revenue for distribution standard control services that may be earned by ActewAGL for the final regulatory year of the current regulatory control period in accordance with:

- (c) the formulae that give effect to the applicable control mechanism;
- (d) the applicable forecast demand (kWh); and
- (e) the applicable *annual revenue requirement*,

under the remade 2015 determination.

adjustment determination means the *AER*'s determination:

- (a) if clause 8A.15.4 applies, of whether there is, and the relevant amounts of, an adjustment amount (including any adjustments made under clause 8A.15.4(d)(1)(ii) and 8A.15.4(d)(2)(ii)) and a subsequent adjustment amount; or
- (b) if clause 8A.15.5 or 8A.15.6 applies, of the relevant amounts of the distribution variation amount, transmission variation amount and metering variation amount.

current regulatory control period means the period of five years that commenced on 1 July 2014 and ends on 30 June 2019, which includes ActewAGL's 'transitional regulatory control period' and 'subsequent regulatory control period' as those terms are defined in clause 11.55.1.

distribution standard control services means *standard control services* provided by ActewAGL other than *transmission standard control services*.

distribution variation amount means an amount equal to:

- (a) the sum of the total revenue for distribution standard control services for ActewAGL for each regulatory year of the current regulatory control period in accordance with:
 - (1) the formulae that give effect to the applicable control mechanism;
 - (2) the applicable forecast demand (kWh); and
 - (3) the applicable *annual revenue requirement*,
under the remade 2015 determination; minus
- (b) the sum of:
 - (1) the total revenue for distribution standard control services for ActewAGL for the first and second regulatory years of the current regulatory control period in accordance with:
 - (i) the formulae that give effect to the applicable control mechanism;
 - (ii) the applicable forecast demand (kWh); and
 - (iii) the applicable *annual revenue requirement*,
under the 2015 determination; plus
 - (2) the total revenue for distribution standard control services for ActewAGL for the third, fourth and final regulatory years of the current regulatory control period under the undertakings that apply for those regulatory years,

provided that such amount includes any adjustments necessary for the *AER* to be satisfied that the amount achieves the revenue recovery principle under clause 8A.15.5(d) or 8A.15.6(d) (as the case may be).

metering services means type 5 and 6 metering services classified as *alternative control services* and in respect of which annual metering service charges are specified in the remade 2015 determination or 2015 determination (as the case may be).

metering variation amount means an amount equal to:

- (a) the sum of the total revenue for metering services for ActewAGL for each regulatory year of the current regulatory control period in accordance with:
 - (1) the formulae that give effect to the applicable control mechanism;
 - (2) the applicable forecast volume; and
 - (3) the applicable building block revenue requirement,under the remade 2015 determination; minus
- (b) the sum of:
 - (1) the total revenue for metering services for ActewAGL for the first and second regulatory years of the current regulatory control period in accordance with:
 - (i) the formulae that give effect to the applicable control mechanism;
 - (ii) the applicable forecast volume; and
 - (iii) the applicable building block revenue requirement,under the 2015 determination; plus
 - (2) the total revenue for metering services for ActewAGL for the third, fourth and final regulatory years of the current regulatory control period under the undertakings that apply for those regulatory years,

provided that such amount includes any adjustments necessary for the *AER* to be satisfied that the amount achieves the revenue recovery principle under clause 8A.15.5(d) or 8A.15.6(d) (as the case may be).

NUOS charges means charges comprising ActewAGL's prices for distribution standard control services, *designated pricing proposal charges* and *jurisdictional scheme amounts*.

regulatory year means each consecutive period of 12 calendar months in the current regulatory control period or subsequent regulatory control period (as the case may be) (the current regulatory control period and subsequent regulatory control period each being a **regulatory control period**), the first such 12 month period commencing at the beginning of the regulatory control period and the final 12 month period ending at the end of the regulatory control period.

remade 2015 determination means the 2015 determination as remade by the *AER* following the Tribunal's decision.

revenue recovery principle means the principle that ActewAGL must be given the ability to recover the same, but no more, revenue (in net present value equivalent terms) as it would have recovered if:

- (a) the remade 2015 determination had been in force from the commencement of the current regulatory control period; and
- (b) the formulae giving effect to the control mechanisms specified in the remade 2015 determination had been applied in each regulatory year of the current regulatory control period.

scheme means any applicable *efficiency benefit sharing scheme, capital expenditure sharing scheme, service target performance incentive scheme, demand management incentive scheme, demand management innovation allowance mechanism and small-scale incentive scheme*.

subsequent adjustment amount means an amount that:

- (a) is equivalent in net present value terms to the adjustment amount, incorporating any adjustments made under clause 8A.15.4(d)(1)(ii) or 8A.15.4(d)(2)(ii) (as the case may be); and
- (b) represents a revenue increase (where the adjustment amount is a negative amount) or a revenue decrease (where the adjustment amount is a positive amount) to ActewAGL's *annual revenue requirement* for the first regulatory year of the subsequent regulatory control period.

subsequent distribution determination means the distribution determination for ActewAGL that is made by the *AER* for the subsequent regulatory control period.

subsequent regulatory control period means the *regulatory control period* for ActewAGL that immediately follows the current regulatory control period.

substituted total revenue amount has the meaning given in clause 8A.15.4(d).

total revenue means the total revenue that ActewAGL is entitled to earn from the provision of distribution standard control services, *transmission standard control services* or metering services (as the case may be) for the relevant regulatory year.

transmission variation amount means an amount equal to:

- (a) the sum of the total revenue for *transmission standard control services* for ActewAGL for each regulatory year of the current regulatory control period in accordance with:
 - (1) the formulae that give effect to the applicable control mechanism; and
 - (2) the applicable *annual revenue requirement*,
under the remade 2015 determination; minus
- (b) the sum of the total revenue for *transmission standard control services* for ActewAGL for each regulatory year of the current regulatory control period in accordance with:
 - (1) the formulae that give effect to the applicable control mechanism; and

- (2) the applicable *annual revenue requirement*,

under the 2015 determination,

provided that such amount includes any adjustments necessary for the *AER* to be satisfied that the amount achieves the revenue recovery principle under clause 8A.15.5(d) or 8A.15.6(d) (as the case may be).

Tribunal means the Australian Competition Tribunal.

Tribunal's decision means the decision of the Tribunal in relation to the 2015 determination delivered on 26 February 2016 to remit the matter back to the *AER* pursuant to section 71P(2)(c) of the *National Electricity Law*, as varied as a consequence of the outcome of judicial review of that decision.

undertaking means an undertaking given to, and accepted by, the *AER* under section 59A of the *National Electricity Law* in respect of the revenue earned and/or prices charged by ActewAGL for the relevant regulatory year.

8A.15.2 Expiry date

This *participant derogation* expires on the date that immediately follows the end of the subsequent regulatory control period.

8A.15.3 Application of Rule 8A.15

- (a) This *participant derogation* prevails to the extent of any inconsistency with:
- (1) any other provision of the *Rules*; and
 - (2) a remade 2015 determination.
- (b) Nothing in this *participant derogation* has the effect of:
- (1) changing the application of the *Rules* to the making of a remade 2015 determination; or
 - (2) rendering a change, in whole or in part, to the terms of a distribution determination that applies in respect of the current regulatory control period.

8A.15.4 Recovery of revenue across the current regulatory control period and subsequent regulatory control period

General

- (a) This clause 8A.15.4 applies in respect of ActewAGL if a remade 2015 determination is made by the *AER* prior to 1 March 2018.

Adjustment determination

- (b) The *AER* may determine at the time of making the remade 2015 determination for ActewAGL:

- (1) an adjustment amount; and
- (2) a subsequent adjustment amount,

if the *AER* is satisfied that the application of the adjustment amount and subsequent adjustment amount under paragraphs (d) and (e), respectively, would:

- (3) be reasonably likely to minimise variations in NUOS charges:
 - (i) between the fourth and final regulatory years of the current regulatory control period; and
 - (ii) between the final regulatory year of the current regulatory control period and the first regulatory year of the subsequent regulatory control period,for ActewAGL; and
- (4) achieve the revenue recovery principle in respect of ActewAGL.

Note:

When determining the adjustment amount and subsequent adjustment amount, the *AER* must also take into account the *national electricity objective* and may take into account the revenue and pricing principles: see *National Electricity Law*, s.16(1)(a) and (2)(b).

- (c) Paragraphs (d) and (e) do not apply in respect of ActewAGL if the *AER* has not determined an adjustment amount and subsequent adjustment amount under paragraph (b).

Recovery in current regulatory control period

- (d) A *pricing proposal* submitted by ActewAGL, and approved by the *AER*, for the final regulatory year of the current regulatory control period must, in respect of revenue for distribution standard control services, only provide for the recovery of:
- (1) where the applicable adjustment amount operates as if it were a revenue increase:
 - (i) ActewAGL's total revenue for distribution standard control services in accordance with the formulae that give effect to the applicable control mechanism, the applicable forecast demand (kWh) and the applicable *annual revenue requirement*, under the remade 2015 determination; plus

- (ii) the adjustment amount, incorporating any adjustments that the *AER* considers necessary to achieve the revenue recovery principle in accordance with subparagraph (b)(4); or
 - (2) where the applicable adjustment amount operates as if it were a revenue decrease:
 - (i) ActewAGL's total revenue for distribution standard control services in accordance with the formulae that give effect to the applicable control mechanism, the applicable forecast demand (kWh) and the applicable *annual revenue requirement*, under the remade 2015 determination; minus
 - (ii) the adjustment amount, incorporating any adjustments that the *AER* considers necessary to achieve the revenue recovery principle in accordance with subparagraph (b)(4),
- (such amount being the **substituted total revenue amount**).

Recovery in subsequent regulatory control period

- (e) The *AER* must include the subsequent adjustment amount determined under paragraph (b) as:
 - (1) if subparagraph (d)(1) applies, a revenue decrease; or
 - (2) if subparagraph (d)(2) applies, a revenue increase,to ActewAGL's *annual revenue requirement* determined under rule 6.4 for the first regulatory year of the subsequent regulatory control period.
- (f) Any subsequent adjustment amount included as a revenue increase or revenue decrease under paragraph (e) must not be considered by the *AER* when determining whether any amount is payable or recoverable by ActewAGL under any scheme that applies to it in respect of the subsequent regulatory control period.

8A.15.5 Recovery of revenue in subsequent regulatory control period only and no reopening of subsequent distribution determination required

General

- (a) This clause 8A.15.5 applies in respect of ActewAGL if a remade 2015 determination is made by the *AER* on or after 1 March 2018, but prior to 1 May 2019.

Adjustment determination

- (b) If paragraph (a) applies, the *AER* must determine at the time of making the remade 2015 determination:
 - (1) the distribution variation amount;

- (2) the transmission variation amount; and
 - (3) the metering variation amount,
- for ActewAGL.

Recovery in subsequent regulatory control period

- (c) The *AER* must include an amount equivalent in net present value terms to:

- (1) the distribution variation amount;
- (2) the transmission variation amount; and
- (3) the metering variation amount,

determined under paragraph (b) as:

- (4) if the applicable distribution variation amount, transmission variation amount or metering variation amount (as the case may be) is a positive amount, a revenue increase; or
- (5) if the applicable distribution variation amount, transmission variation amount or metering variation amount (as the case may be) is a negative amount, a revenue decrease; or
- (6) if the applicable distribution variation amount, transmission variation amount or metering variation amount (as the case may be) is zero, no adjustment,

to ActewAGL's:

- (7) in the case of the distribution variation amount and transmission variation amount, *annual revenue requirement* determined under rule 6.4; and
- (8) in the case of the metering variation amount, applicable building block revenue requirement,

for the first regulatory year of the subsequent regulatory control period.

- (d) When making an adjustment determination under this clause 8A.15.5, the *AER* must be satisfied that the application of the distribution variation amount, transmission variation amount and metering variation amount under paragraph (c) achieves the revenue recovery principle in respect of ActewAGL.
- (e) A distribution variation amount, transmission variation amount or metering variation amount included as a revenue increase or revenue decrease under paragraph (c), must not be considered by the *AER* when determining whether any amount is payable or recoverable by ActewAGL under any scheme that applies to it in respect of the subsequent regulatory control period.

8A.15.6 Recovery of revenue in subsequent regulatory control period only and reopening of distribution determination is required

General

- (a) This clause 8A.15.6 applies in respect of ActewAGL if a remade 2015 determination is made by the *AER* on or after 1 May 2019, but prior to 1 December of the fourth last regulatory year of the subsequent regulatory control period.

Adjustment determination

- (b) If paragraph (a) applies, the *AER* must determine at the time of making the remade 2015 determination:
- (1) the distribution variation amount;
 - (2) the transmission variation amount; and
 - (3) the metering variation amount,
- for ActewAGL.

Recovery in subsequent regulatory control period

- (c) If paragraph (a) applies, the *AER* must revoke ActewAGL's subsequent distribution determination and make a new distribution determination in substitution for that revoked determination, that:
- (1) applies to the remaining regulatory years of the subsequent regulatory control period; and
 - (2) includes an amount equivalent in net present value terms to:
 - (i) the transmission variation amount;
 - (ii) the distribution variation amount; and
 - (iii) the metering variation amount,determined for ActewAGL as:
 - (iv) if the applicable distribution variation amount, transmission variation amount or metering variation amount (as the case may be) is a positive amount, a revenue increase; or
 - (v) if the applicable distribution variation amount, transmission variation amount or metering variation amount (as the case may be) is a negative amount, a revenue decrease; or
 - (vi) if the applicable distribution variation amount, transmission variation amount or metering variation amount (as the case may be) is zero, no adjustment,

to:

- (vii) in the case of the distribution variation amount and transmission variation amount, the *annual revenue requirement* of one or more of the regulatory years in the remainder of ActewAGL's subsequent regulatory control period, subject to the sum of all such increases or decreases for the relevant regulatory years being equivalent in net present value terms to the sum of the distribution variation amount and transmission variation amount; and
 - (viii) in the case of the metering variation amount, the applicable building block revenue requirement of one or more of the regulatory years in the remainder of ActewAGL's subsequent regulatory control period, subject to the sum of all such increases or decreases for the relevant regulatory years being equivalent in net present value terms to the metering variation amount.
- (d) When making an adjustment determination under this clause 8A.15.6, the *AER* must be satisfied that the application of the distribution variation amount, transmission variation amount and metering variation amount under paragraph (c) achieves the revenue recovery principle in respect of ActewAGL.
- (e) The substituted distribution determination made under paragraph (c) must only:
 - (1) vary from the revoked distribution determination to the extent necessary to reflect the increase or decrease (as the case may be) to:
 - (i) in the case of the distribution variation amount and transmission variation amount, the *annual revenue requirement*; and
 - (ii) in the case of the metering variation amount, the applicable building block revenue requirement,of one or more of the regulatory years of the subsequent regulatory control period under paragraph (c); and
 - (2) be made after the *AER* has first consulted with ActewAGL and such other persons as the *AER* considers appropriate.
- (f) If the *AER* revokes and substitutes the subsequent distribution determination under paragraph (c), that revocation and substitution must take effect from the commencement of the next regulatory year.
- (g) A distribution variation amount, transmission variation amount and metering variation amount included as a revenue increase or revenue decrease under paragraph (c), must not be considered by the *AER* when determining whether any amount is payable or recoverable by ActewAGL

under any scheme that applies to it in respect of the subsequent regulatory control period.

8A.15.7 Requirements for adjustment determination

The *AER* must in respect of an adjustment determination made for ActewAGL:

- (a) make the adjustment determination after consulting with ActewAGL and any other persons as the *AER* considers appropriate;
- (b) *publish* its adjustment determination at the time of publication of the remade 2015 determination; and
- (c) include in its adjustment determination, the reasons for the *AER*'s determination of:
 - (1) if clause 8A.15.4 applies, the adjustment amount (including any adjustments made under clause 8A.15.4(d)(1)(ii) or 8A.15.4(d)(2)(ii)) and subsequent adjustment amount or, where the *AER* has not determined an adjustment amount and subsequent adjustment amount, the reasons for that decision; or
 - (2) if clause 8A.15.5 or 8A.15.6 applies, the distribution variation amount, transmission variation amount and metering variation amount.

8A.15.8 Application of Chapter 6 under participant derogation

- (a) Except as otherwise specified in this rule 8A.15 or Chapter 11, Chapter 6 applies to:
 - (1) the remainder of the current regulatory control period; and
 - (2) the making of the subsequent distribution determination,in respect of ActewAGL.
- (b) If clause 8A.15.4 applies, the reference to 'any applicable distribution determination' in clauses 6.18.2(b)(7), 6.18.2(b)(8), 6.18.8(a)(1) and 6.18.8(c) will be taken to be the applicable distribution determination as supplemented by the requirements for ActewAGL's *pricing proposal* under clause 8A.15.4(d).
- (c) For the purposes of the application of clauses 8A.15.4, 8A.15.5 and 8A.15.6 (as applicable) in respect of ActewAGL, Chapter 6 and 6A are amended for the remainder of the current regulatory control period and the subsequent regulatory control period as follows:
 - (1) the requirement under the *Rules* for pricing for *direct control services* in a *pricing proposal* to comply with the *tariff structure statement* does not apply to the extent necessary to allow for the submission of a *pricing proposal* by ActewAGL, and subsequent approval of such

pricing proposal by the AER, in accordance with this *participant derogation*;

- (2) if any variation in proposed tariffs occurs as a result of:
 - (i) the remade 2015 determination; or
 - (ii) application of this *participant derogation*,such variations will be taken to be explained by ActewAGL for the purposes of clauses 6.18.2(b)(7A) and 6.18.8(a)(2);
- (3) to the extent that ActewAGL's tariffs vary from tariffs which would result from complying with the pricing principles in clause 6.18.5(e) to (g) due to the application of this *participant derogation*, such variation is taken to be a variation from the pricing principles permitted under clause 6.18.5(c);
- (4) to the extent that ActewAGL's *tariff structure statement* varies from a *tariff structure statement* which would result from complying with the *pricing principles for direct control services* due to the application of this *participant derogation*, such variation is permitted under the *Rules*;
- (5) clause 6.18.6 does not apply to the extent that ActewAGL's tariffs vary from tariffs which would otherwise result from complying with clause 6.18.6, due to the application of this *participant derogation*;
- (6) if the AER amends a *pricing proposal* under clause 6.18.8(b)(2) or 6.18.8(c), then in addition to the requirements in clause 6.18.8(c1), the AER must also have regard to:
 - (i) any variation in proposed tariffs that result from the remade 2015 determination; and
 - (ii) any variation in proposed tariffs that result from the application of this *participant derogation*;
- (7) if clause 8A.15.6 applies, clause 6.5.9(b)(2) does not apply to the extent necessary to include a revenue increase or revenue decrease (as the case may be) to the *annual revenue requirement* or other building block revenue requirement of one or more regulatory years for the subsequent regulatory control period for ActewAGL under clause 8A.15.6(c);
- (8) if clause 8A.15.4 applies, the reference to 'the other revenue increments or decrements' in clauses 6.4.3(a)(6) and 6.4.3(b)(6) is taken to include such increments or decrements as adjusted to the extent necessary to take into account the application of the substituted total revenue amount under clause 8A.15.4(d); and

- (9) if clause 8A.15.5 or 8A.15.6 applies, clauses 6A.23.3(e)(5), (f) and (g) do not apply in respect of any transmission variation amount.

CHAPTER 9

9. Jurisdictional Derogations and Transitional Arrangements

9.1 Purpose and Application

9.1.1 Purpose

- (a) This Chapter contains the *jurisdictional derogations* that apply in relation to each *participating jurisdiction*.
- (b) This Chapter prevails over all other Chapters of the *Rules*.

9.1.2 Jurisdictional Derogations

The *jurisdictional derogations* that apply in relation to each *participating jurisdiction* are set out in this Chapter as follows:

- (a) Part A - Victoria;
- (b) Part B - New South Wales;
- (c) Part C - Australian Capital Territory;
- (d) Part D - South Australia;
- (e) Part E - Queensland; and
- (f) Part F – Tasmania.

Part G sets out the Schedules to this Chapter 9.

Part A Jurisdictional Derogations for Victoria

9.2 [Deleted]

9.3 Definitions

9.3.1 General Definitions

For the purposes of this Part A:

- (1) a word or expression defined in the glossary in Chapter 10 has the meaning given to it in the glossary unless it is referred to in column 1 of the following table; and
- (2) a word or expression referred to in column 1 of the following table has the meaning given to it in column 2 of the table:

Column 1	Column 2
Counterparties	In relation to each Smelter Agreement, means as applicable Portland Smelter Services Pty Ltd, Alcoa of Australia Limited (ACN 004 879 298) or any other party to that Smelter Agreement (other than SEC).
CPI	The Consumer Price Index: All Groups Index Number Melbourne compiled by the Australian Bureau of Statistics.
distribution licence	A <i>licence</i> to distribute and supply electricity.
Distributor	A person who holds a distribution <i>licence</i> .
EI Act	<i>Electricity Industry Act 2000</i> (Vic).
EI (RP) Act	<i>Electricity Industry (Residual Provisions) Act 1993</i> (Vic).
ESC	The Essential Services Commission established under section 7 of the <i>ESC Act</i> .
ESC Act	The <i>Essential Services Commission Act 2001</i> (Vic).
licence	A <i>licence</i> within the meaning of the <i>EI Act</i> or deemed to be issued under the <i>EI Act</i> by operation of clause 5 of Schedule 4 to the <i>EI (RP) Act</i> .
Quarter	The respective 3 monthly periods adopted by the Australian Bureau of Statistics for the compilation and issue of the CPI.
SEC	State Electricity Commission of Victoria established under the <i>State Electricity Commission Act 1958</i> (Vic).
Smelter Agreements	Each of the agreements, contracts and deeds referred to in Part A of schedule 3 to the <i>EI (RP) Act</i> in their form as at 1 July 1996 (other than the Portland and Point Henry Flexible Tariff Deeds between SEC and the State Trust Corporation of Victoria) in each case until that agreement, contract or deed expires or is terminated.
Smelter Trader	SEC in its capacity as Smelter Trader.
System Code	The code of that name sealed by the Office of the Regulator-General under the <i>Office of the Regulator-General Act 1994</i> (Vic) on 3 October 1994 and saved and continued in operation by section 67 of the <i>ESC Act</i> .

Column 1	Column 2
VENCorp	Victorian Energy Networks Corporation established under Division 2A of Part 2 of the <i>Gas Industry Act 1994</i> (Vic) and continued under Part 8 of the <i>Gas Industry Act 2001</i> (Vic).
Victorian Distribution Network	In relation to a person that holds a distribution <i>licence</i> , the <i>distribution systems</i> in Victoria to which that <i>licence</i> relates and includes any part of those systems.
Victorian Minister	The Minister who, for the time being, administers the <i>National Electricity (Victoria) Act 1997</i> (Vic).
Victorian Transmission Network	The <i>declared shared network</i> of Victoria.
Wholesale Metering Code	The code of that name sealed by the Office of the Regulator-General under the <i>Office of the Regulator-General Act 1994</i> (Vic) on 3 October 1994, as in force immediately before <i>market commencement</i> .

9.3.2 [Deleted]

9.3A Fault levels

Subject to the terms of a *connection agreement* under section 50E(1)(a) of the *National Electricity Law*, AEMO must, when planning the *declared shared network*, use its best endeavours to ensure that fault levels at a *connection point* will not, as a result of a short circuit at that *connection point*, exceed the limits set out in the following table:

FAULT LEVEL TABLE

NOMINAL VOLTAGE AT CONNECTION POINT	THREE AND SINGLE PHASE DESIGN FAULT LEVEL
500kV	
Metro	50.0 kA
Latrobe Valley	63.0 kA
Country	40.0 kA
330kV	40.0 kA
220kV	
Metro	40.0 kA

NOMINAL VOLTAGE AT CONNECTION POINT	THREE AND SINGLE PHASE DESIGN FAULT LEVEL
Latrobe Valley	40.0 kA
Country	26.2 kA
66kV	21.9 kA
22kV	26.2 kA

9.4 Transitional Arrangements for Chapter 2 - Registered Participants, Registration and Cross Border Networks

9.4.1 [Deleted]

9.4.2 Smelter Trader

(a) For the purposes of the *Rules*:

- (1) Smelter Trader is deemed to be entitled to register as a *Customer* in respect of the *connection points* used to supply electricity under a Smelter Agreement for so long as those *connection points* are used to supply electricity under that Smelter Agreement;
- (2) Smelter Trader is deemed to be registered as a *Customer* and as a *Market Customer* in relation to electricity supplied under a Smelter Agreement;
- (3) the electricity supplied under the Smelter Agreements is deemed to have been classified as a *market load* and the *connection points* used to supply that electricity are deemed to have been classified as Smelter Trader's *market connection points*;
- (4) **[Deleted]**
- (5) Alcoa of Australia Limited (ACN 004 879 298) is deemed to be entitled to register as a *Generator* and a *Market Generator* in relation to the *generating systems* forming part of the Anglesea Power Station; and
- (6) **[Deleted]**
- (7) no Counterparty is or is to be taken to be entitled to become a *Market Participant*, an *Intending Participant* or a *Customer* in respect of electricity supplied under that Smelter Agreement.
- (8) **[Deleted]**
- (9) **[Deleted]**

- (b) This clause 9.4.2 ceases to have effect upon the termination of the last of the Smelter Agreements.

9.4.3 Smelter Trader: compliance

- (a) If complying with a requirement of the *Rules* (the "**Rules Requirement**") would result in the Smelter Trader being in breach of a provision of one or more of the Smelter Agreements (the "**Contractual Requirement**"), then the Smelter Trader is not required to comply with the Rules Requirement to the extent of the inconsistency between the Rules Requirement and the Contractual Requirement.
- (b) If the Smelter Trader does not comply with a Rules Requirement in the circumstances described in clause 9.4.3(a), then the Smelter Trader must:
 - (1) give written notice to the *AER* of:
 - (i) the Rules Requirement which has not been complied with;
 - (ii) details of each act or omission which partly or wholly constitutes non-compliance with that Rules Requirement; and
 - (iii) details of each Contractual Requirement which is said by the Smelter Trader to be inconsistent with the Rules Requirement,as soon as practicable and in any event within 30 *days* after the non-compliance with the Rules Requirement occurs or commences; and
 - (2) provide the *AER* with any documents or information in the possession or control of the Smelter Trader which evidence the matters referred to in clause 9.4.3(b)(1) within 14 *days* (or any longer period agreed by the *AER*) of receiving a written request from the *AER*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) If:
 - (1) the Smelter Trader requires the co-operation of a Counterparty to a Smelter Agreement to comply with a requirement of the *Rules*;
 - (2) the Smelter Trader has used reasonable endeavours to obtain the Counterparty's co-operation in order to enable the Smelter Trader to comply with that requirement; and
 - (3) under the Smelter Agreements, SEC has no ability to require the Counterparty to so co-operate with SEC and the Counterparty is not in breach of the Smelter Agreements by refusing to so co-operate with SEC,

then the Smelter Trader is not required to comply with that requirement.

- (d) If the Smelter Trader does not comply with a requirement of the *Rules* in the circumstances described in clause 9.4.3(c), then the Smelter Trader must:

- (1) give written notice to the *AER* of:

- (i) the requirement of the *Rules* that has not been complied with;
- (ii) details of each act or omission which partly or wholly constitutes non-compliance with that requirement of the *Rules*; and
- (iii) details of the endeavours made by the Smelter Trader to obtain the co-operation of the Counterparty to enable the Smelter Trader to comply with the requirement of the *Rules*,

as soon as reasonably practical and in any event before the expiration of 30 *days* after the non-compliance with the requirement of the *Rules* occurs or commences; and

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (2) provide the *AER* with any documents or information in the possession or control of the Smelter Trader which evidence the matters referred to in clause 9.4.3(d)(1) within 14 *days* (or any longer period agreed by the *AER*) of receiving a written request from the *AER*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (e) To avoid any doubt, if:

- (1) after reviewing any written notice provided by the Smelter Trader under clause 9.4.3(b)(1) and any additional documents or information provided by the Smelter Trader under clause 9.4.3(b)(2), the *AER* forms the view that compliance with the relevant Rules Requirement would not have resulted in the Smelter Trader being in breach of the relevant Contractual Requirement; or
- (2) after reviewing any written notice provided by the Smelter Trader under clause 9.4.3(d)(1) and any additional documents or information provided by the Smelter Trader under clause 9.4.3(d)(2), the *AER* forms the view that any of the requirements of clause 9.4.3(c) were not satisfied in respect of the subject of the notice,

then the matter may be dealt with by the *AER* as a breach of the *Rules*.

- (f) The Smelter Trader must give any notice or other information required to be given under this clause 9.4.3 (called in this clause "**required information**") in advance if it becomes aware of the potential for the circumstances giving rise to its obligation to give the required information to arise. If any required information is given under this clause 9.4.3(f), then:
 - (1) the required information is taken to have been given in accordance with this clause 9.4.3; and
 - (2) notwithstanding clause 9.4.3(f)(1), notice must be given of the non-compliance and further information provided to the *AER* upon request under clause 9.4.3(b) or clause 9.4.3(d) (as the case may be) after the non-compliance occurs or commences.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (g) If non-compliance with the *Rules* is continuing, the notice of non-compliance with the *Rules* provided under clause 9.4.3(b) or clause 9.4.3(d) (as the case may be) will be effective in relation to that non-compliance until that non-compliance ends if the relevant notice specifies that the non-compliance is continuing. The Smelter Trader must notify the *AER* of the end of the non-compliance no later than 30 *days* after the non-compliance ends.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (h) Clauses 9.4.3(a) and 9.4.3(c) do not affect SEC's obligations with respect to registration with *NEMMCO* or making payments in respect of *Participant fees*, *prudential requirements* or *settlement amounts*.

9.4.4 Report from AER

Within 30 *days* of the end of each Quarter, the *AER* must prepare a report for the previous Quarter and make it available on request to all *Registered Participants* and to those *participating jurisdictions* that participated in the *market* during the Quarter covered by the report. The report must include:

- (a) a summary of the acts or omission of the Smelter Trader constituting non-compliance with any requirement of the *Rules*, as disclosed in written notices received by the *AER* under clause 9.4.3 during the Quarter covered by the report; and
- (b) an assessment by the *AER* of the effect that those acts or omissions have had on the efficient operation of the *market* during the Quarter covered by the report.

9.4.5 Cross Border Networks

- (a) If:
- (1) the Victorian Minister considers that a *transmission network* or *distribution network* situated in Victoria is a continuation of a *network* situated in another *participating jurisdiction* and should be considered to be part of the *network* of that other *participating jurisdiction*; and
 - (2) the *Minister* for that other *participating jurisdiction* consents,
- then the Victorian Minister and the *Minister* for that other *participating jurisdiction* may nominate that the *network* is deemed to be entirely in that other *participating jurisdiction* and the *Rules* including any relevant *jurisdictional derogations* for the other *participating jurisdiction* are deemed to apply to the *network* as if the *network* were located entirely within that other *participating jurisdiction*.
- (b) If a nomination is made under clause 9.4.5(a), then the *jurisdictional derogations* for Victoria do not apply to the extended part of the relevant *network* which is situated in Victoria.
- (c) If the *Minister* of another *participating jurisdiction* nominates that the *jurisdictional derogations* for Victoria should apply to a *network* part of which is situated in that other *participating jurisdiction*, then if the Victorian Minister consents, the *jurisdictional derogations* for Victoria are also to apply to that part of the *network* situated in the other *participating jurisdiction*.

9.5 [Deleted]

9.6 Transitional Arrangements for Chapter 4 - System Security

9.6.1 Operating Procedures (clause 4.10.1)

- (a) For the purposes of clause 4.10.1(b), the System Operating Procedures as defined in the System Code as at 13 December 1998 (with the necessary changes to be made by VENCORP) are the *regional specific power system operating procedures* that apply from that date in respect of the Victorian Transmission Network.
- (b) This clause is not to be taken as limiting in any way the operation of any other provision of the *Rules* relating to the review, updating and amendment of the *regional specific power system operating procedures*.

9.6.2 Nomenclature Standards (clause 4.12)

For the purposes of clause 4.12, the Nomenclature Standards as defined in the System Code as at 13 December 1998 are taken to be the *nomenclature standards* agreed between a *Network Service Provider* in respect of the Victorian Transmission Network or a Victorian Distribution Network and AEMO until

AEMO and the relevant *Network Service Provider* agree otherwise under clause 4.12(a) or *AEMO* determines otherwise under clause 4.12(a).

9.7 Transitional Arrangements for Chapter 5 - Network Connection

9.7.1 [Deleted]

9.7.2 [Deleted]

9.7.3 [Deleted]

9.7.4 Regulation of Distribution Network Connection

(a) In this clause:

appropriate regulator means:

- (1) if there has been no transfer of regulatory responsibility to the *AER* under a law of Victoria – the *ESC*;
- (2) if there has been a transfer of regulatory responsibility to the *AER* under a law of Victoria – the *AER*.

(b) This clause 9.7.4:

- (1) applies in respect of the regulation of access to, *connection* to, the modification of a *connection* to, the *augmentation* of, the provision of *network services* or *distribution use of system services*, and the modification of the provision of *network services* or *distribution use of system services*, in respect of, a *distribution network* (including any part of a *distribution network*) situated in Victoria; and
- (2) expires on the date fixed under the *National Electricity (Victoria) Act 2005* as the Victorian distribution pricing determination end date.

Note:

The date is 31 December 2010 or a later date fixed in a Victorian distribution pricing determination as the date on which the determination will cease to have effect.

- (c) Notwithstanding anything to the contrary in the *Rules*, the appropriate regulator is responsible for the regulation of access to, *connection* to, the modification of a *connection* to, the *augmentation* of, the provision of *network services* and *distribution use of system services*, and the modification of the provision of *network services* and *distribution use of system services*, in respect of, any *distribution network* to which this clause applies.
- (d) For the purposes of clause 5.3.6(c), any question as to the fairness and reasonableness of an offer to *connect* in relation to a *distribution network* to which this clause applies is to be decided by the appropriate regulator on the

basis of the appropriate regulator's opinion of the fairness and reasonableness of the offer.

- (e) If a dispute arises in relation to any of access to, *connection* to, the modification of a *connection* to, the *augmentation* of, the provision of *network services* or *distribution use of system services*, or the modification of the provision of *network services* or *distribution use of system services*, in respect of, any *distribution network* to which this clause applies, then that dispute must be resolved in accordance with procedures specified by the appropriate regulator and clause 8.2 does not apply to that dispute.

9.7.5 [Deleted]

9.7.6 [Deleted]

9.7.7 [Deleted]

9.8 Transitional Arrangements for Chapter 6 - Network Pricing

9.8.1 [Deleted]

9.8.2 [Deleted]

9.8.3 [Deleted]

9.8.4 Transmission Network Pricing

- (a) Notwithstanding Chapter 6A, in determining *transmission service* pricing and revenues in respect of the Victorian Transmission Network or a part of the Victorian Transmission Network, the *AER* must:
- (1) **[Deleted]**
 - (2) **[Deleted]**
 - (3) ensure that each Distributor has the benefit or burden of an equalisation adjustment for each *financial year* equal to the amount of the adjustment specified for that Distributor in the column headed "Equalisation Adjustment" in the following table:

TABLE	
Business	Equalisation Adjustment (\$'000) Note 2)
TXU Electricity Ltd	(4,939)
Powercor Australia Ltd	(19,011)
AGL Electricity Limited	5,171

TABLE	
Business	Equalisation Adjustment (\$'000) Note 2)
CitiPower Pty Ltd	5,920
United Energy Ltd	12,859

multiplied by the relevant factor determined in accordance with the following table:

TABLE	
If the <i>financial year</i> falls within the period:	then the relevant factor is:
1 July 2001 - 30 June 2005	.80
1 July 2005 - 30 June 2010	.60
1 July 2010 - 30 June 2015	.40
1 July 2015 - 30 June 2020	.20
thereafter	0

- (b) *AEMO* must, in allocating revenue to be recovered from each *Distributor* to which it provides *prescribed TUOS services* and *prescribed common transmission services* by means of, or in connection with a *declared shared network* in each *financial year* of a *relevant regulatory period*, adjust the allocation in accordance with paragraph (a)(3).

9.8.4A [Deleted]

9.8.4B [Deleted]

9.8.4C [Deleted]

9.8.4D [Deleted]

9.8.4E [Deleted]

9.8.4F [Deleted]

9.8.4G [Deleted]

9.8.5 [Deleted]

9.8.6 [Deleted]

9.8.7 Distribution network pricing – transitional application of former Chapter 6

- (a) Subject to this clause, the former Chapter 6 continues to apply in relation to Victorian distribution networks during the transitional period.
- (b) The appropriate regulator has the powers and functions of the *Jurisdictional Regulator* under the former Chapter 6 as if appointed for Victoria as the *Jurisdictional Regulator* for the purposes of clause 6.2.1(b) of the former Chapter 6.
- (c) The following apply only to the extent they are consistent with clause 2.1 of the *Tariff Order*:
 - (1) national guidelines for *distribution service* pricing (so far as applicable to Victorian distribution networks) formulated under clause 6.2.1(c) of the former Chapter 6;
 - (2) guidelines and rules formulated for Victoria under clause 6.2.1(f) of the former Chapter 6,
- (d) The arrangements outlined in Parts D and E of the former Chapter 6 must also be applied by the appropriate regulator subject to clause 2.1 of the *Tariff Order*.
- (e) The value of sunk assets determined under clause 6.2.3(e)(5)(ii) of the former Chapter 6 must be consistent with clause 2.1 of the *Tariff Order*.
- (f) In regulating *distribution service* pricing for a Victorian distribution network:

- (1) the appropriate regulator must specify explicit price capping as the form of economic regulation to be applied in accordance with clause 6.2.5(b) of the former Chapter 6; and
- (2) the appropriate regulator must comply with clause 2.1 of the *Tariff Order*.
- (g) Neither this clause, nor the provisions of former Chapter 6 as continued in force by this clause, are relevant to a distribution determination that is to have effect after the end of the transitional period.
- (h) In this clause:

appropriate regulator means:

- (1) if there has been no transfer of regulatory responsibility to the *AER* under a law of Victoria – the *ESC*;
- (2) if a transfer of regulatory responsibility has been made to the *AER* under a law of Victoria – the *AER*.

transitional period means the period commencing on the commencement of this clause and ending on its expiry.

Victorian distribution network means a *distribution network* situated wholly or partly in Victoria.

- (i) This clause expires on the date fixed under the *National Electricity (Victoria) Act 2005* as the Victorian distribution pricing determination end date.

Note:

The date is 31 December 2010 or a later date fixed in a Victorian distribution pricing determination as the date on which the determination will cease to have effect.

9.8.8 Exclusion of AER's power to aggregate distribution systems and parts of distribution systems

The following provisions of Chapter 6 apply to *distribution systems* situated in Victoria as if, in each case, the words “unless the *AER* otherwise determines” were omitted:

- (a) clause 6.2.4(c);
- (b) clause 6.2.4(d);
- (c) clause 6.8.2(e);
- (d) clause 6.8.2(f).

Note:

The effect of these modifications is to exclude the AER's power to consolidate, under the ambit of a single distribution determination, 2 or more distribution systems, or 2 or more parts of a single distribution system that had, before the commencement of Chapter 6, been separately regulated.

9.9 Transitional Arrangements for Chapter 7 - Metering

9.9.1 Metering Installations To Which This Schedule Applies

The transitional arrangements set out in this clause 9.9 apply in relation to a *metering installation* (including a *check metering installation*) in use at *market commencement* that was required to comply with, and did comply with, the *Wholesale Metering Code* at *market commencement*.

9.9.2 [Deleted]

9.9.3 [Deleted]

9.9.4 [Deleted]

9.9.5 [Deleted]

9.9.6 [Deleted]

9.9.7 [Deleted]

9.9.8 [Deleted]

9.9.9 Periodic Energy Metering (clause 7.9.3)

- (a) Subject to clause 9.9.9(b), for the purposes of clause 7.10.5(a), *AEMO*, the *Local Network Service Provider* and the *Market Participant* are taken to have agreed that the data referred to in clause 7.10.5(a) which is obtained from a *metering installation* to which this clause 9.9 applies may be collated in 15 minute intervals.
- (b) This clause 9.9.9 ceases to apply in respect of a *metering installation* if *AEMO*, the relevant *Local Network Service Provider* or the relevant *Market Participant* gives notice requiring an agreement to be reached under clause 7.10.5(a).

9.9.10 Use of Alternate Technologies (clause 7.13)

- (a) Subject to this clause 9.9.10, if at *market commencement* the *Wholesale Metering Code* provides for the use of alternate technologies or processes for the purpose of calculating the consumption of energy by a non-franchise customer (as defined in the *EI (RP) Act* and in force immediately before the commencement of section 39(a) of the *Electricity Industry Act 1995* (Vic)), then the use of these technologies or processes is taken to have been agreed between the relevant *Market Participant(s)*, the *Local Network Service*

Provider and *AEMO* but only to the extent to which the alternate technology or process was in use at *market commencement* in relation to that non-franchise customer.

9.9A [Deleted]

9.9B [Deleted]

9.9C Metering services for residential and small business customers

9.9C.1 Definitions

- (a) In this clause 9.9C:

AMI Cost Recovery Order means the Order in Council made on 28 August 2007 under sections 15A and 46D of the EI Act and published in the Victoria Government Gazette S200 on that day as amended by the Order in Council made 12 November 2007 and published in the Victoria Government Gazette S286 on that day, the Order in Council made 25 November 2008 and published in the Victoria Government Gazette S314 on that day, the Order in Council made on 31 March 2009 and published in the Victoria Government Gazette G14 on 2 April 2009, the Order in Council made 19 October 2010 and published in the Victoria Government Gazette G42 on 21 October 2010, and the Order in Council made on 21 December 2011 and published in the Victoria Government Gazette G51 on 22 December 2011, and as further amended from time to time.

relevant metering installation means a *metering installation* for a *connection point* located in Victoria in respect of which the volume consumption of the customer is less than 160 MWh per annum of *energy* excluding any such *metering installation* that:

- (a) was installed prior to 1 July 2009 and in respect of which, as at that date, a retailer was the *responsible person*; or
- (b) was installed on or after 1 July 2009, by a retailer as part of that retailer's ordinary replacement cycle of those *metering installations* and in respect of which the retailer was, as at 1 July 2009, the *responsible person*;
- (c) is a type 1 *metering installation*;
- (d) is a type 2 *metering installation*; or
- (e) is located at a *high voltage connection point*.

retailer has the same meaning as in the EI Act.

volume consumption means the volume of *energy* consumed by a customer at the relevant *connection point* calculated in accordance with clause 2.4.17 of the *metrology procedure*.

9.9C.2 Expiry Date

This clause 9.9C expires on 1 December 2017.

9.9C.3 Designation as responsible person

Despite anything to the contrary in clause 7.2.2 and 7.2.3, the *Local Network Service Provider* is the *responsible person* for a relevant metering installation.

9.9C.4 Classification of relevant metering installations

A relevant *metering installation* which, but for it being capable of *remote acquisition*, would be a type 5 or type 6 *metering installation*, is taken to be a type 5 or type 6 *metering installation* respectively.

9.9C.5 Cost recovery of AMI rollout

Clause 7.3A(a) does not apply to the recovery of costs by a *Local Network Service Provider* that are associated with the provision, installation, maintenance, routine testing and inspection of relevant metering installations, to the extent that these costs can be recovered by the *Local Network Service Provider* in accordance with the AMI Cost Recovery Order.

9.9C.6 Capability for remote acquisition of metering data

For the purposes of clause 7.11.1(d), a relevant metering installation is taken not to have the capability for *remote acquisition* of actual *metering data*.

Schedule 9A1.1 [Deleted]

Schedule 9A1.2 [Deleted]

Schedule 9A1.3 [Deleted]

Schedule 9A2 [Deleted]

Schedule 9A3 Jurisdictional Derogations Granted to Generators

1. Interpretation of tables

In this schedule 9A3:

- (a) a reference to a *Generator* listed in a table is a reference to a *Generator* listed in column 1 of the relevant table;
- (b) a reference to a *generating unit* listed in a table in relation to a *Generator* is a reference to each *generating unit* listed opposite the *Generator* in the relevant table;

- (c) a reference to a *Network Service Provider* in relation to a *generating unit* or a *Generator* listed in a table is to be taken to be:
 - (1) in the case of a *generating unit connected to a transmission network*, a reference to VENCORP; and
 - (2) in the case of a *generating unit connected to a distribution network*, a reference to the person that is the *Network Service Provider* in relation to that *distribution network*; and
- (d) a reference to a modification or variation of the *Rules* or an item taken to have been agreed for the purposes of the *Rules* listed in a table applies in respect of each *generating unit* listed opposite that modification, variation or agreed item in the table.

2. Continuing effect

In this schedule 9A3, a reference to:

- (a) a particular *Generator* in relation to a *generating unit*; or
- (b) a particular *Network Service Provider* in relation to a *Generator*,

at any time after the 13 December 1998 is to be taken as a reference to the person or persons who is or are (or who is or are deemed to be) from time to time registered with AEMO as the *Generator* in respect of that *generating unit* for the purposes of the *Rules* or the *Network Service Provider* from time to time in respect of the *transmission network* or *distribution network* to which the *generating unit* is connected.

3. Subsequent agreement

Where, under a provision of this schedule 9A3, a particular matter is taken to have been agreed for the purposes of schedule 5.2 of the *Rules* in relation to a *generating unit*, then that provision ceases to apply in respect of that *generating unit* if all the parties required to reach agreement in relation to that matter under the *Rules* so agree expressly in writing.

4. [Deleted]

5. Reactive Power Capability (clause S5.2.5.1 of schedule 5.2)

Clause S5.2.5.1 of schedule 5.2 of the *Rules* is replaced for a *Generator* listed in Table 2 in respect of those *generating units* listed in column 2 of Table 2 by the following:

For the purpose of this clause S5.2.5.1:

rated active power output means the 'Rated MW (Generated)' (as defined in the *Generating System Design Data Sheet*) for the relevant *synchronous generating unit*; and

nominal terminal voltage means the 'Nominal Terminal Voltage' (as defined in the *Generating System Design Data Sheet*) for the relevant *synchronous generating unit*.

- (a) Each of the *synchronous generating units*, while operating at any level of *active power output*, must be capable of:
 - (1) supplying at its terminals an amount of *reactive power* of at least the amount that would be supplied if the *generating unit* operated at *rated active power output*, *nominal terminal voltage* and a lagging power factor of 0.9; and
 - (2) absorbing at its terminals an amount of *reactive power* of at least the amount that would be absorbed if the *generating unit* operated at *rated active power output*, *nominal terminal voltage* and a leading power factor set out in respect of that *generating unit* in column 3 of Table 2.
- (b) In the event that any of the relevant power factors referred to in paragraph (a) above cannot be provided in respect of a *generating unit*, the relevant *Generator* must reach a commercial arrangement under its *connection agreement* with the relevant *Network Service Provider*, or with another *Registered Participant*, for the supply of the deficit in *reactive power* as measured at that *generating unit's* terminals.

Table 2:

Generator	Generating Unit	Leading Power Factor
Alcoa of Australia Limited (ACN 004 879 298)	Anglesea Power Station Unit 1	0.991

6. [Deleted]

7. [Deleted]

8. [Deleted]

9. [Deleted]

10. [Deleted]

11. [Deleted]

12. [Deleted]

13. Governor Systems (load control) (clause S5.2.5.11 of schedule 5.2)

For the purposes of clause S5.2.5.11 of schedule 5.2 of the *Rules*, a *Generator* listed in Table 10 is not required to include *facilities* for *load* control for the *generating unit* listed in column 2 of Table 10.

Table 10:

Generator	Generating Unit
Alcoa of Australia Limited (ACN 004 879 298)	Anglesea Power Station Unit 1

14. [Deleted]

15. [Deleted]

16. Excitation Control System (clause S5.2.5.13 of schedule 5.2)

For the purposes of clause S5.2.5.13(b) of schedule 5.2 of the *Rules*, a *Generator* listed in Table 13 is not required to provide *power system* stabilising action in relation to the *generating unit* listed in column 2 of Table 13.

Table 13:

Generator	Generating Unit
Alcoa of Australia Limited (ACN 004 879 298)	Anglesea Power Station Unit 1

Part B Jurisdictional Derogations for New South Wales

9.10 [Deleted]

9.11 Definitions

9.11.1 Definitions used in this Part B

For the purposes of this Part B:

- (a) a word or expression defined in the glossary in Chapter 10 has the meaning given to it in the glossary unless it is referred to in column 1 of the following table; and
- (b) a word or expression referred to in column 1 of the following table has the meaning given to it in column 2 of the table:

Column 1	Column 2
ES Act	<i>Electricity Supply Act 1995</i> (NSW).
IPART	The New South Wales Independent Pricing and Regulatory Tribunal established under the <i>IPART Act</i> .
IPART Act	<i>Independent Pricing and Regulatory Tribunal Act 1992</i> (NSW).
Minister	The Minister administering the <i>ES Act</i> from time to time.
Mount Piper Power Station	The <i>power station</i> known as the “Mount Piper Power Station” located at Portland, New South Wales.
Mount Piper Trader	Delta Electricity or such other of the Mount Piper Participants from time to time which is operating the Mount Piper Power Station.
NSW Electricity Market Code	The code entitled NSW State Electricity Market Code, as in force immediately before 13 December 1998.
Power Supply Agreements	Each of the following agreements in their form as at 1 July 1996: (a) Power Supply Agreement dated 23 January 1991 between Macquarie Generation, Tomago Aluminium Company Pty Ltd and others; (b) the contract known as the BHP Port Kembla Slab and Plate Products Contract between

Column 1	Column 2
	Delta Electricity (formerly known as First State Power) and BHP Steel (AIS) Pty Ltd ACN 000 019 625 (formerly known as Australian Iron & Steel Ltd), being the contract that arises from the two agreements dated 24 May 1955, the agreement dated 27 November 1958 and the agreement dated 1 December 1969 (as amended and supplemented before 1 July 1996).
Power Trader	Each of Delta Electricity (formerly known as First State Power), Macquarie Generation and such other person as may be nominated by the Minister to perform any obligation under a Power Supply Agreement.
TransGrid	The energy transmission operator known as "TransGrid" and established under the <i>Energy Services Corporations Act 1995</i> (NSW).

9.12 Transitional Arrangements for Chapter 2 - Generators, Registered Participants, Registration and Cross Border Networks

9.12.1 [Deleted]

9.12.2 Customers

For the purposes of clause 2.3.1(e), and for the purposes of clause 2.4.2(b) in so far as it relates to *Customers*, a person satisfies the requirements of New South Wales for classification of a *connection point* of that person if that person is a retailer or is a wholesale customer (as defined in the *ES Act*).

9.12.3 Power Traders

- (a) Each Power Trader for the purpose of supplying electricity under a Power Supply Agreement (the "**Power Supply Agreement**") is deemed to be and at all relevant times to have been registered with *AEMO* as a *Market Customer* in relation to electricity supplied under the Power Supply Agreement, which electricity is deemed to be and at all relevant times to have been a *market load*.
- (b) If complying with a requirement of the *Rules* ("the **Rules Requirement**") would result in a Power Trader being in breach of a provision of a Power Supply Agreement to which it is a party ("the **Contractual Requirement**"), the Power Trader is not required to comply with the Rules Requirement to the extent of the inconsistency between the Rules Requirement and the Contractual Requirement.

- (c) If a Power Trader does not comply with a Rules Requirement in the circumstances described in clause 9.12.3(b), then the Power Trader must:

- (1) give written notice to the *AER* of:
 - (i) the Rules Requirement which has not been complied with;
 - (ii) details of each act or omission which partly or wholly constitutes non-compliance with that Rules Requirement; and
 - (iii) details of each Contractual Requirement which is said by the Power Trader to be inconsistent with the Rules Requirement,by no later than 7 *days* after the non-compliance with the Rules Requirement occurs or commences; and

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (2) provide the *AER* with any documents or information in the possession or control of the Power Trader which evidence the matters referred to in clause 9.12.3(c)(1), within 14 *days* (or any further period agreed to by the *AER*) of receiving a written request from the *AER*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) If:

- (1) a Power Trader requires the co-operation of any other party to a Power Supply Agreement (a **counterparty**) to comply with a requirement of the *Rules* (the **Rules Requirement**);
- (2) the Power Trader has used all reasonable endeavours to obtain the counterparty's co-operation in order to enable the Power Trader to comply with the Rules Requirement; and
- (3) under the Power Supply Agreement the Power Trader has no ability to require the counterparty to so co-operate with the Power Trader and the counterparty is not in breach of the Power Supply Agreement by refusing to so co-operate with the Power Trader,

then the Power Trader is not required to comply with that Rules Requirement.

- (e) If a Power Trader does not comply with a Rules Requirement in the circumstances described in clause 9.12.3(d), then the Power Trader must:

- (1) give written notice to the *AER* of:
 - (i) the Rules Requirement which has not been complied with;
 - (ii) details of each act or omission which partly or wholly constitutes non-compliance with that Rules Requirement; and
 - (iii) details of the endeavours made by the Power Trader to obtain the counterparty's co-operation to enable the Power Trader to comply with the Rules Requirement,

by no later than 7 *days* after the non-compliance with the Rules Requirement occurs or commences; and

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (2) provide the *AER* with any documents or information in the possession or control of the Power Trader which evidence the matters referred to in clause 9.12.3(e)(1), within 14 *days* (or any further period agreed to by the *AER*) of receiving a written request from the *AER*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (f) To avoid any doubt, if:
 - (1) after reviewing any written notice provided by a Power Trader under clause 9.12.3(c)(1) and any additional documents or information provided by the Power Trader under clause 9.12.3(c)(2), the *AER* forms the view that compliance with the relevant Rules Requirement would not have resulted in the Power Trader being in breach of the relevant Contractual Requirement; or
 - (2) after reviewing any written notice provided by a Power Trader under clause 9.12.3(e)(1) (the **Notice**) and any additional documents or information provided by the Power Trader under clause 9.12.3(e)(2), the *AER* forms the view that any of the requirements of clause 9.12.3(d) were not in fact satisfied in respect of the subject matter of the Notice,

then the matter may be dealt with by the *AER* as a breach of the *Rules*.

- (g) A Power Trader may provide notice and information to the *AER* as required in clauses 9.12.3(c) or (e), as the case requires, in advance if it becomes aware of the potential for the circumstances described in clauses 9.12.3(b) or (d) to arise. Such notice and information will be deemed to have been given in accordance with clauses 9.12.3(c) or (e), as the case requires.

- (h) Notwithstanding the provision of notice and information in advance in accordance with clause 9.12.3(g), the Power Trader must give notice of non-compliance with the *Rules* and provide such other documents or information as required in accordance with clauses 9.12.3(c) or (e), as the case requires, after such non-compliance has occurred or commenced.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (i) If non-compliance with the *Rules* is continuing, the notice of non-compliance with the *Rules* provided under clauses 9.12.3(c) or (e), as the case requires, will be effective in relation to that non-compliance until that non-compliance ends provided that:
 - (1) the notice specifies that the non-compliance is continuing; and
 - (2) the Power Trader notifies the *AER* of the end of the non-compliance no later than 7 days after the non-compliance ends.
- (j) Clauses 9.12.3(b) and (d) do not affect a Power Trader's obligation with respect to registration with *AEMO* or making payments in respect of:
 - (1) *Participant fees*;
 - (2) *prudential requirements*; or
 - (3) *settlement amounts*.
- (k) Within 30 days of the end of each quarter in each calendar year, the *AER* must prepare a quarterly report for the previous quarter and make it available on request to all *Registered Participants* and to the *participating jurisdictions* which participated in the *market* during the quarter covered by the report. The quarterly report must include:
 - (1) a summary of the acts or omissions of Power Traders constituting non-compliance with any Rules Requirement, as disclosed in written notices received by the *AER* under clauses 9.12.3(c) or (e) during the quarter covered by the report; and
 - (2) an assessment by the *AER* of the effect that those acts or omissions have had on the efficient operation of the *market* during the quarter covered by the report.
- (l) This clause 9.12.3 ceases to have effect in respect of a Power Supply Agreement upon termination of that agreement.

9.12.4 Cross Border Networks

- (a) If:

(1) the *Minister* considers that a *transmission network* or *distribution network* situated in New South Wales is a continuation of a *network* situated in another *participating jurisdiction* and should be considered to be part of the *network* of that other *participating jurisdiction*; and

(2) the *Minister* for that other *participating jurisdiction* consents,

then those *Ministers* may nominate that the *network* is deemed to be entirely in that other *participating jurisdiction* and the *Rules* including any relevant *jurisdictional derogations* for the other *participating jurisdiction* are deemed to apply to the *network* as if the *network* were located entirely within that other *participating jurisdiction*.

(b) If a nomination is made under clause 9.12.4(a), then the *jurisdictional derogations* for New South Wales do not apply to the extended part of the relevant *network* which is situated in New South Wales.

(c) If the *Minister* of another *participating jurisdiction* nominates that the *jurisdictional derogations* for New South Wales should apply to a *network* part of which is situated in that other *participating jurisdiction*, then if the *Minister* in respect of New South Wales consents, the *jurisdictional derogations* for New South Wales are also to apply to that part of the *network* situated in the other *participating jurisdiction*.

9.13 [Deleted]

9.14 Transitional Arrangements for Chapter 4 - System Security

9.14.1 Power System Operating Procedures

For the purposes of clause 4.10.1, the *regional specific power system operating procedures* that apply in respect of operations on the *network* situated in New South Wales are, with the inclusion of any operating procedures set out in such operating manuals and other documents as are specified by TransGrid and provided to NEMMCO, the *regional specific power system operating procedures* reviewed and updated under clause 4.10.2(e).

9.15 NSW contestable services for Chapter 5A

9.15.1 Definitions

In this *rule* 9.15—

(a) **connection service** has the same meaning as in Chapter 5A.

(b) **NSW contestable service** means a connection service that is contestable under the *jurisdictional electricity legislation* of NSW, because that legislation permits the service to be provided by more than one supplier as a contestable service or on a competitive basis.

9.15.2 Chapter 5A not to apply to certain contestable services

Chapter 5A of the *Rules* does not apply to a NSW contestable service.

9.16 Transitional Arrangements for Chapter 6 - Network Pricing

9.16.1 NSW contestable services

(a) In this clause 9.16.1—

- (1) **connection service** has the same meaning as in Chapter 5A.
- (2) **NSW contestable service** means a connection service that is contestable under the *jurisdictional electricity legislation* of NSW, because that legislation permits the service to be provided by more than one supplier as a contestable service or on a competitive basis.

(b) Part DA of Chapter 6 does not apply to a NSW contestable service.

9.16.2 [Deleted]

9.16.3 Jurisdictional Regulator

(a) **[Deleted]**

(b) However, the definitions of *local area* and *Local Network Service Provider* are to be read as if the reference to the authority responsible for administering the jurisdictional electricity legislation in the relevant participating jurisdiction were replaced by a reference to the laws of the State of New South Wales.

(c) **[Deleted]**

9.16.4 Deemed Regulated Interconnector

For the purposes of the *Rules*, the *interconnector* between Armidale in New South Wales and Tarong in Queensland, to the extent that it forms part of the *power system* in New South Wales, is deemed to be a *regulated interconnector*.

9.16.5 [Deleted]

9.17 Transitional Arrangements for Chapter 7 - Metering

9.17.1 Extent of Derogations

(a) **[Deleted]**

(b) **[Deleted]**

(c) The transitional arrangements set out in clauses 9.17.2 and 9.17.4 apply to all *metering installations* (including *check metering installations*) that were

in use at 13 December 1998 and that were required to comply with (and did comply with) the NSW Electricity Market Code as at 13 December 1998.

9.17.2 Initial Registration (clause 7.1.2)

(a) Subject to clause 9.17.2(b), if:

- (1) a *metering installation* to which this clause 9.17 applies was registered with TransGrid under the NSW Electricity Market Code as at 13 December 1998; and
- (2) the details registered with TransGrid were provided to *NEMMCO* on or before 13 December 1998,

then the *metering installation* is taken to be registered with *AEMO* for the purposes of clause 7.1.2(a).

- (b) The *responsible person* in respect of a *metering installation* which is taken to be registered under clause 9.17.2(a) must ensure that the requirements for registration of a *metering installation* under Chapter 7 are met by 13 December 1999 or such other time as may be agreed with *AEMO*.

9.17.3 Amendments to Schedule 9G1

The transitional metering provisions set out in schedule 9G1, amended as follows, apply to New South Wales in respect of Chapter 7:

(a) **[Deleted]**

(b) **[Deleted]**

- (c) If, in respect of a *metering installation* commissioned before 13 December 1998, the *responsible person* has obtained an exemption prior to 13 December 1998 from TransGrid pursuant to clause 2.2(c) of Schedule 7.2 of the NSW Electricity Market Code, then that exemption is deemed to continue as an exemption granted by *AEMO* pursuant to clause S7.2.2(c) of schedule 7.2 of the *Rules*.

(d) **[Deleted]**

(e) **[Deleted]**

(f) **[Deleted]**

9.17.4 Compliance with AS/NZ ISO 9002 (clause S7.4.3(f) of schedule 7.4)

Category 1A, 2A and 3A *Metering Providers* must be able to exhibit the requirements of clause S7.4.3(f)(1) of schedule 7.4 of the *Rules* by the date which is 2 years after the date the *Metering Provider* applied to be registered as a *Metering Provider* with *NEMMCO*.

9.17A [Deleted]

9.18 [Deleted]

Part C Jurisdictional Derogations for the Australian Capital Territory

9.19 [Deleted]

9.20 Definitions and Transitional Arrangements for Cross-Border Networks

9.20.1 Definitions

For the purposes of this Part C:

- (a) a word or expression defined in the glossary in Chapter 10 has the meaning given to it in the glossary unless it is referred to in column 1 of the following table; and
- (b) a word or expression referred to in column 1 of the following table has the meaning given to it in column 2 of the table:

Column 1	Column 2
Minister	The Minister from time to time administering the <i>Utilities Act 2000</i> (ACT) or other applicable ACT legislation.

9.20.2 Cross Border Networks

- (a) If:
 - (1) the *Minister* considers that a *transmission network* or *distribution network* situated in the Australian Capital Territory is a continuation of a *network* situated in New South Wales and should be considered to be a part of the New South Wales *network*; and
 - (2) the *Minister* for New South Wales consents,

then those *Ministers* may nominate that the *network* is deemed to be entirely in New South Wales and the *Rules* including any relevant *jurisdictional derogations* for New South Wales are deemed to apply to the *network* as if the *network* were located entirely within New South Wales.
- (b) If a nomination is made under clause 9.20.2(a), then the *jurisdictional derogations* for the Australian Capital Territory do not apply to the extended part of the relevant *network* which is situated in the Australian Capital Territory.

- (c) If the *Minister* for New South Wales nominates that the *jurisdictional derogations* for the Australian Capital Territory should apply to a *network* part of which is situated in New South Wales, then if the *Minister* for the Australian Capital Territory consents, the *jurisdictional derogations* for the Australian Capital Territory are also to apply to that part of the *network* situated in New South Wales.

9.21 [Deleted]

9.22 [Deleted]

9.23 Transitional Arrangements for Chapter 6 - Network Pricing

9.23.1 [Deleted]

9.23.2 [Deleted]

9.23.3 [Deleted]

9.23.4 [Deleted]

9.24 Transitional Arrangements

9.24.1 Chapter 7 - Metering

The transitional metering provisions set out in schedule 9G1 apply to the Australian Capital Territory in respect of Chapter 7.

9.24.2 [Deleted]

9.24A [Deleted]

Part D Jurisdictional Derogations for South Australia

9.25 Definitions

9.25.1 [Deleted]

9.25.2 Definitions

- (a) For the purposes of this Part D, a word or expression defined in the glossary in Chapter 10 has the meaning given to it in the glossary unless it is referred to in column 1 of the table in clause 9.25.2(b).
- (b) For the purposes of this Part D, a word or expression referred to in column 1 of the following table has the meaning given to it in column 2 of the table:

Column 1	Column 2
customer	A customer as defined in the <i>Electricity Act</i>
Distribution Lessor Corporation	A subsidiary of the Treasurer of the State of South Australia established by the <i>Public Corporations (Distribution Lessor Corporation) Regulations 1999</i> and known as "Distribution Lessor Corporation" and includes any entity which replaces or assumes rights or obligations of Distribution Lessor Corporation under a South Australian Distribution Network Lease, by way of succession, assignment, novation, ministerial direction, or otherwise.
Electricity Act	<i>Electricity Act 1996 (SA).</i>
ETSA Corporation	The statutory corporation established pursuant to the <i>Electricity Corporations Act 1994</i> and known as "ETSA Corporation" and includes its successors and assigns
ETSA Power	The statutory corporation established as a subsidiary of ETSA Corporation by the <i>Public Corporations (ETSA Power) Regulations 1995</i> , and includes its successors and assigns.
ETSA Transmission Corporation	The statutory corporation established pursuant to the <i>Electricity Corporations Act 1994</i> and known as "ETSA Transmission Corporation" and includes any party which replaces or assumes rights or obligations of ETSA Transmission Corporation as a party to the South Australian Transmission Lease, by way of succession, assignment, novation, ministerial direction, or otherwise.
Generation Lessor Corporation	A subsidiary of the Treasurer of the State of South Australia established by the <i>Public Corporations (Generation Lessor Corporation) Regulations 1999</i> and known as "Generation Lessor Corporation" and includes any entity which replaces or assumes rights or obligations of Generation Lessor Corporation under the South Australian Generation Leases, by way of succession, assignment, novation, ministerial direction, or otherwise.
Northern Power Station agreements	The various agreements, documents and deeds in their form as at 1 July 1996 relating to the leasing and ownership of the <i>generating system</i> and associated <i>generating units</i> comprising the Northern Power Station entered into by ETSA Corporation and now

Column 1	Column 2
	under the control of SA Generation Corporation
Northern Power Station Participants	The parties to the Northern Power Station agreements other than SA Generation Corporation.
Osborne agreement	The Agreement dated 4 June 1996 (in its form as at 1 July 1996) between ETSA Corporation and Osborne Cogeneration Pty Ltd and known as the “Osborne Power Purchase Agreement”.
South Australian Distribution Network Lease	Any lease with respect to the electricity <i>distribution network</i> , plant and equipment owned by Distribution Lessor Corporation from time to time.
SA Generation Corporation	The statutory corporation established pursuant to the <i>Electricity Corporations Act 1994</i> and known as “SA Generation Corporation” (trading as Optima Energy), and includes its successors and assigns
South Australian Generation Leases	Leases with respect to electricity <i>generating systems</i> and associated <i>generating units</i> owned by Generation Lessor Corporation from time to time.
South Australian network	A <i>network</i> situated in South Australia or deemed to be situated in South Australia by operation of clause 9.4.5.
South Australian Transmission Lease	The various agreements, documents and deeds in their form as at 31 August 1998 relating to the leasing and ownership of the <i>transmission network</i> in South Australia entered into by ETSA Transmission Corporation.
South Australian Transmission Lease Participants	The parties to the South Australian Transmission Lease other than ETSA Transmission Corporation.
South Australian Transmission Network Sub Sub Sub Lease	Any sub sub sub-lease (together with any lease or agreement to lease extending beyond the termination date of such sub sub sub lease) with respect to the electricity <i>transmission network</i> , plant and equipment of which ETSA Transmission Corporation is sub sub sub-lessor from time to time.

(c) [Deleted]

(d) For the purposes of the *Rules applicable regulatory instruments* includes the following South Australian instruments in relation only to the regulation

of *networks, network services* and retail sales of electricity in South Australia:

- (i) the *Electricity Act*;
- (ii) all codes and regulations made and licences issued under the *Electricity Act*;
- (iii) all regulatory instruments applicable under those licences;
- (iv) the Electricity Pricing Order made under section 35B of the *Electricity Act*;
- (v) the *Electricity Corporations (Restructuring and Disposal) Act 1999*;
- (vi) the *Essential Services Commission Act 2002*; and
- (vii) all regulations and determinations made under the *Essential Services Commission Act 2002*.

9.26 Transitional Arrangements for Chapter 2 - Registered Participants, Registration And Cross Border Networks

9.26.1 Registration as a Generator

For the purposes of the *Rules*:

- (a) ETSA Power and any one person that replaces or assumes rights or obligations of ETSA Power as party to the Osborne agreement, by way of succession, assignment, novation, ministerial direction, or otherwise, is deemed to be, and at all relevant times to have been, the person who must register as the *Generator* in relation to the *generating system* and associated *generating units* which are the subject of the Osborne agreement;
- (b) Osborne Cogeneration Pty Ltd is not to, and is not to be taken to be entitled to, and is to be taken to have been exempted from the requirement to, register as a *Generator* in relation to the *generating system* and associated *generating units* which are the subject of the Osborne agreement;
- (c) SA Generation Corporation and any person that replaces or assumes rights or obligations of SA Generation Corporation as party to the Northern Power Station agreements, by way of succession, assignment, novation, ministerial direction, or otherwise, is deemed to be, and at all relevant times to have been, the person that must register as the *Generator* (unless otherwise exempt) in relation to the *generating system* and associated *generating units* which are the subject of the Northern Power Station agreements;
- (d) the Northern Power Station Participants are not to, and are not to be taken to be entitled to, and are taken to have been exempted from the requirement to, register as a *Generator* in relation to the *generating system* and associated

generating units which are the subject of the Northern Power Station agreements;

- (e) clauses 9.26.1(a) and (b) will cease to have effect on the termination of the Osborne agreement;
- (f) clauses 9.26.1(c) and (d) will cease to have effect on the termination of the last of the Northern Power Station agreements;
- (g) Generation Lessor Corporation is not obliged to, and is not to be taken to be entitled to, and is to be taken to have been exempted from the requirement to, register as a *Generator* in relation to the *generating system* and associated *generating units* in South Australia which are the subject of the South Australian Generation Leases; and
- (h) clause 9.26.1(g) will apply in respect of each South Australian Generation Lease from the time that lease becomes effective and will cease to have effect on the termination of that lease (or the termination of any renewal of that lease).

9.26.2 Registration as a Customer

For the purposes of clause 2.3.1(e), a person may classify its electricity purchased at a *connection point* in South Australia if the person is a *retailer* or a customer pursuant to the Electricity Act and regulations.

9.26.3 Cross Border Networks

- (a) If:
 - (1) the *Minister* considers that a *transmission network* or *distribution network* situated in South Australia is a continuation of a *network* situated in another *participating jurisdiction* and should be considered to be part of the *network* of that other *participating jurisdiction*; and
 - (2) the *Minister* for that other *participating jurisdiction* consents,then those *Ministers* may nominate that the *network* is deemed to be entirely in that other *participating jurisdiction* and the *Rules* including any relevant *jurisdictional derogations* for the other *participating jurisdiction* are deemed to apply to the *network* as if the *network* were located entirely within that other *participating jurisdiction*.
- (b) If a nomination is made under clause 9.26.3(a), then the *jurisdictional derogations* for South Australia do not apply to the extended part of the relevant *network* which is situated in South Australia.
- (c) If the *Minister* of another *participating jurisdiction* nominates that the *jurisdictional derogations* for South Australia should apply to a *network* part of which is situated in that other *participating jurisdiction*, then if the *Minister* in respect of South Australia consents, the *jurisdictional*

derogations for South Australia are also to apply to that part of the *network* situated in the other *participating jurisdiction*.

9.26.4 [Deleted]

9.26.5 Registration as a Network Service Provider

For the purpose of the *Rules*:

- (a) the South Australian Transmission Lease Participants are not obliged to, and are taken to have been exempted from the requirement to, register as a *Network Service Provider* in relation to the *transmission network* in South Australia which is the subject of the South Australian Transmission Lease.
- (b) Clause 9.26.5(a) will cease to have effect on the termination, extension or variation of the South Australian Transmission Lease.
- (c) Distribution Lessor Corporation is not obliged to, and is not to be taken to be entitled to, and is to be taken to have been exempted from the requirement to, register as a *Network Service Provider* in relation to the *distribution network* in South Australia which is the subject of the South Australian Distribution Network Lease.
- (d) ETSA Transmission Corporation (notwithstanding that it is the owner and sub sub sub lessor of the *transmission network* in South Australia) is not obliged to, and is not to be taken to be entitled to, and is to be taken to have been exempted from the requirement to, register as a *Network Service Provider* in relation to the *transmission network* in South Australia which is the subject of the South Australian Transmission Network Sub Sub Sub Lease.
- (e) Clause 9.26.5(c) will have effect for the period of each South Australian Distribution Network Lease (including the period of any renewal).
- (f) Clause 9.26.5(d) will have effect for the period of each South Australian Transmission Network Sub Sub Sub Lease (including the period of any renewal).

9.27 [Deleted]

9.28 Transitional Arrangements for Chapter 5 - Network Connection

9.28.1 Application of clause 5.2

For the purposes of clause 5.2:

- (a) for *facilities* existing at *market commencement*, *Registered Participant* exemptions may be sought from AEMO in accordance with the *Rules* for particular *facilities* where material departures from the *Rules* are reasonably expected. Any necessity to alter the existing arrangements for *facilities* is to be negotiated and agreed by affected *Registered Participants*;

- (b) South Australia reserves the right to seek further exemptions from *AEMO* in accordance with the *Rules* for existing *power stations* if they are unable to meet the requirements of the *Rules* and those exemptions will not result in system damage; and
- (c) **[Deleted]**
- (d) **[Deleted]**
- (e) the provisions in this clause 9.28 apply until there are corresponding changes to the *Rules* which deliver equivalent outcomes to the satisfaction of the South Australian Government.

9.28.2 [Deleted]

9.29 Transitional Arrangements for Chapter 6 - Economic Regulation of Distribution Services

9.29.1 [Deleted]

9.29.2 [Deleted]

9.29.3 [Deleted]

9.29.4 [Deleted]

9.29.5 Distribution Network Pricing – South Australia

- (a) In this clause:

price determination means Part B of the 2005–2010 Electricity Distribution Price Determination made under the *Essential Services Commission Act 2002* (SA).

SA Distributor means the *Distribution Network Service Provider* whose *distribution network* is situated in South Australia.

relevant distribution determination means the distribution determination for the SA Distributor for the *regulatory control period* that commences in 2010.

small customer has the same meaning as in the *Electricity Act 1996* (SA).

statement of regulatory intent means the *statement of regulatory intent* in regard to the electricity distribution efficiency carryover mechanism issued by the Essential Services Commission on 23 March 2007 under clause 7.4 of the Electricity Pricing Order made by the Treasurer under section 35B of the *Electricity Act 1996* (SA) on 11 October 1999.

- (b) The relevant distribution determination:

- (1) must incorporate appropriate transitional arrangements to take into account the change from a pre-tax to a *post-tax revenue model* (which must be consistent with any agreement between the AER and the SA Distributor about the arrangements necessary to deal with the transition); and
 - (2) must allow the SA Distributor to carry forward impacts associated with the calculation of Maximum Average Distribution Revenue under the price determination into the 2010/11 and 2011/12 *regulatory years*.
- (c) The *efficiency benefit sharing scheme* under the relevant distribution determination must be consistent with the *statement of regulatory intent*.
- (d) The following side constraint is to be applied to tariffs for small customers for the *regulatory control period* to which the relevant distribution determination applies:
- The fixed supply charge component of the tariff must not increase by more than \$10 from one *regulatory year* to the next.
- (e) In preparing its *framework and approach paper* for the distribution determination that is to follow the relevant distribution determination, the AER must consider whether the above side constraint should continue with or without modification.
- (f) Any reduction in *transmission network* charges as a result of a regulatory reset (excluding reductions resulting from the distribution of *settlements residue* and *settlements residue auction* proceeds) must be paid to all *customers*.

9.29.6 Capital contributions, prepayments and financial guarantees

- (a) The amount that a South Australian *Distribution Network Service Provider* may receive by way of capital contribution, prepayment and/or financial guarantee in respect of a South Australian network will be determined by the appropriate regulator in accordance with *applicable regulatory instruments*.
- (b) This clause operates to the exclusion of clause 6.7.2(b) of the former Chapter 6 (as it continues in force under transitional provisions) and clause 6.21.2(2) of the present Chapter 6.
- (c) In this clause:

appropriate regulator means:
 - (1) if the South Australian Minister has made no transfer of regulatory responsibility to the AER under clause 11.14.4 – the South Australian Essential Services Commission;

- (2) if the South Australian Minister has made a transfer of regulatory responsibility to the *AER* under clause 11.14.4 – the *AER*.

9.29.7 Ring fencing

On the *AER*'s assumption of responsibility for the economic regulation of *distribution services* in South Australia, the guidelines entitled *Operational Ring-fencing Requirements for the SA Electricity Supply Industry: Electricity Industry Guideline No. 9* dated June 2003 (including amendments and substitutions made up to the date the *AER* assumes that responsibility) will be taken to be distribution ring-fencing guidelines issued by the *AER* under Rule 6.17.

9.29A Monitoring and reporting

- (a) This clause applies to information about *interconnectors* into South Australia or consisting of South Australian market data that is:
 - (1) within *AEMO*'s control; and
 - (2) reasonably required by a relevant South Australian authority to fulfil obligations under:
 - (i) a relevant protocol on the use of emergency powers; or
 - (ii) regulations under the *Electricity Act 1996*(SA).
- (b) *AEMO* must, at the request of a relevant South Australian authority, provide the authority with information to which this clause applies.
- (c) The information must be provided by way of a real time data link or, if such a link is not available, by the most expeditious means reasonably practicable in the circumstances.
- (d) If the cost incurred by *AEMO* in providing information under this clause exceeds the cost usually incurred in providing a *Market Participant* with information in accordance with the *Rules*, the relevant South Australian authority that requested the information must pay the excess.
- (e) In this *Rule*:

relevant protocol on the use of emergency powers means the National Electricity Market Memorandum of Understanding on the Use of Emergency Powers (as amended from time to time) and includes any later protocol on the use of emergency powers agreed between jurisdictions participating in the National Electricity Market.

relevant South Australian authority means:

- (a) the Technical Regulator; or

- (b) an officer of the South Australian Public Service nominated by the SA Minister to be a responsible officer for the purpose of fulfilling obligations under:
 - (i) a relevant protocol on the use of emergency powers; or
 - (ii) regulations under the *Electricity Act 1996* (SA).

Technical Regulator means the person holding or acting in the office of Technical Regulator under section 7 of the *Electricity Act 1996* (SA).

9.30 Transitional Provisions

9.30.1 Chapter 7 - Metering

- (1) The transitional metering provisions set out in schedule 9G1 apply to South Australia in respect of Chapter 7.

Part E Jurisdictional Derogations for Queensland

9.31 [Deleted]

9.32 Definitions and Interpretation

9.32.1 Definitions

- (a) For the purposes of this Part E:
 - (1) a word or expression defined in the glossary in Chapter 10 has the meaning given to it in the glossary unless it is referred to in column 1 of the following table; and
 - (2) a word or expression referred to in column 1 of the following table has the meaning given to it in column 2 of the table:

Column 1	Column 2
connection agreement	Includes all “Connection and Access Agreements” established in Queensland prior to <i>market commencement</i> ..
Electricity Act	The <i>Electricity Act 1994</i> (Qld).
excluded customer	An excluded customer as defined in the <i>Electricity Act</i> .
exempt seller	An exempt seller as defined in the National Energy Retail Law (Queensland).
exempted generation	An agreement between a State Electricity Entity and the owner or operator of a <i>generating system</i> , as listed

Column 1	Column 2
agreement	at schedule 9E1, and any amendment of such agreement made prior to 13 December 1998 or, if made in accordance with clause 9.34.6(s), thereafter.
GOC Act	The <i>Government Owned Corporations Act 1993</i> (Qld).
Minister	The Minister administering the <i>Electricity Act</i> from time to time.
Nominated Generator	A State Electricity Entity determined by the <i>Minister</i> for the purposes described in clause 9.34.6 for a <i>generating system</i> to which an exempted generation agreement applies.
Powerlink Queensland	Queensland Electricity Transmission Corporation Ltd, a corporation established under the GOC Act.
Queensland Competition Authority	The Queensland Competition Authority established under the <i>Queensland Competition Authority Act</i> .
Queensland Competition Authority Act	The <i>Queensland Competition Authority Act 1997</i> (Qld).
Queensland distribution network	A <i>distribution network</i> (including any part of a <i>distribution network</i>) situated in Queensland.
Queensland Grid Code	The Code of that name first issued by the Department of Mines and Energy (Qld) on 28 November 1994, as amended from time to time.
Queensland system	The sum of the <i>transmission network</i> located in Queensland operating at a nominal <i>voltage</i> of 275 kV, the <i>connection assets</i> associated with that <i>network</i> and any <i>transmission or distribution system connected</i> to that <i>network</i> and also located in Queensland.
Queensland transmission network	A <i>transmission network</i> (including any part of a <i>transmission network</i>) situated in Queensland.
Small Generator	A <i>Generator</i> whose <i>generating system</i> is <i>connected</i> to the Queensland system and has a <i>nameplate rating</i> of less than 5MW.
Stanwell Corporation Ltd	A corporation established under the GOC Act.
Stanwell Cross Border	The various agreements, documents and deeds relating to the leasing, ownership and operation of the

Column 1	Column 2
Leases	<i>generating systems</i> comprising the Stanwell Power Station entered into, or to be entered into, at the request of, or for the benefit of, one or more of Stanwell Corporation Ltd and the State of Queensland and whether or not any of Stanwell Corporation Ltd or the State of Queensland is a party to those agreements, documents and deeds.
Stanwell Power Station	The <i>power station</i> known as the “Stanwell Power Station” located at Stanwell, Queensland.
State Electricity Entity	A State electricity entity as defined in the <i>Electricity Act</i> .
transmission authority	An authority of that name issued under the <i>Electricity Act</i> .

- (b) For the purposes of the *Rules*, to the extent that any *network* is located in Queensland, a *network* or part of a *network* is a *transmission network* if and only if it satisfies the following definition of “*transmission network*” and the definition of “*transmission network*” given in the glossary in Chapter 10 does not apply in those circumstances:

transmission network	Despite clause 6A.1.5(b) and the glossary of the <i>Rules</i> , in Queensland the <i>transmission network</i> assets are to be taken to include only those assets owned by Powerlink Queensland or any other <i>Transmission Network Service Provider</i> that holds a transmission authority irrespective of the <i>voltage</i> level and does not include any assets owned by a <i>Distribution Network Service Provider</i> whether or not such <i>distribution</i> assets are operated in parallel with the <i>transmission system</i> .

9.32.2 Interpretation

In this Part E, a reference to any authority, corporation or body whether statutory or otherwise, in the event of that authority, corporation or body ceasing to exist or being reconstituted, renamed or replaced or its powers, duties or functions being transferred to or assumed by any other authority, corporation or body, will, as the case requires, be taken to refer to the authority, corporation or body replacing it or the authority, corporation or body, succeeding to or assuming the powers, duties or functions of it.

9.33 Transitional Arrangements for Chapter 1

9.33.1 [Deleted]

9.34 Transitional Arrangements for Chapter 2 - Registered Participants and Registration

9.34.1 Application of the Rules in Queensland (clauses 2.2 and 2.5)

Any person who engages in the activity of owning, controlling or operating:

- (a) a *generating system* that *supplies* electricity to a *transmission or distribution system* of a kind referred to in clause 9.34.1(b); or
- (b) a *transmission or distribution system* in Queensland which does not form part of the *national grid*,

is not to, and is not to be taken to be entitled to, and is taken to have been exempted from the requirement to, register as a *Registered Participant* in relation to that activity.

9.34.2 Stanwell Cross Border Leases (clause 2.2)

- (a) Stanwell Corporation Ltd is deemed to be the person that must register as a *Generator* in relation to the *generating systems* which are the subject of the Stanwell Cross Border Leases.
- (b) The parties (other than Stanwell Corporation Ltd) to the Stanwell Cross Border Leases are not to be and are not to be entitled to, and are taken to have been exempted from the requirement to, register as a *Generator* in relation to the *generating systems* which are the subject of the Stanwell Cross Border Leases.
- (c) Clauses 9.34.2(a) and (b) cease to have effect upon the expiry or earlier termination of the last of the Stanwell Cross Border Leases.

9.34.3 [Deleted]

9.34.4 Registration as a Customer (clause 2.3.1)

- (a) Subject to clause 9.34.4(c), for the purpose of clause 2.3.1(e), a person satisfies the requirements of Queensland for classification of a *connection point* if that person is:
 - (1) a customer (other than an excluded customer) in relation to that *connection point*; or
 - (2) a *retailer* who is authorised to sell electricity to the person *connected* at that *connection point*; or
 - (3) an exempt seller; or

- (4) a person exempted under the *National Energy Retail Law* (Queensland), from the operation of section 88 of that Act.
- (b) For the purpose of clause 2.3.1(e), a person does not satisfy the requirements of Queensland for classification of its electricity purchased at a *connection point* in Queensland if the electricity is *supplied* through a *transmission system* which does not form part of the *national grid*.

9.34.5 There is no clause 9.34.5

9.34.6 Exempted generation agreements (clause 2.2)

- (a) For the purpose of supplying electricity under any exempted generation agreement, for each *generating system* which forms part of one of the *power stations* listed in schedule 9E1 the Minister may determine, in consultation in each case with the owner of the relevant *generating system*, whether a State Electricity Entity (the "**Nominated Generator**"), rather than another person engaging in the activity of owning, operating or controlling the *generating system*, should be the *Generator* in respect of the *generating system*.
- (b) For the purposes of the *Rules* if the Minister has determined a Nominated Generator for any *generating system* as described in clause 9.34.6(a):
 - (1) the Nominated Generator is taken to be, and at all relevant times to have been, and is the person that must register as, a *Generator* in relation to that *generating system*; and
 - (2) any person engaging in the activity of owning, controlling or operating that *generating system*, not being the Nominated Generator, is not to, is not entitled to, and is taken to have been exempted from the requirement to, register as a *Generator* in relation to that *generating system*.
- (c) If complying with a requirement of the *Rules* ("the **Rules Requirement**") would result in a Nominated Generator being in breach of a provision of an exempted generation agreement to which it is a party (the **contractual requirement**), the Nominated Generator is not required to comply with the *Rules* requirement to the extent of the inconsistency between the *Rules* requirement and the contractual requirement provided that this clause 9.34.6(c) must not be interpreted to relieve a Nominated Generator of the obligation to submit offers in respect of a *scheduled generating unit* or to operate the *generating unit* in accordance with *dispatch instructions* determined under Chapter 3.
- (d) If:
 - (1) a Nominated Generator requires the co-operation of one or more of the parties to an exempted generation agreement (a "**counterparty**") in order to enable the Nominated Generator to comply with the *Rules* requirement;

- (2) the Nominated Generator has used its reasonable endeavours to obtain the counterparty's co-operation in order to enable the Nominated Generator to comply with the *Rules* requirement; and
- (3) the Nominated Generator has no ability to require the counterparty to so co-operate with the Nominated Generator and the counterparty is not in breach of the exempted generation agreement by refusing to so co-operate,

then the Nominated Generator is not required to comply with the *Rules* requirement.

- (e) If a Nominated Generator does not comply with a *Rules* requirement in the circumstances set out in clause 9.34.6(c) or (d), the Nominated Generator must:

- (1) give notice to the *AER* as soon as practicable, and in any event before the expiration of 7 *days* after the non-compliance with the *Rules* requirement occurs or commences, of:
 - (a) details of the *Rules* requirement which has not been or will not be complied with;
 - (b) details of each act or omission which partly or wholly constitutes non-compliance with that *Rules* requirement;
 - (c) in the case of circumstances described in clause 9.34.6(c), unless explicitly prohibited by the terms of the relevant exempted generation agreement, details of each contractual requirement which is considered by the Nominated Generator to be inconsistent with the *Rules* requirement; and
 - (d) in the case of circumstances described in clause 9.34.6(d), details of the endeavours made by the Nominated Generator to obtain the counterparty's co-operation to enable the Nominated Generator to comply with the *Rules* requirement; and

- (2) unless explicitly prohibited by the terms of the relevant exempted generation agreement, give the *AER* any documents or information in the possession or control of the Nominated Generator which evidence the matters referred to in clause 9.34.6(e)(1) within 14 *days* (or any further period agreed to by the *AER*) of receiving a written request from the *AER*.

- (f) To avoid any doubt, if after reviewing a notice and any documents or information given by the Nominated Generator under clause 9.34.6(e), the *AER* forms the view that:

- (1) in the case of circumstances described in clause 9.34.6(c), compliance with the *Rules* requirement would not have resulted in the Nominated Generator being in breach of the relevant contractual requirement; or

- (2) in the case of circumstances described in clause 9.34.6(d), any of the requirements of clause 9.34.6(d) were not in fact satisfied,

then the matter may be dealt with by the *AER* as a breach of the *Rules*.

(g) **[Deleted]**

- (h) A Nominated Generator may give notice and information to the *AER* as required in clause 9.34.6(e) in advance if it becomes aware of the potential for the circumstances described in clause 9.34.6(c) or 9.34.6(d) to arise, and the giving of that notice and information will be taken to satisfy the requirements of the Nominated Generator in clause 9.34.6(e)(1) in respect of those circumstances.

- (i) Notwithstanding the provision of notice and information in advance in accordance with clause 9.34.6(h), the Nominated Generator must provide such other documents or information as may be required in accordance with clause 9.34.6(e) after such non-compliance has occurred or commenced.

- (j) If non-compliance with the *Rules* is continuing, the notice of non-compliance with the *Rules* provided under clause 9.34.6(e) will be effective in relation to that non-compliance until that non-compliance ends provided that:

- (1) the notice specifies that the non-compliance is continuing; and
- (2) the Nominated Generator notifies the *AER* of the end of the non-compliance no later than 7 days after the non-compliance ends.

- (k) Clauses 9.34.6(c) and 9.34.6(d) do not affect the obligations of a Nominated Generator with respect to registration with *AEMO* or to making payments under the provisions of the *Rules* in respect of:

- (1) *Participant fees*;
- (2) *prudential requirements*; or
- (3) *settlement amounts*.

- (l) Within 30 days of the end of each quarter in each calendar year, the *AER* must prepare a quarterly report for the previous quarter and make it available upon request to all *Registered Participants* and those *participating jurisdictions* that participated in the *market* during the quarter covered by the report. The quarterly report must include:

- (1) a summary of the acts or omissions of the Nominated Generator constituting non-compliance with any requirement of the *Rules*, as disclosed in written notices received by the *AER* under this clause 9.34.6 during the quarter covered by the report: and

- (2) an assessment by the *AER* of the effect that those acts or omissions have had on the efficient operation, during the quarter covered by the report, of the *spot market*.
- (m) **[Deleted]**
- (n) No amendment, other than an amendment to correct a typographical error, may be made to an exempted generation agreement unless the parties to the exempted generation agreement submit to the *AER*:
 - (1) the proposed amendment, a copy of the exempted generation agreement and such supporting information as the parties consider necessary (the **EGA amendment material**);
 - (2) a request that the *AER* seek advice from the *ACCC* as to whether the *ACCC* considers that the proposed amendment would or may:
 - (i) **[Deleted]**
 - (ii) **[Deleted]**
 - (iii) contravene a provision of the *Competition and Consumer Act 2010* (Cth) or the Competition Code of a *participating jurisdiction*; and
 - (3) if requested by the *AER* to do so, such further information as may be required by the *AER* in order for the *ACCC* to consider the matters referred to in clause 9.34.6(n)(2),and the proposed amendment is not prohibited under clause 9.34.6(q).
- (o) When the parties to an exempted generation agreement submit EGA amendment material to the *AER* in accordance with clause 9.34.6(n), they may include as part of the material submitted a written request that the *AER* and the *ACCC* treat the EGA amendment material as confidential. In such a case the *AER*:
 - (1) must comply with that request until such time as the parties to the exempted generation agreement notify the *AER* in writing that the *AER* is no longer under an obligation to do so; and
 - (2) must not provide any EGA amendment material to the *ACCC* unless the parties to the exempted generation agreement have notified the *AER* in writing that they have agreed acceptable confidentiality arrangements in relation to the EGA amendment material with the *ACCC* and that the *AER* should provide the EGA amendment material to the *ACCC*.
- (p) **[Deleted]**

- (q) If, within 10 *business days* of receiving the material referred to in clause 9.34.6(n) or such other period as is agreed between the *AER* and the parties to the exempted generation agreement, the *AER* responds that:
- (1) the *ACCC* considers that the proposed amendment would or may have any or all of the effects referred to in clause 9.34.6(n)(2); or
 - (2) the *ACCC* considers that it is unable, because of:
 - (i) insufficient information before it; or
 - (ii) any confidentiality arrangements in relation to the EGA amendment material agreed between the *ACCC* and the parties to the exempted generation agreement,to reasonably consider whether the proposed amendment would have any or all of the effects referred to in clause 9.34.6(n)(2),
- then the proposed amendment must not be made.
- (r) If the *AER* has not provided a response to a request made in accordance with clause 9.34.6(n)(2) within:
- (1) 10 *business days* of receiving the material referred to in clause 9.34.6(n); or
 - (2) such other period as is agreed between the *AER* and the parties to the exempted generation agreement,
- the *ACCC* is deemed to have no objection to the proposed amendment.
- (s) If the *AER* notifies the parties to the exempted generation agreement that the *ACCC* has no objection to the proposed amendment, or if the *ACCC* is deemed under clause 9.34.6(r) to have no objection to the proposed amendment, the parties to the exempted generation agreement may make the proposed amendment.
- (t) This clause 9.34.6 ceases to have effect in respect of a *generating system* the subject of an exempted generation agreement upon the termination of that agreement.

9.35 [Deleted]

9.36 [Deleted]

9.37 Transitional Arrangements for Chapter 5 - Network Connection

9.37.1 [Deleted]

9.37.2 Existing connection and access agreements (clause 5.2)

- (a) The technical connection and network pricing requirements of the Interconnection and Power Pooling Agreement dated 30 March 1994 between the owners of the Gladstone Power Station and the Queensland Electricity Commission (as amended prior to 18 January 1998) are to be taken to be a *connection agreement* in respect of both the Gladstone Power Station and the Boyne Island aluminium smelter unless replacement *connection agreements* are entered into in respect of the power station and smelter.
- (b) Despite anything to the contrary in clause 5.2.2, if the *generating system* at Gladstone Power Station meets the technical connection requirements of the Interconnection and Power Pooling Agreement, or the technical requirements of a replacement *connection agreement* no less onerous than those in the Interconnection and Power Pooling Agreement, the relevant *generating system* is to be deemed to comply with all the technical connection requirements of the *Rules* in respect of the Gladstone Power Station.
- (c) Despite anything to the contrary in clause 5.2.2, if the Boyne Island aluminium smelter meets the technical connection requirements of the Interconnection and Power Pooling Agreement, or the technical requirements of a replacement *connection agreement* no less onerous than those in the Interconnection and Power Pooling Agreement, the Boyne Island aluminium smelter is to be deemed to comply with all the technical connection requirements of the *Rules* in respect of the Boyne Island aluminium smelter.
- (d) Despite anything to the contrary in clause 5.2.2, if Queensland Rail complies with the technical requirements in the *connection agreements* for Queensland Rail *connections* as at 18 January 1998, Queensland Rail is to be deemed to comply with all the technical connection requirements of the *Rules*.
- (e) Small Generators are not required to comply with the conditions of *connection* set out in schedule 5.2 of the *Rules*.

9.37.3 [Deleted]

9.37.4 [Deleted]

9.37.5 Forecasts for connection points to transmission network (clause 5.11.1)

If a *Network Service Provider*, on the Queensland system, modifies forecast information in accordance with clause 5.11.1(d), then that *Network Service Provider* is not required to notify the relevant *Registered Participant* if it has conflicting confidentiality obligations to other *Registered Participants*.

9.37.6 There is no clause 9.37.6

9.37.7 Cross Border Networks

(a) If:

(1) the *Minister* considers that a *transmission network* or *distribution network* situated in Queensland is a continuation of a *network* situated in another *participating jurisdiction* and should be considered to be part of the *network* of that other *participating jurisdiction*; and

(2) the *Minister* for that other *participating jurisdiction* consents,

then those *Ministers* may nominate that the *network* is deemed to be entirely in that other *participating jurisdiction* and the *Rules* including any relevant *jurisdictional derogations* for the other *participating jurisdiction* are deemed to apply to the *network* as if the *network* were located entirely within that other *participating jurisdiction*.

(b) If a nomination is made under clause 9.37.7(a), then the *jurisdictional derogations* for Queensland do not apply to the continuation of the relevant *network* which is situated in Queensland.

(c) If the *Minister* of another *participating jurisdiction* nominates that the *jurisdictional derogations* for Queensland should apply to a *network* part of which is situated in that other *participating jurisdiction*, then if the *Minister* in respect of Queensland consents, the *jurisdictional derogations* for Queensland are also to apply to that part of the *network* situated in the other *participating jurisdiction*.

9.37.8 [Deleted]

9.37.9 Credible contingency events (clause S5.1.2.1 of schedule 5.1)

(a) The *protection systems* installed on any 110/132kV lines located in Queensland and existing at *market commencement* are deemed to comply with clause S5.1.2.1(d) of schedule 5.1 of the *Rules* except where such *protection system* has a material effect in degrading the stability and security of the Queensland system or the *power system*.

9.37.10 Reactive power capability (clause S5.2.5.1 of schedule 5.2)

Clause S5.2.5.1 of schedule 5.2 of the *Rules* is replaced for each of the *generating units* situated at the relevant *power station* listed in the following table by the following:

For the purpose of this clause S5.2.5.1:

rated active power output means the 'Rated MW Generated)' (as defined in the *Generating System Design Data Sheet*) for the relevant *synchronous generating unit*; and

nominal terminal voltage means the 'Nominal Terminal Voltage' (as defined in the *Generating System Design Data Sheet*) for the relevant *synchronous generating unit*.

- (a) Each of the *generating units*, while operating at any level of *active power* output, must be capable of:
 - (1) supplying at its terminals an amount of *reactive power* of at least the amount that would be supplied if the *generating unit* operated at rated *active power* output, nominal terminal voltage and a lagging power factor of 0.9; and
 - (2) absorbing at its terminals an amount of *reactive power* of at least the amount that would be absorbed if the *generating unit* operated at rated *active power* output, nominal terminal voltage and a leading power factor set out in respect of that *generating unit* in column 3 of the following table.
- (b) In the event that any of the relevant power factors referred to in paragraph (a) above cannot be provided in respect of a *generating unit*, the relevant *Generator* must reach a commercial arrangement under its *connection agreement* with the relevant *Network Service Provider*, or with another *Registered Participant*, for the supply of the deficit in *reactive power* as measured at that *generating unit's* terminals.

Power station	Generating units	Leading power factor
Gladstone	Units 1 to 4	0.99
Gladstone	Units 5 & 6	0.94
Collinsville	Units 1 to 5	0.95

9.37.11 [Deleted]

9.37.12 Voltage fluctuations (clause S5.1.5 of schedule 5.1)

For application in Queensland, clause S5.1.5 of schedule 5.1 of the *Rules* is replaced with the following:

"A *Network Service Provider* whose *network* is a Queensland transmission network or a Queensland distribution network must include conditions in *connection agreements* in relation to the permissible variation with time of the power generated or load taken by a *Registered Participant* to ensure that other *Registered Participants* are supplied with a power-frequency voltage which fluctuates to an extent that is less than the limit defined by the "Threshold of Perceptibility" or the "Threshold of Irritability" as the case may be for the conditions specified in the paragraph below, in Figure 1 of *Australian Standard AS2279*, Part 4.

A *Network Service Provider* whose *network* is a Queensland transmission network or a Queensland distribution network must ensure that voltage fluctuations caused by the switching or operation of *network plant* does not exceed the following amounts referenced to Figure 1 of *Australian Standard AS 2279*, Part 4:

- (1) Above 66kV:
 - (A) the "Threshold of Perceptibility" when all *network plant* is in service; and
 - (B) the "Threshold of Irritability" during any *credible contingency event* which is reasonably expected to be of short duration;
- (2) 66kV and below: the "Threshold of Irritability" when all *network plant* is in service.

The requirements of paragraphs (1) and (2) above do not apply to events such as switching of *network plant* to or from an abnormal state or to *network* faults which occur infrequently (ie. less than one event per day).

Where the *Rules* (other than this Part E) refer to clause S5.1.5(a) or (b) of schedule 5.1 of the *Rules* then, in so far as that reference relates to a *Network Service Provider* whose *network* is a Queensland transmission network or a Queensland distribution network or to a *network* which is a Queensland transmission network or a Queensland distribution network, that reference must be construed as a reference to the immediately preceding paragraph.

A *Network Service Provider* whose *network* is a Queensland transmission network or a Queensland distribution network is responsible only for excursions in voltage fluctuations outside the range defined in the first two paragraphs of this clause S5.1.5 caused by *network plant* and the pursuit of all reasonable measures available under the *Rules* to remedy the situation in respect of *Registered Participants* whose *plant* does not perform to the standards defined by clause S5.2.5.2(c) of schedule 5.2 of the *Rules* for *Generators*, the standards set out in the first paragraph below for *Customers* and the standards set out in the second paragraph below for *Market Network Service Providers*.

Each *Customer* must ensure that variations in current at each of its *connection points* including those arising from the *energisation*, de-energisation or operation of any *plant* within or supplied from the *Customer's substation* are such that the

contribution to the magnitude and rate of occurrence of the resulting *voltage* disturbance does not exceed the following limits:

- (i) where only one *Customer* has a *connection point* associated with the point of *supply*, the limit is 80% of the threshold of perceptibility set out in Figure 1 of *Australian Standard AS2279*, Part 4; or
- (ii) where two or more *Distribution Network Service Providers* or *Customers* causing *voltage* fluctuations have a *connection point* associated with a point of *supply*, the threshold of perceptibility limit is to be shared in a manner to be agreed between the *Distribution Network Service Provider* and the *Registered Participant* in accordance with *good electricity industry practice* that recognises the number of *Registered Participants* in the vicinity that may produce *voltage* fluctuations.

Each *Market Network Service Provider* must ensure that variations in current at each of its *connection points* arising from the *energisation*, de-energisation or operation of any of its *plant* involved in the provision of *market network services* are such that the contribution to the magnitude and rate of occurrence of the resulting *voltage* disturbance does not exceed the following limits:

- (i) where only one *Market Network Service Provider* has a *connection point* associated with the point of *supply*, the limit is 80% of the threshold of perceptibility set out in Figure 1 of *Australian Standard AS2279*, Part 4; or
- (ii) where two or more *Distribution Network Service Providers*, *Market Network Service Providers* or *Customers* causing *voltage* fluctuations have a *connection point* associated with a point of *supply*, the threshold of perceptibility limit is to be shared in a manner to be agreed between the *Distribution Network Service Provider* and the *Registered Participant* in accordance with *good electricity industry practice* that recognises the number of *Registered Participants* in the vicinity that may produce *voltage* fluctuations.

For these purposes, references to *Australian Standard AS2279* are references to that standard as it existed prior to it being superseded by AS/NZS 61000.3.7:2001."

Note

See clause 11.10.7.

9.37.13 [Deleted]

9.37.14 [Deleted]

9.37.15 [Deleted]

9.37.16 [Deleted]

9.37.17 [Deleted]

9.37.18 [Deleted]

9.37.19 Generating unit response to disturbances (clause S5.2.5.3 of schedule 5.2)

- (a) Despite the provisions of clause S5.2.5.3 of schedule 5.2 of the *Rules*, the *generating units* listed in the following table are not required to operate continuously outside the corresponding *frequency* band specified in column three of the following table:

Power station	Generating units	Frequency band
Gladstone	Units 1 to 6	47.5 Hz to 51.5 Hz
Collinsville	Units 1 to 4	48.0 Hz to 51 Hz
Collinsville	Unit 5	48.0 Hz to 52 Hz

- (b) **[Deleted]**

- (b1) **[Deleted]**

9.37.20 [Deleted]

9.37.21 Excitation control system (clause S5.2.5.13 of schedule 5.2)

- (a) For each of the *generating units* listed in the following table:
- (1) the application of clause S5.2.5.13(a) of schedule 5.2 of the *Rules* is modified by amending it to ensure that the short-time average *generating unit* stator *voltage* at highest rated power output level is not required to be more than 5% above nominal stator *voltage*; and
 - (2) the application of clause S5.2.5.13(b) of schedule 5.2 of the *Rules* is modified by deleting the words “all operating conditions” and replacing them with the words “all normal operating conditions and any *credible contingency event*”.

Power station	Generating units
Gladstone	Units 1 to 6
Collinsville	Units 1 to 5

- (b) **[Deleted]**
- (c) **[Deleted]**
- (d) For Collinsville Power Station, any variation to the minimum performance requirements specified in clause S5.2.5.13 of schedule 5.2 of the *Rules* is to be limited to figures agreed with the *Network Service Provider* to whose *network* the Collinsville Power Station is *connected*.
- (e) A *Generator* whose *generating unit* is situated in Queensland must ensure that each new *synchronous generating unit* of greater than 100MW is fitted with a *static excitation system* or some other *excitation control system* which will provide *voltage* regulation to within 0.5% of the selected setpoint value unless otherwise agreed with the relevant *Network Service Provider*.

Note

See clause 11.10.7.

9.37.22 [Deleted]

9.37.23 Annual forecast information for planning purposes (schedule 5.7)

Each *Registered Participant* that has a *connection point* to a Queensland *transmission network* must submit to the relevant Queensland *Transmission Network Service Provider* a forecast of the annual *energy* consumption associated with each *connection point* together with the information set out in schedule 5.7 of the *Rules*.

9.38 Transitional Arrangements for Chapter 6 - Network Pricing

9.38.1 [Deleted]

9.38.2 [Deleted]

9.38.3 [Deleted]

9.38.4 Interconnectors between regions

For the purposes of the *Rules*, the *interconnector* between Armidale in New South Wales and Tarong in Queensland, to the extent that it forms part of the Queensland system, is deemed to be a *regulated interconnector*.

9.38.5 Transmission pricing for exempted generation agreements

- (a) Notwithstanding the provisions of Chapter 6, the amounts payable for *transmission services* in respect of a *generating system* or a *load* the subject of an exempted generation agreement by a *Generator* or *Customer* which is referred to in an exempted generation agreement, or the relevant State Electricity Entity nominated pursuant to clause 9.34.6(a), as the case may be, will be the amounts payable under the *connection agreement* in respect of that *generating system* or *load*.
- (b) If the amounts payable for *transmission services* under clause 9.38.5(a) differ to those that would have been payable if the amounts had been calculated in accordance with the provisions of Chapter 6 (as modified by this clause 9.38) then the amount of that difference is to be recovered in accordance with clause 6.5.6(a).
- (c) For the purpose of clause 9.38.5(b), the amount of any difference is to be recovered from *Transmission Customers* located in Queensland and connected to the Queensland system and is not otherwise to be taken into account in determining *Transmission Customer common service charges* under clause 6.5.6(a).
- (d) For the application of clause 9.38.5(a) to the *generating system* at Gladstone Power Station and the *load* at the Boyne Island aluminium smelter, the *connection agreement* referred to is the Interconnection and Power Pooling Agreement dated 30 March 1994 between the owners of the Gladstone Power Station and the Queensland Electricity Commission (as amended prior to 18 January 1998), or any *connection agreements* entered into in respect of those *connection points* in replacement of that agreement, provided that in the latter case any difference to be recovered pursuant to clause 9.38.5(b) must not exceed that which would have applied had that agreement continued.
- (e) Clause 9.38.5(a) continues to apply in respect of the *generating system* at Gladstone Power Station and the *load* at the Boyne Island aluminium smelter despite the entering into *connection agreements* in replacement of the Interconnection and Power Pooling Agreement as envisaged in clause 9.38.5(d).

9.39 Transitional Arrangements for Chapter 7 - Metering

9.39.1 Metering installations to which this clause applies

- (a) The transitional *metering* provisions set out in schedule 9G1 apply to Queensland in respect of Chapter 7.
- (b) Notwithstanding the application of schedule 9G1 in Queensland, the transitional arrangements set out in this clause 9.39 apply in relation to a *metering installation* (including a *check metering installation*) that meets the following criteria:

- (1) at 1 October 1997, the *metering installation*:
 - (i) was a *metering installation* to which the Queensland Grid Code applied; and
 - (ii) complied with the metering requirements of the Queensland Grid Code; and
- (2) excepting normal repair and maintenance, no part of the *metering installation* has been modified or replaced since 1 October 1997.

9.39.2 [Deleted]

9.39.3 [Deleted]

9.39.4 [Deleted]

9.39.5 [Deleted]

9.40 Transitional Arrangements for Chapter 8 - Administration Functions

9.40.1 [Deleted]

9.40.2 [Deleted]

9.40.3 [Deleted]

9.41 [Deleted]

Schedule 9E1 Exempted Generation Agreements

Station Name	Owner or Operator of Station	Date of Agreement
Gladstone Power Station	GPS Participants ¹	30 March 1994
Collinsville Power Station	Collinsville Participants ²	30 November 1995
Townsville Power Station	Transfield Townsville Pty Ltd A.C.N. 075 001 991	2 August 1996
Oakey Power Station	Oakey Power Pty Ltd A.C.N. 075 258 114	10 September 1996
Mt Stuart Power	Origin Energy Mt Stuart, a general partnership between Origin Energy	5 August 1996

Station Name	Owner or Operator of Station	Date of Agreement
Station	Mt Stuart BV (ARBN 079 232 572) & Origin Energy Australia Holdings BV (ARBN 079 234 165)	
Various Sugar Mills	Queensland Sugar Power Pool Pty Ltd A.C.N. 072 003 537	21 December 1995
Somerset Dam Hydro	Hydro Power Pty Ltd A.C.N. 010 669 351	1 June 1996
Browns Plains Landfill Gas	EDL LFG (QLD) Pty Ltd A.C.N. 071 089 579 and Energex Limited A.C.N. 078 849 055	31 July 1996

¹ GPS Participants Each of:
GPS Power Pty Ltd, A.C.N. 009 103 422;
GPS Energy Pty Ltd, A.C.N. 063 207 456;
Sunshine State Power B.V., A.R.B.N. 062 295 425;
Sunshine State Power (No 2) B.V., ARBN 063 382 829;
SLMA GPS Pty Ltd, A.C.N. 063 779 028;
Ryowa II GPS Pty Ltd, A.C.N. 063 780 058; and
YKK GPS (Queensland) Pty Ltd, A.C.N. 062 905 275.

² Collinsville Participants Each of:
Transfield Collinsville Pty Ltd, A.C.N. 058 436 847;
and
Transfield Services Collinsville B.V., A.R.B.N. 070 968 606.

Part F Jurisdictional Derogations for Tasmania

9.42 Definitions and interpretation

9.42.1 Definitions

For the purposes of this Part F:

- (a) a word or expression defined in the glossary in chapter 10 has the meaning given to it in the glossary, unless it is referred to in column 1 of the following table; and

- (b) a word or expression referred to in column 1 of the following table has the meaning given to it in column 2 of the table:

Column 1	Column 2
Aurora	Aurora Energy Pty Ltd (ABN 85 082 464 622).
Basslink	The project for the interconnection, by means of a DC electricity transmission link, of the Victorian and Tasmanian <i>transmission systems</i> .
ESI Act	The <i>Electricity Supply Industry Act 1995</i> (Tas).
George Town Substation	The electricity substation located on the land comprised in Certificate of Title Volume 34076 Folio 1.
Hydro Tasmania	The Hydro-Electric Corporation (ABN 48 072 377 158).
Minister	The Minister for the time being responsible for administering the <i>ESI Act</i> .
Tasmanian Code	The Tasmanian Electricity Code issued under section 49A of the <i>ESI Act</i> .
Tasmanian Code Participant	A person who is a Code Participant within the meaning of the <i>Tasmanian Code</i> .
Tasmanian Electricity Regulator	The office of the Regulator established pursuant to section 5 of the <i>ESI Act</i> .
Tasmanian Network Service Provider	A person who is a <i>Network Service Provider</i> in respect of a <i>network</i> located in Tasmania (including the <i>Network Service Provider</i> in respect of Basslink).
Transend	Transend Networks Pty Limited (ABN 57 082 586 892).
Transition Date	The date on and from which section 6 of the <i>Electricity - National Scheme (Tasmania) Act 1999</i> commences.

9.42.2 Interpretation

In this Part F, references to Tasmania do not include King Island or Flinders Island unless the context otherwise requires.

9.42.3 National grid, power system and related expressions

Notwithstanding anything else in the *Rules*, but subject to the other provisions of this Part F, on and from the Transition Date:

- (a) the *connected transmission systems* and *distribution systems* located in Tasmania are to be treated as forming part of the *national grid* and the interconnected *transmission* and *distribution networks*; and
- (b) the electricity power system located in Tasmania, including associated *generation* and *transmission* and *distribution networks* for the *supply* of electricity, is to be treated as forming part of the *power system* and the electricity system,

even if they are not *connected* to a *network* or *networks* in other *participating jurisdictions*.

9.43 [Deleted]

9.44 Transitional arrangements for Chapter 2 – Registered Participants and Registration - Customers (clause 2.3.1(e))

For the purposes of clause 2.3.1(e), and for the purposes of clause 2.4.2(b) in so far as it relates to *Customers*, a person satisfies the requirements of Tasmania for classification of a *connection point* of that person if that person is a *retailer* or is a contestable customer within the meaning of the ESI Act in respect of that *connection point*.

9.45 Tasmanian Region (clause 3.5)

Notwithstanding Chapter 2A, the State of Tasmania is, and must be, one *region* and that *region* must not include any areas which fall outside of the State of Tasmania.

9.47 Transitional arrangements for Chapter 5- Network Connection

9.47.1 Existing Connection Agreements

The following agreements are each to be taken to be a *connection agreement* for the purposes of clause 5.2:

- (a) the Connection Agreement dated 1 July 1998 between Aurora and Hydro Tasmania;
- (b) the Connection and Network Services Agreement dated 1 July 1998 between Transend and Aurora;
- (c) the Connection and Network Services Agreement dated 1 July 1998 between Transend and Hydro Tasmania;

- (d) the Basslink Connection Agreement dated 28 January 2000 between National Grid International Limited and Transend; and
- (e) any other connection agreement entered into prior to the Transition Date in accordance with the *Tasmanian Code*.

9.48 Transitional arrangements - Transmission and Distribution Pricing

9.48.4A Ring fencing

On the AER's assumption of responsibility for the economic regulation of *distribution services* in Tasmania, the following guidelines (as amended or substituted from time to time) will be taken to be distribution ring-fencing guidelines issued by the AER under Rule 6.17:

- (1) *Guideline for Ring-fencing in the Tasmanian Electricity Supply Industry* (dated October 2004); and
- (2) *Electricity Distribution and Retail Accounting Ring-fencing Guidelines: Electricity Guideline No 2.2, Issue No 5, March 2011*.

Note:

The AER will assume responsibility for the economic regulation of *distribution services* on the transfer of regulatory responsibility under clause 11.14.4.

9.48.4B Uniformity of tariffs for small customers

- (a) In making a distribution determination or approving a *pricing proposal* for a Tasmanian *Distribution Network Service Provider*, the AER must ensure that distribution tariffs for small customers of a particular class are uniform regardless of where in mainland Tasmania the customer is supplied with electricity.
- (b) In this clause, *small customer* has the same meaning as under the *National Energy Retail Law (Tasmania) Regulations 2012*.

9.48.5 Transmission network

For the purpose of the *Rules*, a *network* operating at "extra high voltage" (as that term is defined in the *ESI Act*) is deemed to be a *transmission network*.

9.48.6 Deemed regulated interconnector

For the purposes of the *Rules*, any *interconnector* between *regions* in Tasmania in existence when those *regions* are established, to the extent that it forms part of the *power system* in Tasmania, is deemed to be a *regulated interconnector*.

Part G Schedules to Chapter 9

Schedule 9G1 Metering Transitional Arrangements

1. Introduction

- (a) The following minimum requirements apply in respect of *metering installations* commissioned before 13 December 1998.
- (b) **[Deleted]**

2. **[Deleted]**

3. General Principle

The general principle is that *meters* are required and a *metering installation(s)* capable of recording half-hour *energy* flows and of providing electronic data for transfer to the *metering database* is to be in place for each *Market Participant's connection point(s)* before the *Market Participant* is permitted to participate in the *market*, and there will be no relaxation of this principle in the *jurisdictional derogations*.

4. **[Deleted]**

5. Accuracy Requirements

5.1 Existing Metering Installations Transitional Exemptions

In addition to those allowances in clause S7.2.2 of schedule 7.2 - “Metering installations commissioned prior to 13 December 1998”, the following conditions/exemptions apply:

- (a) For *Generators*, *generated* quantities together with estimates for *generating unit* auxiliary loads may be used provided there is an agreed method with *NEMMCO* for determining *sent-out* energy. [refer to clause 7.3.2]
- (b) The *check metering* requirements of the *Rules* do not have to be met for Type 1 *metering installations*. A minimum of partial *check metering* is required for Types 1 and 2 *metering installations*. [refer to clause S7.2.4 of schedule 7.2 of Chapter 7]
- (c) Joint use of secondary circuits is permitted for Type 1 *metering installations*. [refer to cl.S7.2.6.1(a) of schedule 7.2 of Chapter 7]

5.2 **[Deleted]**

6. **[Deleted]**

7. **[Deleted]**

8. **[Deleted]**

9. **[Deleted]**

10. **[Deleted]**

CHAPTER 10

10. Glossary

AARR

The *aggregate annual revenue requirement* for prescribed transmission services.

abnormal conditions

A condition described in clause 4.2.3A(a).

above-standard system shared transmission service

A *shared transmission service* that exceeds the requirements referred to in paragraph (a)(1) or (2) of the definition of *negotiated transmission service* principally as a consequence of investments that have *system-wide benefits*.

ACCC

Australian Competition and Consumer Commission as established under the *Competition and Consumer Act 2010* (Cth).

acceptable credit criteria

The credit criteria defined in clause 3.3.3.

acceptable credit rating

The credit rating determined by AEMO under clause 3.3.4.

accepted restriction offer

A *restriction offer* accepted by AEMO in accordance with the *restriction offer procedures*.

access charge

For a *Distribution Network Service Provider* - in respect of access to:

- (a) *negotiated distribution services* which would have been *negotiated distribution services* regardless of the operation of clause 6.24.2(c), an amount described in clause 5.3AA(f)(4).
- (b) **[Deleted]**

access party

In respect of a service that is listed in column 1 of Table S7.5.1.1, the party listed in column 3 of Table S7.5.1.1.

access policy

An access policy as required for *large DCA services* under clause 5.2A.8.

access standard

Either an *automatic access standard* or a *negotiated access standard* for a particular technical requirement as recorded in a *connection agreement*.

Accredited Service Provider category

A category of registration of a *Metering Provider* established by AEMO under S7.2.2(b) as a consequence of requirements of a *participating jurisdiction* to install *metering installations*.

accumulated energy data

The data that results from the measurement of the flow of electricity in a power conductor where the data represents a period in excess of a *trading interval*. *Accumulated energy data* is held in the *metering installation*. The measurement is carried out at a *metering point*.

accumulated metering data

The *accumulated energy data*, once collected from a *metering installation*, is *accumulated metering data*. *Accumulated metering data* is held in a *metering data services database* and the *metering database*.

activate, activated, activation

The operation of a *generating unit* (other than a *scheduled generating unit*) at an increased *loading level* or reduction in demand (other than a *scheduled load*) undertaken in response to a request by AEMO in accordance with an *unscheduled reserve contract*.

active energy

A measure of electrical energy flow, being the time integral of the product of *voltage* and the in-phase component of current flow across a *connection point*, expressed in watthour (Wh).

active power

The rate at which *active energy* is transferred.

active power capability

The maximum rate at which *active energy* may be transferred from a *generating unit* to a *connection point* as specified or proposed to be specified in a *connection agreement* (as the case may be).

additional intervention claim

Has the meaning given in clause 3.12.2(k).

adequately damped

In relation to a *control system*, when tested with a step change of a feedback input or corresponding reference, or otherwise observed, any oscillatory response at a *frequency* of:

- (a) 0.05 Hz or less, has a damping ratio of at least 0.4;
- (b) between 0.05 Hz and 0.6 Hz, has a halving time of 5 seconds or less (equivalent to a damping coefficient -0.14 nepers per second or less); and
- (c) 0.6 Hz or more, has a damping ratio of at least 0.05 in relation to a *minimum access standard* and a damping ratio of at least 0.1 otherwise.

adjusted gross energy

The *energy* adjusted in accordance with clause 3.15.5 (for a *transmission network connection point*) or clause 3.15.5A (for a *virtual transmission node*) or clause 3.15.4 (for any other *connection point*).

adjusted locational component

Has the meaning given to it in clause 6A.23.3(b).

adjusted non-locational component

Has the meaning given to it in clause 6A.23.3(e).

administered floor price

A price floor to apply to a *regional reference price*, with the levels of the price floor being administered under clause 3.14.1 and the circumstances under which it can be invoked by AEMO being determined as set out in clause 3.14.2.

administered price cap

A price cap to apply to a *dispatch price*, *regional reference price* or *ancillary service price* as specified in clause 3.14.1.

administered price period

A period declared by AEMO, in accordance with clause 3.14.2, in which an *administered price cap* may be invoked.

adoptive jurisdiction

Has the meaning given in the *National Electricity Law*.

adverse system strength impact

An adverse impact, assessed in accordance with the *system strength impact assessment guidelines*, on the ability under different operating conditions of:

- (a) the *power system* to maintain system stability in accordance with clause S5.1a.3; or

- (b) a *generating system* or *market network service facility* forming part of the power system to maintain stable operation including following any *credible contingency event* or *protected event*,

so as to maintain the power system in a *secure operating state*.

Adviser

The Dispute Resolution Adviser specified in clause 8.2.2(a).

Adviser referral notice

A notice referring a dispute to the *Adviser* for the purposes of clause 8.2.5.

AEMC

The Australian Energy Market Commission, which is established under section 5 of the *Australian Energy Market Commission Establishment Act 2004* (SA).

AEMO

Means Australian Energy Market Operator Limited (ACN 072 010 327)

Note

Before its change of name, AEMO was known as NEMMCO.

AEMO advisory matter

A matter that relates to *AEMO*'s functions under the *National Electricity Law* and a matter in which *AEMO* has a role in schedules 5.1a, 5.1, 5.2, 5.3 and 5.3a.

AEMO co-ordinating centre

The control centre from which *AEMO* conducts *market* related activities and the coordination of the operation of the *national grid*.

AEMO intervention event

An event where *AEMO* intervenes in the *market* under the *Rules* by:

- (a) issuing a *direction* in accordance with clause 4.8.9; or
- (b) exercising the *reliability and emergency reserve trader* in accordance with rule 3.20 by:
 - (1) *dispatching scheduled generating units, scheduled network services or scheduled loads* in accordance with a *scheduled reserve contract*; or
 - (2) *activating loads or generating units* under an *unscheduled reserve contract*.

AEMO Member

A person appointed as a *Member* by *AEMO* to represent *AEMO* in accordance with clause 7.17.10(c).

AEMO power system security responsibilities

The responsibilities described in clause 4.3.1.

AER

The Australian Energy Regulator, which is established by section 44AE of the *Competition and Consumer Act 2010* (Cth).

affected participant's adjustment claim

Has the meaning given in clause 3.12.2(g)(3).

Affected Participant

- (a) In respect of a particular *direction* in an *intervention price trading interval*:
 - (1) a *Scheduled Generator* or *Scheduled Network Service Provider*:
 - (i) which was not the subject of the *direction*, that had its *dispatched* quantity affected by that *direction*; or
 - (ii) which was the subject of the *direction*, that had its *dispatched* quantity for other *generating units* or other services which were not the subject of that *direction* affected by that *direction*, however, the *Scheduled Generator* or *Scheduled Network Service Provider* is only an *Affected Participant* in respect of those *generating units* and services which were not the subject of that *direction*; or
 - (2) an *eligible person* entitled to receive an amount from AEMO pursuant to clause 3.18.1(b)(1) where there has been a change in flow of a *directional interconnector*, for which the *eligible person* holds units for the *intervention price trading interval*, as a result of the *direction*; and
- (b) in relation to the exercise of the *RERT* under rule 3.20:
 - (1) a *Scheduled Generator* or *Scheduled Network Service Provider*:
 - (i) whose *plant* or *scheduled network service* was not *dispatched* under a *scheduled reserve contract*, that had its *dispatched* quantity affected by the *dispatch* of *plant* or *scheduled network service* under that *scheduled reserve contract*; and
 - (ii) who was not the subject of *activation* under an *unscheduled reserve contract*, that had its *dispatched* quantity affected by the *activation* of *generating units* or *loads* under that *unscheduled reserve contract*;
 - (2) a *Scheduled Generator* or *Scheduled Network Service Provider* whose *plant* or *scheduled network service* was *dispatched* under a *scheduled reserve contract*, that had its *dispatched* quantity for other *generating*

units or other services which were not dispatched under the scheduled reserve contract affected by that dispatch of plant or scheduled network service under that scheduled reserve contract, however, the Scheduled Generator or Scheduled Network Service Provider is only an Affected Participant in respect of those generating units and services which were not dispatched under that scheduled reserve contract; or

- (3) *an eligible person entitled to receive an amount from AEMO pursuant to clause 3.18.1(b)(1) where there has been a change in flow of a directional interconnector, for which the eligible person holds units for the intervention price trading interval, as a result of the dispatch of plant or scheduled network service under a scheduled reserve contract or the activation of generating units or loads under an unscheduled reserve contract.*

aggregate annual revenue requirement

For *prescribed transmission services*, the meaning in clause 6A.22.1 and for any other service, the calculated total annual revenue to be earned by an entity for a defined class or classes of service.

aggregate payment due

The aggregate of the net amounts payable by AEMO to each of the *Market Participants* to whom payments are to be made in relation to *spot market transactions* or *reallocation transactions* in respect of a *billing period* determined in accordance with clause 3.15.22(c).

agreed capability

In relation to a *connection point*, the capability to receive or send out power for that *connection point* determined in accordance with the relevant *connection agreement*.

allowed rate of return

Has the meaning given to it by clause 6.5.2(a) or clause 6A.6.2(a), as the case may be.

allowed rate of return objective

Has the meaning given to it by clause 6.5.2(c) or clause 6A.6.2(c), as the case may be.

alternative control service

A *distribution service* that is a *direct control service* but not a *standard control service*.

alternative network constraint formulation

A *network constraint* equation formulation used by AEMO other than a *fully co-optimised network constraint formulation*.

Amending Rule

A Rule made by the AEMC under section 103 of the *National Electricity Law* on and from the date of commencement of the operation of that Rule, or parts of that Rule.

ancillary service fees

The fees determined by AEMO under Chapter 2 in relation to *ancillary services*.

ancillary service generating unit

A *generating unit* which has been classified in accordance with Chapter 2 as an *ancillary service generating unit*.

ancillary service load

A *market load* or *load* which has been classified in accordance with Chapter 2 as an *ancillary service load*.

ancillary service price

In respect of a *dispatch interval*, for a *market ancillary service*, the common clearing price for the *market ancillary service* determined in accordance with clause 3.9.

Ancillary Service Provider

A person who engages in the activity of owning, controlling or operating a *generating unit*, *load* or *market load* classified in accordance with Chapter 2 as an *ancillary service generating unit* or *ancillary service load*, as the case may be.

ancillary services

Market ancillary services and *non-market ancillary services*.

ancillary services agreement

An agreement under which an *NMAS provider* agrees to provide one or more *non-market ancillary services* to AEMO.

annual benchmarking report

Has the meaning given to it by clause 6.27 or clause 6A.31, as the case may be.

annual building block revenue requirement

The amount representing the revenue requirement of a *Transmission Network Service Provider* for each *regulatory year* of a *regulatory control period* calculated in accordance with clause 6A.5.4.

annual revenue requirement

An amount representing revenue for a *Distribution Network Service Provider*, for each *regulatory year* of a *regulatory control period*, calculated in accordance with Part C of Chapter 6.

annual service revenue requirement (or "ASRR")

Has the meaning set out in clause 6A.22.2.

apparent power

The square root of the sum of the squares of the *active power* and the *reactive power*.

applicable regulatory instruments

All laws, regulations, orders, licences, codes, determinations and other regulatory instruments (other than the *Rules*) which apply to *Registered Participants* from time to time, including those applicable in each *participating jurisdiction* as listed below, to the extent that they regulate or contain terms and conditions relating to access to a *network*, *connection to a network*, the provision of *network services*, *network service price* or *augmentation of a network*.

(1) New South Wales:

- (a) the *Electricity Supply Act 1995* (**ES Act**);
- (b) all regulations made and licences (**Licences**) issued under the ES Act;
- (c) the *Independent Pricing and Regulatory Tribunal Act 1992* (**IPART Act**);
- (d) all regulations and determinations made under the IPART Act;
- (e) all regulatory instruments applicable under the Licences; and
- (f) *Commercial Arbitration Act 2010*.

(2) Victoria:

- (a) the *Electricity Industry Act 2000* (**EI Act**);
- (b) all regulations made and licences (**Licences**) issued under the EI Act;
- (c) the *Essential Services Commission Act 2001* (**ESCV Act**);
- (d) all regulations and determinations made under the ESCV Act;
- (e) all regulatory instruments applicable under the Licences; and
- (f) the Tariff Order made under section 158A(1) of the *Electricity Industry Act 1993* and continued in effect by clause 6(1) of Schedule 4

to the *Electricity Industry (Residual Provisions) Act 1993*, as amended or varied in accordance with section 14 of the EI Act.

- (3) South Australia:
 - (a) the *Electricity Act 1996*;
 - (b) all regulations made and licences (**Licences**) issued under the Electricity Act;
 - (c) the *Essential Services Commission Act 2002* (**ESCSA Act**);
 - (d) all regulations and determinations made under the ESCSA Act;
 - (e) all regulatory instruments applicable under the Licences; and
 - (f) the Electricity Pricing Order made under section 35B of the Electricity Act.
- (4) Australian Capital Territory:
 - (a) the *Utilities Act 2000*;
 - (b) all regulations made and licences (**Licences**) issued under the Utilities Act;
 - (c) the *Independent Competition and Regulatory Commission Act 1997* (**ICRC Act**);
 - (d) all regulations and determinations made under the ICRC Act; and
 - (e) all regulatory instruments applicable under the Licences.
- (5) Queensland:
 - (a) the *Electricity Act 1994*;
 - (b) all regulations made and authorities and special approvals (**Licences**) granted under the Electricity Act;
 - (c) the *Queensland Competition Authority Act 1997* (**QCA Act**);
 - (d) all regulations and determinations made under the QCA Act;
 - (e) all regulatory instruments applicable under the Licences; and
 - (f) the *Gladstone Power Station Agreement Act 1993* and associated agreements.
- (6) Tasmania:
 - (a) the *Electricity Supply Industry Act 1995*;

- (b) all regulations made and licences (**Licences**) issued under the Electricity Supply Industry Act;
- (c) all regulatory instruments under the Electricity Supply Industry Act or the Licences (including, without limitation, determinations of the Tasmanian Electricity Regulator under the *Electricity Supply Industry (Price Control) Regulations*); and
- (d) the Tasmanian Electricity Code issued under section 49A of the Electricity Supply Industry Act.

application to connect

An application made by a *Connection Applicant* in accordance with rule 5.3 or rule 5.3A for *connection* to a *network* and/or the provision of *network services* or modification of a *connection* to a *network* and/or the provision of *network services*.

approved jurisdictional scheme

For a *Distribution Network Service Provider*, means a *jurisdictional scheme* in relation to which the AER:

- (a) has made a decision under clause 6.12.1(20);
- (b) has made a determination under clause 6.6.1A(e); or
- (c) is taken to have made a determination under clause 6.6.1A(f).

approved pass through amount

In respect of a *positive change event* for a *Transmission Network Service Provider*:

- (a) the amount which the AER determines should be passed through to *Transmission Network Users* under clause 6A.7.3(d)(2); or
- (b) the amount which the AER is taken to have determined under clause 6A.7.3(e)(1),

as the case may be.

In respect of a *positive change event* for a *Distribution Network Service Provider*:

- (a) the amount the AER determines should be passed through to *Distribution Network Users* under clause 6.6.1(d)(2); or
- (b) the amount the AER is taken to have determined under clause 6.6.1(e)(1),

as the case may be.

approved pricing proposal

A *pricing proposal* approved by the AER.

ASRR

The *annual service revenue requirement*.

asset exemption

Has the meaning given in clause 6.4B.1(a).

Asset Exemption Guidelines

Guidelines developed, maintained and *published* by the AER under clause 6.4B.1(c).

asynchronous generating unit

A *generating unit* that is not a *synchronous generating unit*.

attributable connection point cost share

Has the meaning set out in clause 6A.22.4.

attributable cost share

Has the meaning set out in clause 6A.22.3.

auction

A *settlement residue* auction held under clause 3.18.

auction amounts

All amounts:

- (a) payable by AEMO to *eligible persons* under *SRD agreements*; or
- (b) distributed to *Network Service Providers* under clause 3.18.4; or
- (c) recovered by AEMO under clause 3.18.4, clause 3.18.4A or the *auction rules*, including *auction expense fees*; or
- (d) payable by *eligible persons* to AEMO under *SRD agreements* including any margin referred to in clause 3.18.4A(b).

auction expense fees

The costs and expenses incurred by AEMO referred to in clause 3.18.4(b).

auction participation agreement

Has the meaning given in clause 3.18.1(a).

auction rules

The rules developed by AEMO under clause 3.18.3, as amended from time to time in accordance with that clause.

augmentation

Has the meaning given in the *National Electricity Law*.

augmentation technical report

A report on *augmentation* under rule 5.21.

Australian Standard (AS)

The most recent edition of a standard publication by Standards Australia (Standards Association of Australia).

Australian Government's National Greenhouse and Energy Reporting Framework

The reporting framework developed under the National Greenhouse and Energy Reporting Act 2007 (Cth).

Authority

Any government, government department, instrumentality, *Minister*, agency, statutory authority or other body in which a government has a controlling interest, and includes the *AEMC*, *AEMO*, the *AER* and the *ACCC* and their successors.

automatic access standard

In relation to a technical requirement of access, a standard of performance, identified in a schedule of Chapter 5 as an automatic access standard for that technical requirement, such that a *plant* that meets that standard would not be denied access because of that technical requirement.

automatic generation control system(AGC)

The system into which the *loading levels* from economic *dispatch* will be entered for *generating units* operating on automatic generation control in accordance with clause 3.8.21(d).

automatic reclose equipment

In relation to a *transmission line* or *distribution line*, the equipment which automatically recloses the relevant line's circuit breaker(s) following their opening as a result of the detection of a fault in the *transmission line* or the *distribution line* (as the case may be).

available capacity

The total MW capacity available for *dispatch* by a *scheduled generating unit*, *semi-scheduled generating unit* or *scheduled load* (i.e. maximum plant availability) or, in relation to a specified *price band*, the MW capacity within that *price band* available for *dispatch* (i.e. availability at each price band).

average electrical energy loss

The volume-weighted average of the *electrical energy losses* incurred in each *trading interval* over all *trading intervals* in a defined period of time

average loss factor

A multiplier used to describe the *average electrical energy loss* for electricity used or transmitted.

avoided Customer TUOS charges

The charges described in rule 5.3AA(h).

B2B Change Party

A person who has provided a change proposal to the *Information Exchange Committee* under clause 7.17.4(f) and is not otherwise a *B2B Party*.

B2B Communications

Communications between *B2B Parties* relating to end-users or *supply* to end-users provided for in the *B2B Procedures*.

B2B costs

The following costs incurred by *AEMO*:

- (a) the costs of the development of the *B2B Procedures*;
- (b) the costs of the establishment and operation of the *Information Exchange Committee* (including the engagement costs of specialist advisers), all of which must be set out in the budget prepared by the *Information Exchange Committee* pursuant to clause 7.17.7(d) and the *Information Exchange Committee Annual Report*; and
- (c) the operational costs associated with any service provided by *AEMO* to facilitate *B2B Communications* (including providing, maintaining, upgrading and operating a *B2B e-Hub*).

B2B Data

Data relating to *B2B Communications*.

B2B Decision

A decision of *AEMO* to approve or not approve an *Information Exchange Committee Recommendation*.

B2B Determination Dispute

A dispute in relation to either a *B2B Decision* or an *Information Exchange Committee Recommendation*.

B2B e-Hub

An electronic information exchange platform provided, maintained and operated by *AEMO* to facilitate *B2B Communications*.

B2B e-Hub Participant

A person who has been accredited by *AEMO* as a *B2B e-Hub Participant* under clause 7.17.2.

B2B factors

The following factors:

- (a) The reasonable costs of compliance by *AEMO* and *B2B Parties* with the *B2B Procedures* compared with the likely benefits from *B2B Communications*;
- (b) The likely impacts on innovation in and barriers to entry to the markets for services facilitated by advanced meters resulting from changing the existing *B2B Procedures*; and
- (c) The implementation timeframe reasonably necessary for *AEMO* and *B2B Parties* to implement systems or other changes required to be compliant with any change to existing *B2B Procedures*.

B2B Party

Distribution Network Service Providers, retailers, Local Retailers, Metering Coordinators, Metering Providers, Metering Data Providers, Embedded Network Managers and other Third Party B2B Participants.

B2B Principles

The following principles:

- (a) *B2B Procedures* should provide a uniform approach to *B2B Communications* in *participating jurisdictions*;
- (b) *B2B Procedures* should detail operational and procedural matters and technical requirements that result in efficient, effective and reliable *B2B Communications*;
- (c) *B2B Procedures* should avoid unreasonable discrimination between *B2B Parties*; and
- (d) *B2B Procedures* should protect the confidentiality of commercially sensitive information.

B2B Procedures

The *B2B Procedures* made under Part H with the content required under clause 7.17.3.

B2B Procedures Change Pack

A document consisting of:

- (a) a *B2B Proposal*;

- (b) a report setting out an overview of the likely impact of the *B2B Proposal* on *AEMO* and *B2B Parties*;
- (c) draft *B2B Procedures* (incorporating proposed changes in mark up, where appropriate); and
- (d) an issues paper explaining why the *B2B Proposal* is being presented.

B2B Proposal

A proposal for *B2B Procedures*, or a change to the *B2B Procedures*, which is the subject of consultation by the *Information Exchange Committee*.

bank bill rate

On any *day*, the rate determined by *AEMO* (having regard to such market indicators as *AEMO* in its discretion selects) to be the market rate as at 10.00 am on that *day* (or if not a *business day*, on the previous *business day*) for Australian dollar denominated bank accepted bills of exchange having a tenor of 30 *days*.

basic connection service

Has (in the context of Chapter 5A) the meaning given in clause 5A.A.1.

basic micro EG connection service

Has (in the context of Chapter 5A) the meaning given in clause 5A.A.1.

bid and offer validation data

Data submitted by *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* to *AEMO* in relation to their *scheduled loads*, *scheduled generating units*, *semi-scheduled generating units* and *scheduled market network services* in accordance with schedule 3.1.

billed but unpaid charges

For a *Distribution Network Service Provider*, *network charges* that have been billed to a *failed retailer* by the *Distribution Network Service Provider*, but that the *failed retailer* has not yet paid (whether before or after the relevant due date for payment).

billing period

The period of 7 *days* commencing at the start of the *trading interval* ending 12.30 am Sunday.

black start capability

A capability that allows a *generating unit*, following its *disconnection* from the *power system*, to be able to deliver electricity to either:

- (a) its *connection point*; or

- (b) a suitable point in the *network* from which *supply* can be made available to other *generating units*,

without taking *supply* from any part of the *power system* following *disconnection*.

black system

The absence of *voltage* on all or a significant part of the *transmission system* or within a *region* during a *major supply disruption* affecting a significant number of customers.

breaker fail

In relation to a *protection system*, that part of the *protection system* that protects a *Market Participant's facilities* against the non-operation of a circuit breaker that is required to open.

breaker fail protection system

A *protection system* that protects a *facility* against the non-operation of a circuit breaker that is required to open to clear a fault.

building block determination

The component of a distribution determination relevant to the regulation of *standard control services* (See rule 6.3).

building block proposal

For a *Distribution Network Service Provider*, the part of the provider's *regulatory proposal* relevant to the regulation of *standard control services* (See clause 6.3.1).

busbar

A common *connection point* in a *power station switchyard* or a *transmission network substation*.

business day

A day that is not:

- (a) a Saturday or Sunday; or
- (b) observed as a public holiday on the same day in each of the *participating jurisdictions* (except the Commonwealth).

calculated metering data

The *trading interval* data corresponding to the calculation of consumed *energy* for a type 7 *metering installation* in accordance with the *metrology procedure*. *Calculated metering data* is held in the *metering data services database* and the *metering database*.

call amount

The amount determined pursuant to the formula in clause 3.3.11 for the purposes of a *call notice* where the *outstandings* of a *Market Participant* exceed its *trading limit*.

call notice

A notice issued by AEMO pursuant to clause 3.3.11 where the *outstandings* of a *Market Participant* exceed its *trading limit*.

capacitor bank

Electrical equipment used to generate *reactive power* and therefore support *voltage* levels on *distribution* and *transmission lines* in periods of high *load*.

capacity reserve

At any time, the amount of surplus or unused generating capacity indicated by the relevant *Generators* as being available in the relevant timeframe minus the capacity requirement to meet the current forecast *load* demand, taking into account the known or historical levels of demand management.

capital expenditure criteria

For a *Transmission Network Service Provider* – the matters listed in clause 6A.6.7(c)(1)–(3).

For a *Distribution Network Service Provider* – the matters listed in clause 6.5.7(c)(1)–(3).

capital expenditure factors

For a *Transmission Network Service Provider* - the factors listed in clause 6A.6.7(e)(1)–(14).

For a *Distribution Network Service Provider* - the factors listed in clause 6.5.7(e)(1)–(12).

Capital Expenditure Incentive Guidelines

Guidelines made by the AER under clause 6.4A(b) or clause 6A.5A(b), as the case may be.

capital expenditure incentive objective

Has the meaning given to it by clause 6.4A(a) or clause 6A.5A(a), as the case may be.

capital expenditure objectives

For a *Transmission Network Service Provider* – the objectives set out in clause 6A.6.7(a).

For a *Distribution Network Service Provider* – the objectives set out in clause 6.5.7(a).

capital expenditure sharing scheme

A scheme developed and *published* by the AER in accordance with clause 6.5.8A or clause 6A.6.5A, as the case may be.

capital expenditure sharing scheme principles

Has the meaning given to it by clause 6.5.8A(c) or clause 6A.6.5(c), as the case may be.

capitalisation requirement

The requirement set out in clause S6.2.2A(e) or clause S6A.2.2A(e), as the case may be.

carbon dioxide equivalent intensity index

The index published by AEMO in accordance with clause 3.13.14(f).

carbon dioxide equivalent intensity index procedures

The procedures published by AEMO in accordance with clause 3.13.14(a).

cascading outage

The occurrence of an uncontrollable succession of *outages*, each of which is initiated by conditions (e.g. instability or overloading) arising or made worse as a result of the event preceding it.

categories of prescribed transmission services

For the purposes of pricing for *prescribed transmission services*:

- (a) *prescribed entry services*;
- (b) *prescribed exit services*;
- (c) *prescribed common transmission services*; and
- (d) *prescribed TUOS services*.

central dispatch

The process managed by AEMO for the *dispatch* of *scheduled generating units*, *semi-scheduled generating units*, *scheduled loads*, *scheduled network services* and *market ancillary services* in accordance with rule 3.8.

change

Includes amendment, alteration, addition or deletion.

changeover date

Has the meaning given in the *National Electricity Law*.

charging parameters

The constituent elements of a tariff.

check meter

An additional *meter* used as a source of *check metering data* for Type 1 and Type 2 *metering installations* as specified in schedule 7.4.

check metering data

The *energy data*, once collected from a *check metering installation*, is *check metering data*. *Check metering data* is held in a *metering data services database* and the *metering database*.

check metering installation

A *metering installation* that includes a *check meter* which is used as the source of *check metering data* for validation in the *settlements* process.

child connection point

The agreed point of *supply* between an *embedded network* and an electrical installation, *generating unit* or other *network connected* to that *embedded network*, for which a *Market Participant* is, or proposes to be, *financially responsible*.

clause 4.8.9 instruction

Has the meaning given in clause 4.8.9(a1)(2).

commercial arbitrator

A dispute resolution panel (within the meaning of section 2 of the *National Electricity Law*) established pursuant to clause 6A.30.2(b).

commitment

The commencement of the process of starting up and *synchronising* a *generating unit* to the *power system*.

communications interface

The modem and other devices and processes that facilitate the connection between the *metering installation* and the *telecommunications network* for the purpose of the *remote acquisition* of *energy data*.

compensation recovery amount

Has the meaning given in clause 3.15.8(a).

confidential information

In relation to a *Registered Participant* or *AEMO*, information which is or has been provided to that *Registered Participant* or *AEMO* under or in connection with the *Rules* and which is stated under the *Rules*, or by *AEMO*, the *AER* or the *AEMC*, to be *confidential information* or is otherwise confidential or commercially sensitive. It also includes any information which is derived from such information.

Note:

In the context of Chapter 5A, the above definition has been displaced by a definition specifically applicable to that Chapter. See clause 5A.A.1.

congestion information resource

The information resource developed, *published* and amended from time to time by *AEMO* in accordance with rule 3.7A.

congestion information resource guidelines

Guidelines developed and *published* by *AEMO* in accordance with rules 3.7A(k) to (m).

congestion information resource objective

The objective of the *congestion information resource* which is set out in rule 3.7A(a).

connect, connected, connection

To form a physical link to or through a *transmission network* (including to a *network connection asset* or a *dedicated connection asset* that is physically linked to that *transmission network*) or *distribution network*.

Note:

In the context of Chapter 5A, the above definition has been displaced by a definition specifically applicable to that Chapter. See clause 5A.A.1.

connection agreement

An agreement between a *Network Service Provider* and a *Registered Participant* or other person by which the *Registered Participant* or other person is *connected* to the *Network Service Provider's transmission* or *distribution network* and/or receives *transmission services* or *distribution services*. In some *participating jurisdictions*, the *Registered Participant* or other person may have one *connection agreement* with a *Network Service Provider* for *connection services* and another agreement with a different *Network Service Provider* for *network services* provided by the *transmission network*.

connection alteration

Has (in the context of Chapter 5A) the meaning given in clause 5A.A.1.

Connection Applicant

A person who wants to establish or modify *connection* to a *transmission network* or *distribution network* and/or who wishes to receive *network services* and who makes a *connection enquiry* as described in clause 5.3.2 or clause 5.3A.5.

In respect of establishing or modifying a *connection* to a *transmission network* of a *Primary Transmission Network Service Provider*, a *Connection Applicant* includes:

- (a) a person seeking to *connect* its *facilities* to a *dedicated connection asset* that is or will be *connected* to the *transmission network* of that *Primary Transmission Network Service Provider*; and
- (b) a person seeking to negotiate a *network operating agreement* for a *third party IUSA*.

Note

A person seeking access to *large DCA services* from a *third party DCA* under an *access policy* may also need to negotiate with the *Primary Transmission Network Service Provider*.

In the context of Chapter 5A, the above definition has been displaced by a definition specifically applicable to that Chapter. See clause 5A.A.1.

connection application

Has (in the context of Chapter 5A) the meaning given in clause 5A.A.1.

connection assets

For the *declared transmission system* of an *adoptive jurisdiction*, and a *distribution system*, those components of a *transmission or distribution system* which are used to provide *connection services*.

For other *transmission systems*, *dedicated connection assets* and *network connection assets*.

Note

A *third party DCA* is a *connection asset* but for the purpose of registration under Chapter 2 also constitutes a *transmission system*.

connection charge

Has the meaning given in clause 5A.A.1.

connection charge guidelines

Has the meaning given in clause 5A.E.3.

connection charge principles

Has the meaning given in clause 5A.E.1.

connection contract

Has (in the context of Chapter 5A) the meaning given in clause 5A.A.1.

connection offer

Has (in the context of Chapter 5A) the meaning given in clause 5A.A.1.

connection point

In relation to a *declared shared network* and a *distribution network* (other than an *embedded network*), the agreed point of supply established between *Network Service Provider(s)* and another *Registered Participant*, *Non-Registered Customer* or *franchise customer* and includes a *parent connection point*.

In relation to other *transmission networks*, the point at which power flows to or from the person or *identified user group connected* to the *transmission network* can be isolated from the *transmission network*. If there is more than one such point, the *Network Service Provider* and that person or *identified user group* will agree which point is the *connection point* in their *connection agreement*.

In relation to an *embedded network*, the *child connection point*, unless otherwise specified.

connection policy

Has the meaning given in clause 5A.A.1.

connection service

An *entry service* (being a service provided to serve a *Generator* or a group of *Generators*, or a *Network Service Provider* or a group of *Network Service Providers*, at a single *connection point*) or an *exit service* (being a service provided to serve a *Transmission Customer* or *Distribution Customer* or a group of *Transmission Customers* or *Distribution Customers*, or a *Network Service Provider* or a group of *Network Service Providers*, at a single *connection point*).

Note:

In the context of Chapter 5A and Part DA of Chapter 6, the above definition has been displaced by a definition specifically applicable to that Chapter. See clause 5A.A.1.

considered project

- (a) In respect of a *transmission network augmentation*, a project that meets the following criteria:
 - (1) the *Network Service Provider* has acquired the necessary land and easements;
 - (2) the *Network Service Provider* has obtained all necessary planning and development approvals;
 - (3) as applicable:

- (i) the *augmentation* project has passed the *regulatory investment test for transmission*;
 - (ii) the *augmentation* has passed the *regulatory investment test for distribution*;
 - (iii) in respect of a *transmission investment* which has not been subject to a *regulatory investment test for transmission* or the *regulatory investment test for distribution*, an intention to proceed with the project has been published in the *Network Service Provider's Transmission Annual Planning Report* or *Distribution Annual Planning Report* (as the case may be); or
- (4) construction has either commenced or the *Network Service Provider* has set a firm date for it to commence.
- (b) In respect of a *distribution network augmentation*, a project that meets the following criteria:
 - (1) the *Network Service Provider* has acquired the necessary land and easements;
 - (2) the *Network Service Provider* has obtained all necessary planning and development approvals; and
 - (3) construction has either commenced or the *Network Service Provider* has set a firm date for it to commence.

constrained off

In respect of a *generating unit*, the state where, due to a *constraint* on a *network*, the output of that *generating unit* is limited below the level to which it would otherwise have been *dispatched* by AEMO on the basis of its *dispatch offer*.

constrained on

In respect of a *generating unit*, the state where, due to a *constraint* on a *network* or in order to provide *inertia network services* under an *inertia services agreement* or *system strength services* under a *system strength services agreement*, the output of that *generating unit* is limited above the level to which it would otherwise have been *dispatched* by AEMO on the basis of its *dispatch offer*.

constraint, constrained

A limitation on the capability of a *network*, *load* or a *generating unit* such that it is unacceptable to either transfer, consume or generate the level of electrical power that would occur if the limitation was removed.

consulting party

The person who is required to comply with the *Rules consultation procedures*.

Consumer Member

A person appointed by *AEMO* as a *Member* to represent *small customers* in accordance with the *Rules* (including clause 7.17.10(b)).

contestable

- (a) In relation to *transmission services* a service which is permitted by the laws of the relevant *participating jurisdiction* to be provided by more than one *Transmission Network Service Provider* as a contestable service or on a competitive basis.
- (b) In relation to *distribution services*, a service which is permitted by the laws of the relevant *participating jurisdiction* to be provided by more than one *Distribution Network Service Provider* as a contestable service or on a competitive basis.

Note:

In the context of Chapter 5A, the above definition has been displaced by a definition specifically applicable to that Chapter. See clause 5A.A.1.

contestable IUSA components

Those components of the *identified user shared asset* that satisfy the criteria set out in clause 5.2A.4(c).

contingency capacity reserve

Actual *active* and *reactive energy* capacity, *interruptible load* arrangements and other arrangements organised to be available to be utilised on the actual occurrence of one or more *contingency events* to allow the restoration and maintenance of *power system security*.

contingency capacity reserve standards

The standards set out in the *power system security standards* to be used by *AEMO* to determine the levels of *contingency capacity reserves* necessary for *power system security*.

contingency event

An event described in clause 4.2.3(a).

contingent project

In relation to a distribution determination, a *proposed contingent project* that is determined by the *AER*, in accordance with clause 6.6A.1(b), to be a *contingent project* for the purposes of that distribution determination.

In relation to a *revenue determination*, a *proposed contingent project* that is determined by the *AER*, in accordance with clause 6A.8.1(b), to be a *contingent project* for the purposes of that *revenue determination*.

continuous uninterrupted operation

In respect of a *generating system* or operating *generating unit* operating immediately prior to a *power system* disturbance, not *disconnecting* from the *power system* except under its *performance standards* established under clauses S5.2.5.8 and S5.2.5.9 and, after clearance of any electrical fault that caused the disturbance, only substantially varying its *active power* and *reactive power* required by its *performance standards* established under clauses S5.2.5.11, S5.2.5.13 and S5.2.5.14, with all essential auxiliary and *reactive plant* remaining in service, and responding so as to not exacerbate or prolong the disturbance or cause a subsequent disturbance for other *connected plant*.

control centre

The *facilities* used by AEMO for managing *power system security* and administering the *market*.

control system

Means of monitoring and controlling the operation of the *power system* or equipment including *generating units connected* to a *transmission* or *distribution network*.

cooling off period

Has the same meaning as in rule 47(2) of the *NERR*.

Co-ordinated Universal Time (UTC)

The time as determined by the International Bureau of Weights and Measures and maintained under section 8AA of the *National Measurement Act*.

Co-ordinating Network Service Provider

A *Network Service Provider* appointed by multiple *Transmission Network Service Providers* to allocate AARR in accordance with rule 6A.29.

Cost Allocation Guidelines

For a *Transmission Network Service Provider* – the guidelines referred to in clause 6A.19.3.

For a *Distribution Network Service Provider* – the guidelines referred to in clause 6.15.3.

Cost Allocation Method

For a *Distribution Network Service Provider*, the Cost Allocation Method approved by the AER for that *Distribution Network Service Provider* under clause 6.15.4(c) and (d) as amended from time to time in accordance with clause 6.15.4(f) and (g).

Cost Allocation Methodology

For a *Transmission Network Service Provider*, the Cost Allocation Methodology approved or taken to be approved by the *AER* for that *Transmission Network Service Provider* under clauses 6A.19.4(c) and (d) as amended from time to time in accordance with clauses 6A.19.4(f) and (g).

Cost Allocation Principles

For a *Transmission Network Service Provider* – the principles set out in clause 6A.19.2.

For a *Distribution Network Service Provider* – the principles set out in clause 6.15.2.

cost reflective network pricing methodology or CRNP methodology

The cost allocation methodology set out in clause S6A.3.2.

CPI

As at a particular time, the Consumer Price Index: All Groups Index Number, weighted average of eight capital cities published by the Australian Bureau of Statistics for the most recent quarter that precedes that particular time and for which the index referred to has been published by the Australian Bureau of Statistics as at that time. If that index ceases to be published or is substantially changed, *CPI* will be such other index as is determined by the *AER* as a suitable benchmark for recording general movements in prices.

credible contingency event

An event described in clause 4.2.3(b), certain examples of which are set out in schedule 5.1.

credit support

For the purposes of Chapter 3—an obligation owed to *AEMO* by a third party supporting the obligations of a *Market Participant* and having the characteristics required by clause 3.3.2.

For the purposes of Chapter 6B—a security supporting the obligations of a *retailer* to a *Distribution Network Service Provider* under Chapter 6B.

credit support provider

The issuing party that assumes obligations to *AEMO* pursuant to a *credit support*.

cumulative price threshold

The threshold for imposition of an *administered price cap* as defined in clause 3.14.1.

current rating

The maximum current that may be permitted to flow (under defined conditions) through a *transmission line* or *distribution line* or other item of equipment that forms part of a *power system*.

current transformer (CT)

A *transformer* for use with *meters* and/or protection devices in which the current in the secondary winding is, within prescribed error limits, proportional to and in phase with the current in the primary winding.

Customer

A person who:

1. engages in the activity of purchasing electricity *supplied* through a *transmission or distribution system* to a *connection point*; and
2. is registered by AEMO as a *Customer* under Chapter 2.

customer authorised representative

A person authorised by a *retail customer* to request and receive information under Chapter 7 on the *retail customer's* behalf.

customer connection service

Has (in the context of Chapter 6B) the meaning given in clause 6B.A1.2.

Customer transmission use of system, Customer transmission use of system service

A service provided to a *Transmission Network User* for use of the *transmission network* for the conveyance of electricity that can be reasonably allocated to a *Transmission Network User* on a locational basis, but does not include *Generator transmission use of system services*.

date of issue

Has (in the context of Chapter 6B) the meaning given in clause 6B.A1.2.

day

Unless otherwise specified, the 24 hour period beginning and ending at midnight *Eastern Standard Time (EST)*.

declared NEM project

A project determined to be a declared NEM project under clause 2.11.1(ba) or 2.11.1(bd), for which there is special treatment in the timing of cost recovery.

declared network functions

Has the meaning given in the *National Electricity Law*.

declared shared network

Has the meaning given in the *National Electricity Law*.

declared transmission system

Has the meaning given in the *National Electricity Law*.

declared transmission system operator

Has the meaning given in the *National Electricity Law*.

decommission, decommit

In respect of a *generating unit*, ceasing to generate and *disconnecting* from a *network*.

dedicated connection asset

The apparatus, equipment, plant and buildings that:

- (a) are used for the purpose of *connecting* an *identified user group* to an existing *transmission network*;
- (b) are used exclusively by the *identified user group*;
- (c) can be electrically isolated from the *transmission network* without affecting the provision of *shared transmission services* to persons who are not members of the *identified user group*; and
- (d) are not:
 - (1) *network connection assets*;
 - (2) part of a *generating system*;
 - (3) part of a *distribution system*;
 - (4) part of a *transmission system* for which a *Market Network Service Provider* is registered under Chapter 2;
 - (5) part of a *Transmission Customer's facility* that utilises electrical *energy*; or
 - (6) part of the *declared transmission system* of an *adoptive jurisdiction*.

Note

Where a *Primary Transmission Network Service Provider* is registered in respect of a *dedicated connection asset* operating at *distribution voltage*, it will not be a *distribution system* and will constitute part of its *transmission system* for which it is registered. See definitions of *distribution system* and *transmission system*.

Dedicated Connection Asset Service Provider

A *Transmission Network Service Provider* to the extent that its *transmission system* or any part of it is classified as a *dedicated connection asset* in accordance with Chapter 2.

default dispatch bid

A *dispatch bid* made pursuant to clause 3.8.9.

default dispatch offer

A *dispatch offer* made pursuant to clause 3.8.9.

default event

An event defined as such in clause 3.15.21(a).

default notice

A notice issued by *AEMO* pursuant to clause 3.15.21(b)(1).

default rate

Has (in the context of Chapter 6B) the meaning given in clause 6B.A1.2.

defaulting Market Participant

A *Market Participant* in relation to which a *default event* has occurred.

delayed lower service

The service of providing, in accordance with the *market ancillary service specification*, the capability of controlling the level of *generation* or *load* associated with a particular *facility* in response to a change in the *frequency* of the *power system* beyond a threshold or in accordance with electronic signals from *AEMO* in order to lower that *frequency* to within the *normal operating frequency band*.

delayed raise service

The service of providing, in accordance with the *market ancillary service specification*, the capability of controlling the level of *generation* or *load* associated with a particular *facility* in response to a change in the *frequency* of the *power system* beyond a threshold or in accordance with electronic signals from *AEMO* in order to raise that *frequency* to within the *normal operating frequency band*.

delayed response capacity reserve

That part of the *contingency capacity reserve* capable of realisation within 5 minutes of a major *frequency* decline in the *power system* as described further in the *power system security standards*.

delayed service

A *delayed raise service* or a *delayed lower service*.

demand based price

A price expressed in dollars per kilowatt per time period or dollars per kilovolt ampere per time period.

demand management incentive scheme

A scheme developed and *published* by the AER under clause 6.6.3.

demand management incentive scheme objective

Has the meaning given to it by clause 6.6.3(b).

demand management innovation allowance mechanism

A mechanism developed and *published* by the AER under clause 6.6.3A.

demand management innovation allowance objective

Has the meaning given to it by clause 6.6.3A(b).

deprival value

A value ascribed to assets which is the lower of economic value or optimised depreciated replacement value.

designated pricing proposal charges

Any of the following:

- (a) charges for *designated pricing proposal services*;
- (b) *avoided Customer TUOS charges*;
- (c) charges for *distribution services* provided by another *Distribution Network Service Provider*, but only to the extent those charges comprise:
 - (1) charges incurred by that *Distribution Network Service Provider* for *designated pricing proposal services*; or
 - (2) charges for *standard control services*;
- (d) charges or payments specified in rule 11.39.

designated pricing proposal services

Any of the following services:

- (a) *prescribed exit services*;
- (b) *prescribed common transmission services*; and

(c) *prescribed TUOS services.*

de-synchronising/de-synchronisation

The act of *disconnection* of a *generating unit* from the *connection point* with the *power system*, normally under controlled circumstances.

direct control service

A *distribution service* that is a direct control network service within the meaning of section 2B of the Law.

Directed Participant

A *Scheduled Generator*, *Semi-Scheduled Generator*, *Market Generator*, *Market Ancillary Service Provider*, *Scheduled Network Service Provider* or *Market Customer* the subject of a *direction*.

direction

Has the meaning given in clause 4.8.9(a1)(1).

directional interconnector

Has the meaning given in clause 3.18.1(c).

Disclosee

In relation to a *Registered Participant*, a person to whom that *Registered Participant* discloses *confidential information*.

disconnect, disconnected, disconnection

The operation of switching equipment or other action so as to prevent the flow of electricity at a *connection point*.

Discretionary Member

A person appointed as a *Member* by AEMO to represent a class or classes of persons who have an interest in the *B2B Procedures* in accordance with the *Rules* (including clause 7.17.10(d)).

dispatch

The act of initiating or enabling all or part of the response specified in a *dispatch bid*, *dispatch offer* or *market ancillary service offer* in respect of a *scheduled generating unit*, *semi-scheduled generating unit*, a *scheduled load*, a *scheduled network service*, an *ancillary service generating unit* or an *ancillary service load* in accordance with rule 3.8, or a *direction* or operation of capacity the subject of a *reserve contract* or an instruction under an *ancillary services agreement* or to enable an *inertia network service* or *system strength service* as appropriate.

dispatch algorithm

The algorithm used to determine *central dispatch* developed by AEMO in accordance with clause 3.8.1(d).

dispatch bid

A notice submitted by a *Market Participant* to AEMO relating to the *dispatch* of a *scheduled load* in accordance with clause 3.8.7.

dispatch inflexibility profile

Data which may be provided to AEMO by *Market Participants*, in accordance with clause 3.8.19, to specify *dispatch inflexibilities* in respect of *scheduled loads* or *scheduled generating units* which are not *slow start generating units*.

dispatch instruction

An instruction given to a *Registered Participant* under clauses 4.9.2, 4.9.2A, 4.9.3, 4.9.3A, or to an *NMAS provider* under clause 4.9.3A.

dispatch interval

A period defined in clause 3.8.21(a1) in which the *dispatch algorithm* is run in accordance with clause 3.8.21(b).

dispatch level

Means:

- (1) for a *semi-dispatch interval*, the amount of electricity specified in a *dispatch instruction* as the *semi-scheduled generating unit's* maximum permissible *active power* at the end of the *dispatch interval* specified in the *dispatch instruction*; and
- (2) for a *non semi-dispatch interval*, an estimate of the *active power* at the end of the *dispatch interval* specified in the *dispatch instruction*.

dispatch offer

A *generation dispatch offer* or a *network dispatch offer*.

dispatch offer price

The price submitted by a *Scheduled Generator*, *Semi-Scheduled Generator* or a *Scheduled Network Service Provider* for a *price band* and a *trading interval* in a *dispatch offer*.

dispatch price

The price determined for each *regional reference node* by the *dispatch algorithm* each time it is run by AEMO.

dispatchable unit identifier

An unique reference label allocated by *AEMO* for each *scheduled generating unit*, *semi-scheduled generating unit*, *scheduled load*, and *scheduled network service*.

dispatched generating unit

A *scheduled generating unit* which has received instructions from *AEMO* in accordance with a *dispatch* schedule.

dispatched generation

The *generation* which has been *dispatched* as part of *central dispatch*.

dispatched Generator

A *Generator* who has received a *dispatch instruction* from *AEMO*.

dispatched load

The *load* which has been *dispatched* as part of *central dispatch*.

dispute management system

The dispute management system which each *Registered Participant* and *AEMO* must adopt in accordance with clause 8.2.3.

dispute resolution panel

A dispute resolution panel established pursuant to clause 8.2.6A.

distribution

Activities pertaining to a *distribution system* including the conveyance of electricity through that *distribution system*.

Distribution Annual Planning Report

A report prepared by a *Distribution Network Service Provider* under clause 5.13.2.

Distribution Confidentiality Guidelines

Guidelines made by the *AER* under clause 6.14A.

distribution connection assets

Those components of the *distribution system* which are used to provide *connection services* to a *Distribution Network User* or a group of *Distribution Network Users* or a *Network Service Provider* or a group of *Network Service Providers*.

distribution consultation procedures

The procedures set out in Part G of Chapter 6.

Distribution Customer

A Customer, Distribution Network Service Provider, Non-Registered Customer, franchise customer, or retail customer having a connection point with a distribution network.

distribution line

A power line, including underground cables, that is part of a distribution network.

distribution loss factor

An average loss factor calculated according to clause 3.6.3.

distribution losses

Electrical energy losses incurred in distributing electricity over a distribution network.

distribution network

A network which is not a transmission network.

distribution network connection point

A connection point on a distribution network.

Distribution Network Service Provider

A person who engages in the activity of owning, controlling, or operating a distribution system.

Distribution Network Service Provider Member

A person nominated and elected as a Member by Distribution Network Service Providers to represent Distribution Network Service Providers in accordance with the Rules (including clause 7.17.10(e)) and Information Exchange Committee Election Procedures.

Distribution Network User

A Distribution Customer or an Embedded Generator.

distribution network user access

The power transfer capability of the distribution network in respect of:

- (a) generating units or a group of generating units; and*
- (b) network elements,*

at a connection point which has been negotiated in accordance with rule 5.5.

Distribution Reliability Measures Guidelines

Guidelines made by the AER under clause 6.28.

Distribution Ring-Fencing Guidelines

The guidelines developed by the AER under clause 6.17.2.

distribution service

A service provided by means of, or in connection with, a *distribution system*.

distribution services access dispute

A dispute referred to in clause 6.22.1.

Distribution Service Classification Guidelines

Guidelines developed, maintained and *published* by the AER under clause 6.2.3A.

distribution standard control service revenue

Has the meaning given in rule 6.26(b)(2).

distribution system

A *distribution network*, together with the *connection assets* associated with the *distribution network*, which is *connected* to another *transmission or distribution system*.

Connection assets on their own, and *dedicated connection assets* in respect of which a *Primary Transmission Network Services Provider* is registered, do not constitute a *distribution system*.

Distribution System Operator

A person who is responsible, under the *Rules* or otherwise, for controlling or operating any portion of a *distribution system* (including being responsible for directing its operations during *power system* emergencies) and who is registered by AEMO as a *Distribution System Operator* under Chapter 2.

distribution use of system, distribution use of system service

A service provided to a *Distribution Network User* for use of the *distribution network* for the conveyance of electricity that can be reasonably allocated on a locational and/or *voltage* basis.

DMS

A *dispute management system*.

DMS Contact

A person appointed by a *Registered Participant* or AEMO pursuant to its *DMS* to be the first point of contact for the notification of disputes under clause 8.2.

DMS referral notice

A notice served on a *DMS Contact* pursuant to clause 8.2.4(a).

DRP

A dispute resolution panel.

dual function asset

Means any part of a *network* owned, operated or controlled by a *Distribution Network Service Provider* which operates between 66 kV and 220 kV and which operates in parallel, and provides support, to the higher voltage *transmission network* which is deemed by clause 6.24.2(a) to be a *dual function asset*. For the avoidance of doubt:

- (a) a *dual function asset* can only be an asset which forms part of a *network* that is predominantly a *distribution network*; and
- (b) an asset which forms part of a *network* which is predominantly a *transmission network* cannot be characterised as a *dual function asset*,

through the operation of clause 6.24.2(a).

due date for payment

Has (in the context of Chapter 6B) the meaning given in clause 6B.A1.2.

dynamic performance

The response and behaviour of *networks* and *facilities* which are *connected* to the *networks* when the *satisfactory operating state* of the *power system* is disturbed.

EAAP guidelines

The guidelines *published* by *AEMO* in accordance with clause 3.7C(k) that *AEMO* must comply with in preparing the *EAAP*.

EAAP principles

The principles referred to in clause 3.7C(b) that *AEMO* must comply with in preparing the *EAAP* and the *EAAP guidelines*.

Eastern Standard Time (EST)

The time which is set at 10 hours in advance of *Co-ordinated Universal Time*.

EFCS settings schedule

The schedules developed by *AEMO* for each *participating jurisdiction* in accordance with clause 4.3.2(h)(2) specifying the settings for *emergency frequency control schemes* affecting *regions* in the *participating jurisdiction*.

efficiency benefit sharing scheme

For a *Transmission Network Service Provider* – a scheme developed and *published* by the *AER* under clause 6A.5.

For a *Distribution Network Service Provider* – a scheme developed and *published* by the AER under clause 6.5.8.

efficiency benefit sharing scheme parameters

For an *efficiency benefit sharing scheme*, those parameters that are *published* by the AER in respect of that scheme pursuant to clause 6A.6.5(c).

electrical energy loss

Energy loss incurred in the production, transportation and/or use of electricity.

electrical sub-network

A part of the *national grid* determined by AEMO in accordance with clause 3.11.8.

Electricity Procedures

Procedures made under these *Rules* including:

- (a) *Retail Market Procedures*; and
- (b) procedures governing the operation of the *National Electricity Market*; and
- (c) *RoLR procedures* for electricity; and
- (d) procedures dealing with any other subject on which these *Rules* empower the making of procedures.

electronic communication system

Includes the electronic communication and the *electronic data transfer* system provided to *Registered Participants* by AEMO.

electronic data transfer

The transfer of data by electronic means from one location to another.

eligible pass through amount

In respect of a *positive change event* for a *Transmission Network Service Provider*, the increase in costs in the provision of *prescribed transmission services* that, as a result of that *positive change event*, the *Transmission Network Service Provider* has incurred and is likely to incur (as opposed to the revenue impact of that event) until:

- (a) unless paragraph(b) applies – the end of the *regulatory control period* in which the *positive change event* occurred; or
- (b) if the *transmission determination* for the *regulatory control period* following that in which the *positive change event* occurred does not make any allowance for the recovery of that increase in costs (whether or not in the forecast operating expenditure or forecast capital expenditure accepted

or substituted by the *AER* for that *regulatory control period*) – the end of the *regulatory control period* following that in which the *positive change event* occurred.

In respect of a *positive change event* for a *Distribution Network Service Provider*, the increase in costs in the provision of *direct control services* that, as a result of that *positive change event*, the *Distribution Network Service Provider* has incurred and is likely to incur (as opposed to the revenue impact of that event) until:

- (a) unless paragraph(b) applies – the end of the *regulatory control period* in which the *positive change event* occurred; or
- (b) if the distribution determination for the *regulatory control period* following that in which the *positive change event* occurred does not make any allowance for the recovery of that increase in costs (whether or not in the forecast operating expenditure or forecast capital expenditure accepted or substituted by the *AER* for that *regulatory control period*) – the end of the *regulatory control period* following that in which the *positive change event* occurred.

eligible person

Has the meaning given in clause 3.18.2(b).

embedded generating unit

A *generating unit* connected within a *distribution network* and not having direct access to the *transmission network*.

Embedded Generator

A *Generator* who owns, operates or controls an *embedded generating unit*.

Note:

In the context of Chapter 5A, the above definition has been displaced by the definition "embedded generator" specifically applicable to that Chapter. See clause 5A.A.1.

embedded network

A *distribution system*, connected at a *parent connection point* to either a *distribution system* or *transmission system* that forms part of the *national grid*, and which is owned, controlled or operated by a person who is not a *Network Service Provider*.

embedded network management services

Services that involve carrying out the roles, discharging the responsibilities and complying with the obligations of an *Embedded Network Manager* under the *Rules* and procedures authorised under the *Rules*.

Embedded Network Manager

A person:

- (a) who meets the requirements listed in schedule 7.7 and has been accredited and registered by *AEMO* as an *Embedded Network Manager*; and
- (b) who has not been deregistered by *AEMO* as an *Embedded Network Manager* under clause 7.4.4(d).

emergency frequency control scheme

Facilities for initiating automatic load shedding or automatic generation shedding to prevent or arrest uncontrolled increases or decreases in frequency (alone or in combination) leading to cascading outages or major supply disruptions.

emergency priority procedures

The procedures developed and *published* by *AEMO* in accordance with clause 7.8.5(b).

emission factor

The factor representing the amount of greenhouse gas emissions per unit of electricity (t CO₂-e/MWh) of energy produced by each *power station*.

enabled, enable

A *market ancillary service* is enabled when *AEMO* has selected the relevant *generating unit* or *load* for the provision of the *market ancillary service* and has notified the relevant *Market Participant* accordingly.

An *inertia network service* is enabled when *AEMO* has selected the relevant *inertia network service* and the service is providing *inertia* to an *inertia sub-network*.

An activity approved by *AEMO* under clause 5.20B.5(a) is enabled when *AEMO* has selected the relevant activity and the activity is performing and available in accordance with any conditions of that approval.

A *system strength service* is enabled when *AEMO* has selected the relevant *system strength service* and the service is contributing to the *three phase fault level* at the relevant *fault level node*.

enablement limit

In relation to any *market ancillary service offer*, the level of associated *generation* or *load* (in MW) above or below which no response is specified as being available.

enabling price

Has the meaning given in clause 3.8.7A(d).

energise/energisation

The act of operation of switching equipment or the start-up of a *generating unit*, which results in there being a non-zero *voltage* beyond a *connection point* or part of the *transmission* or *distribution network*.

energy

Active energy and/or *reactive energy*.

energy adequacy assessment projection (EAAP)

A projection of AEMO's assessment of *energy* availability that accounts for *energy constraints* for each month over a 24 month period, which is prepared and *published* in accordance with rule 3.7C and is measured as *unserved energy* for each *region*.

energy based price

A price expressed in cents per kilowatt hour of *energy*.

energy constrained scheduled generating unit

A *scheduled generating unit* in respect of which the amount of electricity it is capable of *supplying* on a *trading day* is less than the amount of electricity it would *supply* on that *trading day* if it were *dispatched* to its full nominated availability for the whole *trading day*.

energy constrained scheduled load

A *scheduled load* in respect of which the amount of electricity it can take in a *trading day*, if *normally off*, or it can *off-load*, if *normally on*, is *constrained*.

energy constraint

A limitation on the ability of a *generating unit* or group of *generating units* to generate *active power* due to the restrictions in the availability of fuel or other necessary expendable resources such as, but not limited to, gas, coal, or water for operating turbines or for cooling.

energy conversion model

The model that defines how the *intermittent* input energy source (such as wind) is converted by the *semi-scheduled generating unit* into electrical output. That model must contain the information set out in the guidelines *published* by AEMO in accordance with clause 2.2.7(d).

energy data

Interval energy data or *accumulated energy data*.

energy laws

Has the meaning given in section 2(1) of the *NERL*

energy ombudsman

Has the same meaning as in the *NERL*.

energy support arrangement

A contractual arrangement between a *Generator* or *Network Service Provider* on the one hand, and a customer or *participating jurisdiction* on the other, under which *facilities* not subject to an *ancillary services agreement* for the provision of *system restart ancillary services* are used to assist *supply* to a customer during a *major supply disruption* affecting that customer, or customers generally in the *participating jurisdictions*, as the case may be.

ENM conditions

An *Exempt Embedded Network Service Provider* must:

- (a) act as the *Embedded Network Manager* for the relevant *embedded network*; or
- (b) engage an *Embedded Network Manager* to provide *embedded network management services* for the relevant *embedded network*; and
- (c) enter into an agreement with an *Embedded Network Manager* for the provision of *embedded network management services* where that person has engaged an *Embedded Network Manager* under paragraph (b).

ENM conditions trigger

In relation to a *small customer*, when the *small customer* enters a *market retail contract* for the sale of energy at the relevant *child connection point* and the *cooling off period* in relation to that contract has expired.

In relation to a *large customer*, when the *large customer* has entered a contract for the sale of energy at the relevant *child connection point*.

ENM service level procedures

The procedures established by *AEMO* in accordance with clause 7.16.6A.

enquiry

Has (in the context of Chapter 5A) the meaning given in clause 5A.A.1

entry charge

The charge payable by an *Embedded Generator* to a *Distribution Network Service Provider* for an *entry service* at a *distribution network connection point*.

entry cost

For each *distribution network connection point*, the amount of the *aggregate annual revenue requirement* for all individual assets classified as *entry service* assets which provide *entry service* for the *connection point*.

entry service

A service provided to serve a *Generator* or a group of *Generators*, or a *Network Service Provider* or a group of *Network Service Providers*, at a single *connection point*.

EN wiring information

Panel layouts and wiring diagrams relevant to an *embedded network*.

estimated metering data

The estimated values of *accumulated metering data*, *interval metering data* or *calculated metering data* that have been prepared in accordance with the *metrology procedure*. *Estimated metering data* is held in a *metering data services database* and the *metering database*.

excitation control system

In relation to a *generating unit*, the automatic *control system* that provides the field excitation for the generator of the *generating unit* (including excitation limiting devices and any *power system stabiliser*).

Exempt Embedded Network Service Provider

A person who engages in the activity of owning, controlling or operating an *embedded network* under an exemption granted or deemed to be granted by the AER under section 13 of the *National Electricity Law* and clause 2.5.1(d).

exemption application

Has the meaning given in clause 6.4B.2(a).

exit charge

The charge payable by a *Distribution Customer* to a *Distribution Network Service Provider* for *exit service* at a *distribution network connection point*.

exit cost

For each *distribution network connection point*, the amount of the *aggregate annual revenue requirement* for all individual assets classified as *exit service* assets which provide *exit service* for the *connection point*.

exit service

A service provided to serve a *Transmission Customer* or *Distribution Customer* or a group of *Transmission Customers* or *Distribution Customers*, or a *Network Service Provider* or a group of *Network Service Providers*, at a single *connection point*.

expenditure for a restricted asset

Capital expenditure for a *restricted asset*, excluding capital expenditure for the refurbishment of that asset.

Expenditure Forecast Assessment Guidelines

Guidelines made by the *AER* under clause 6.4.5(a) or clause 6A.5.6(a), as the case may be.

extension

An *augmentation* that requires the *connection* of a power line or *facility* outside the present boundaries of the *transmission* or *distribution network* owned, controlled or operated by a *Network Service Provider*.

external administration default event

A *default event* of a type referred to in subparagraphs 3.15.21(a)(10) or (11).

extreme frequency excursion tolerance limits

In relation to the *frequency* of the *power system*, means the limits so described and specified in the *power system security standards*.

facilities

A generic term associated with the apparatus, equipment, buildings and necessary associated supporting resources provided at, typically:

- (a) a *power station* or *generating unit*;
- (b) a *substation* or *power station switchyard*;
- (c) a *control centre* (being a *AEMO control centre*, or a *distribution* or *transmission network control centre*);
- (d) facilities providing an *exit service*.

failed retailer

Has the meaning given in the *National Energy Retail Law*.

fast lower service

The service of providing, in accordance with the requirements of the *market ancillary service specification*, the capability of rapidly controlling the level of *generation* or *load* associated with a particular *facility* in response to the locally sensed *frequency* of the *power system* in order to arrest a rise in that *frequency*.

fast raise service

The service of providing, in accordance with the requirements of the *market ancillary service specification*, the capability of rapidly controlling the level of *generation* or *load* associated with a particular *facility* in response to the locally sensed *frequency* of the *power system* in order to arrest a fall in that *frequency*.

fault clearance time

In respect of a *fault type*, the time within which the *protection system* is designed, operated and maintained to clear a *short circuit fault* of that *fault type* within its protection zone.

fault level node

A location on a *transmission network* that AEMO determines is a *fault level node* in its determination of *system strength requirements* under clause 5.20C.1(a).

fault level shortfall

A shortfall in the *three phase fault level* typically provided at a *fault level node* in a *region* (having regard to typical patterns of *dispatched generation* in *central dispatch*) compared to the minimum *three phase fault level* most recently determined by AEMO for the *fault level node*.

fault level shortfall event

A *Transmission Network Service Provider* is required to make *system strength services* available under clause 5.20C.3 as a consequence of an assessment by AEMO under clause 5.20C.2(c) that there is a *fault level shortfall* at a *fault level node* in a *region* for which the *Transmission Network Service Provider* is the *System Strength Service Provider* or to cease making *system strength services* available under clause 5.20C.3 as a consequence of an assessment by AEMO under clause 5.20C.2(d) that a *fault level shortfall* at a *fault level node* has ceased and:

- (a) the *Transmission Network Service Provider* is required to provide, or cease providing, *system strength services* during the course of a *regulatory control period*; and
- (b) making *system strength services* available or ceasing to make *system strength services* available *materially* increases or *materially* decreases the *Transmission Network Service Provider's* costs of providing *prescribed transmission services*.

fault type

One of the following types of electrical fault:

- (a) three phase to ground fault;
- (b) three phase fault;
- (c) two phase to ground fault;
- (d) phase to phase fault; and
- (e) one phase to ground fault.

final statement

A statement issued by *AEMO* under clause 3.15.15 to a *Market Participant*.

financial year

A period commencing on 1 July in one calendar year and terminating on 30 June in the following calendar year.

financially responsible

In relation to any *market connection point*, a term which is used to describe the *Market Participant* which has either:

1. classified the *connection point* as one of its *market loads*;
2. classified the *generating unit connected* at that *connection point* as a *market generating unit*; or
3. classified the *network services* at that *connection point* as a *market network service*.

First-Tier Customer

A *Customer* which has classified any *load* as a *first-tier load* in accordance with Chapter 2.

first-tier load

Electricity purchased at a *connection point* directly and in its entirety from the *Local Retailer* and which is classified as a *first-tier load* in accordance with Chapter 2.

former Chapter 6A

Chapter 6A of the *Rules* as in force immediately prior to the commencement of Schedules 1, 2, 4, 5 and 6 of the *National Electricity Amendment (Transmission Connection and Planning Arrangements) Rule 2017 No.4* and which is applicable for a *declared transmission system* of an *adoptive jurisdiction* under clause 11.98.8, as amended from time to time.

framework and approach paper

A document prepared and issued as a framework and approach paper under clause 6.8.1.

franchise customer

A person who does not meet its local jurisdiction requirements to make it eligible to be registered by *AEMO* as a *Customer* for a *load*.

frequency

For alternating current electricity, the number of cycles occurring in each second. The term Hertz (Hz) corresponds to cycles per second.

frequency operating standard

The standards which specify the *frequency* levels for the operation of the *power system* set out in the *power system security standards*.

frequency response mode

The mode of operation of a *generating unit* which allows automatic changes to the generated power when the *frequency* of the *power system* changes.

fully co-optimised network constraint formulation

A *network constraint* equation formulation that allows AEMO, through direct physical representation, to control all the variables within the equation that can be determined through the *central dispatch* process. Some variables may not be included in accordance with clause 3.8.10(c) of the *Rules* if control of such variables would not materially enhance the security of the *power system* due to the small size of their coefficients.

funded augmentation

A *transmission network augmentation* for which the *Transmission Network Service Provider* is not entitled to receive a charge pursuant to Chapter 6A.

GELF parameters

Variable parameters specific to a *Generator Energy Limitation Framework (GELF)* which are defined in the *EAAP guidelines* and supplement the *GELF*, and are submitted by a *Scheduled Generator* and updated in accordance with rule 3.7C for the purpose of the *EAAP*.

general regulatory information order

Has the meaning given in the *National Electricity Law*.

generated

In relation to a *generating unit*, the amount of electricity produced by the *generating unit* as measured at its terminals.

generating plant

In relation to a *connection point*, includes all equipment involved in generating electrical *energy*.

generating system

- (a) Subject to paragraph (b), for the purposes of the *Rules*, a system comprising one or more *generating units*.
- (b) For the purposes of clause 2.2.1(e)(3), clause 4.9.2, Chapter 5 and a *jurisdictional derogation* from Chapter 5, a system comprising one or more *generating units* and includes auxiliary or *reactive plant* that is located on the *Generator's* side of the *connection point* and is necessary for the *generating system* to meet its *performance standards*.

generating unit

The plant used in the production of electricity and all related equipment essential to its functioning as a single entity.

generating unit minimum ramp rate requirement

- (a) in relation to a *generating unit* that has not been aggregated in accordance with clause 3.8.3, the lower of 3MW/minute or 3% of the maximum *generation* provided in accordance with clause 3.13.3(b); or
- (b) in relation to a *generating unit* that has been aggregated in accordance with clause 3.8.3, the lower of 3 MW/minute or 3% of the maximum *generation* provided in accordance with clause 3.13.3(b1),

expressed as MW/minute rounded down to the nearest whole number except where this would result in the nearest whole number being zero, in which case the generating unit minimum ramp rate requirement is 1 MW/minute.

generation

The production of electrical power by converting another form of energy in a *generating unit*.

generation centre

A geographically concentrated area containing a *generating unit* or *generating units* with significant combined generating capability.

generation dispatch offer

A notice submitted by a *Scheduled Generator* or *Semi-Scheduled Generator* to AEMO relating to the *dispatch* of a *scheduled generating unit* or a *semi-scheduled generating unit* in accordance with clause 3.8.6.

generation shedding

Disconnecting, or reducing the transfer of *active power* to the *power system* from, one or more *generating systems* or *generating units*.

Generator

A person who engages in the activity of owning, controlling or operating a *generating system* that is *connected* to, or who otherwise *supplies* electricity to, a *transmission* or *distribution system* and who is registered by AEMO as a *Generator* under Chapter 2.

For the purposes of Chapter 5, the term includes a person who is required or intends to register in that capacity or is a non-registered embedded generator (as defined in clause 5A.A.1) who has made an election under clause 5A.A.2(c).

Generator Energy Limitation Framework (GELF)

A description of the *energy constraints* that affect the ability of a *scheduled generating unit* to generate electricity prepared in accordance with the *EAAP guidelines*.

Generator transmission use of system, Generator transmission use of system service

A service provided to a *Generator* for:

- (a) **[Deleted]**
- (b) use of a *transmission investment* for the conveyance of electricity that can be reasonably allocated to a *Generator* on a locational basis.

global market ancillary service requirement

Has the meaning given to it by clause 3.8.1(e2).

good electricity industry practice

The exercise of that degree of skill, diligence, prudence and foresight that reasonably would be expected from a significant proportion of operators of *facilities* forming part of the *power system* for the *generation, transmission* or *supply* of electricity under conditions comparable to those applicable to the relevant *facility* consistent with *applicable regulatory instruments, reliability, safety* and environmental protection. The determination of comparable conditions is to take into account factors such as the relative size, duty, age and technological status of the relevant *facility* and the *applicable regulatory instruments*.

high voltage (HV)

A voltage greater than 1 kV.

identified need

The objective a *Network Service Provider* (or in the case of a need identified through joint planning under clause 5.14.1(d)(3) or clause 5.14.2(a), or clause 5.14.3(a), a group of *Network Service Providers*) seeks to achieve by investing in the *network*.

identified user group

One or more persons (other than a *Network Service Provider* who is not a *Market Network Service Provider*) who, from time to time, are *connected* to a *transmission network* at the same single *connection point*.

identified user shared asset

The apparatus, equipment, plant and buildings that:

- (a) are used for the purpose of *connecting* one or more *identified user groups* to an existing *transmission network*;

- (b) are not used exclusively by the relevant *identified user groups*;
- (c) under normal operating conditions, cannot be electrically isolated from the *transmission network* without affecting the provision of *shared transmission services* to persons who are not members of the relevant *identified user groups*; and
- (d) are not part of the *declared transmission system* of an *adoptive jurisdiction*.

Incoming Retailer

A retailer that:

- (a) has a contract with a customer at a *connection point*; and
- (b) has initiated the customer transfer process in accordance with the *Market Settlement and Transfer Solution Procedures*,

but which is not yet designated the *financially responsible Market Participant* for that *connection point*.

Independent Engineer

A person appointed under rule 5.4.

independent person

A person who:

- (a) is not a member, employee or member of staff of the *AER* or the *AEMC*;
- (b) is not a director or employee of *AEMO*;
- (c) is not a director or employee of, or partner in, a *Registered Participant*;
- (d) does not have a direct or indirect financial interest (whether as shareholder, partner or other equity participant) in any *Registered Participant* or a *related body corporate* of any *Registered Participant*, other than an interest of less than 0.1% of the net shareholders funds of that entity (as determined at the date the relevant person is appointed to carry out a function under the *Rules*); or
- (e) is not a director or employee of a *related body corporate* of any *Registered Participant*.

independently controllable two-terminal link

A *two-terminal link* through which the *power transfer* can be independently controlled within a range determined by the *power transfer capability* of the *two-terminal link* and the conditions prevailing in the rest of the *power system*.

indexed amount

As at any time and in relation to a dollar value that is expressly set out in Part C of Chapter 6 or Part C of Chapter 6A, that dollar value multiplied by CPI_a/CPI_b

where:

CPI_a is the *CPI* as at that time; and

CPI_b is the Consumer Price Index: All Groups Index Number, weighted average of eight capital cities published by the Australian Bureau of Statistics for the quarter ending 30 June 2006.

indicative pricing schedule

For a *Distribution Network Service Provider*, means the schedule of indicative price levels as referred to in paragraph 6.18.1A(e).

inertia

Contribution to the capability of the *power system* to resist changes in *frequency* by means of an inertial response from a *generating unit*, *network element* or other equipment that is electro-magnetically coupled with the *power system* and synchronised to the *frequency* of the *power system*.

inertia generating unit

A *generating unit* registered with AEMO under clause 5.20B.6(b).

inertia network service

A service for the provision of *inertia* to a *transmission system*.

inertia requirements

The *minimum threshold level of inertia* and the *secure operating level of inertia* for an *inertia sub-network* determined by AEMO under clause 5.20B.2(a).

inertia requirements methodology

The process AEMO uses to determine the *inertia requirements* for each *inertia sub-network*, published by AEMO under clause 5.20.1(a)(3).

inertia service payment

A payment by a *Transmission Network Service Provider* made under an *inertia services agreement* where:

- (a) the payment is made for *inertia network services* or *inertia support activities* to be made available or provided as a service to the *Transmission Network Service Provider* in its capacity as an *Inertia Service Provider* to (in the case of *inertia network services*) satisfy an obligation under clause 5.20B.4 or (in the case of *inertia support activities*) resulting in an adjustment to the

minimum threshold level of inertia or the *secure operating level of inertia*; and

- (b) the *inertia network services* are made available or provided, or the *inertia support activity* is undertaken, in accordance with:
 - (1) applicable technical specifications and performance standards approved by AEMO; and
 - (2) in the case of an *inertia support activity*, any conditions of AEMO's approval under clause 5.20B.5(a).

Inertia Service Provider

The *Inertia Service Provider* for an *inertia sub-network* as specified under clause 5.20B.4(a).

inertia services agreement

An agreement under which a person agrees to provide one or more *inertia network services* to an *Inertia Service Provider* or to undertake an *inertia support activity*.

inertia shortfall

A shortfall in the level of *inertia* typically provided in an *inertia sub-network* (having regard to typical patterns of *dispatched generation* in *central dispatch*) compared to the *secure operating level of inertia* most recently determined by AEMO for the *inertia sub-network*.

inertia shortfall event

A *Transmission Network Service Provider* is required to make *inertia network services* available under clause 5.20B.4 as a consequence of an assessment by AEMO under clause 5.20B.3(c) that there is an *inertia shortfall* in an *inertia sub-network* for which the *Transmission Network Service Provider* is the *Inertia Service Provider* or to cease making *inertia network services* available under clause 5.20B.4 as a consequence of an assessment by AEMO under clause 5.20B.3(d) that an *inertia shortfall* in the *inertia sub-network* has ceased and:

- (a) the *Transmission Network Service Provider* is required to provide, or cease providing, *inertia network services* during the course of a *regulatory control period*; and
- (b) making *inertia network services* available or ceasing to make *inertia network services* available *materially* increases or *materially* decreases the *Transmission Network Service Provider's* costs of providing *prescribed transmission services*.

inertia sub-network

A part of the *national grid* determined by AEMO in accordance with clause 5.20B.1.

inertia support activity

An activity approved by AEMO under clause 5.20B.5(a).

inflexible, inflexibility

In respect of a *scheduled generating unit*, *scheduled load* or *scheduled network service* for a *trading interval* means that the *scheduled generating unit*, *scheduled load* or *scheduled network service* is only able to be *dispatched* in the *trading interval* at a fixed *loading level* specified in accordance with clause 3.8.19(a).

Information Exchange Committee

The committee established under clause 7.17.6(a).

Information Exchange Committee Annual Report

The annual report prepared by the *Information Exchange Committee* in accordance with the *Information Exchange Committee Operating Manual* and the *Rules*.

Information Exchange Committee Election Procedures

The procedures of that title which set out the process for election of *Members*.

Information Exchange Committee Operating Manual

The manual of that title prepared by the *Information Exchange Committee* which sets out the processes pursuant to which the *Information Exchange Committee* operates.

Information Exchange Committee Recommendation

- (a) For the purposes of Chapter 8 and any applicable definitions, a decision made by the *Information Exchange Committee* under clauses 7.17.4(n)(1) or 7.17.4(n)(2).
- (b) Otherwise, a decision made by the *Information Exchange Committee* under clause 7.17.4(n)(2).

Information Exchange Committee Working Groups

The groups established by the *Information Exchange Committee* to assist with the *Information Exchange Committee Works Programme*.

Information Exchange Committee Works Programme

The work programme prepared by the *Information Exchange Committee* in respect of the development, implementation and operation of the *B2B Procedures* and other matters which are incidental to effective and efficient *B2B Communications*.

information guidelines

Guidelines made by the *AER* for the purpose of guiding a *Transmission Network Service Provider* in the submission of certified annual statements and other related information in accordance with clause 6A.17.2.

insolvency official

A receiver, receiver and manager, administrator, provisional liquidator, liquidator, trustee in bankruptcy or person having a similar or analogous function.

instrument transformer

Either a *current transformer (CT)* or a *voltage transformer (VT)*.

insurance event

An event for which the risk of its occurrence is the subject of insurance taken out by or for a *Transmission Network Service Provider*, for which an allowance is provided in the *total revenue cap* for the *Transmission Network Service Provider* and in respect of which:

- (a) the cost of the premium paid or required to be paid by the *Transmission Network Service Provider* in the *regulatory year* in which the cost of the premium changes is higher or lower than the premium that is provided for in the *maximum allowed revenue* for the provider for that *regulatory year* by an amount of more than 1% of the *maximum allowed revenue* for the provider for that *regulatory year*;
- (b) the risk eventuates and, as a consequence, the *Transmission Network Service Provider* incurs or will incur all or part of a deductible where the amount so incurred or to be so incurred in a *regulatory year* is higher or lower than the allowance for the deductible (if any) that is provided for in the *maximum allowed revenue* for the provider for that *regulatory year* by an amount of more than 1% of the *maximum allowed revenue* for the provider for that *regulatory year*;
- (c) insurance becomes unavailable to the *Transmission Network Service Provider*; or
- (d) insurance becomes available to the *Transmission Network Service Provider* on terms materially different to those existing as at the time the *revenue determination* was made (other than as a result of any act or omission of the provider which is inconsistent with good electricity industry practice).

intending load

A proposed purchase of electricity at a *connection point* (the location of which may be undefined) which is classified as an *intending load* in accordance with Chapter 2.

Intending Participant

A person who is registered by *AEMO* as an *Intending Participant* under Chapter 2.

interconnection, interconnector, interconnect, interconnected

A *transmission line* or group of *transmission lines* that *connects* the *transmission networks* in adjacent *regions*.

interconnector flow

The quantity of electricity in MW being transmitted by an *interconnector*.

interested party

- (a) In Chapter 5, a person including an end user or its *representative* who, in *AEMO's* opinion, has or identifies itself to *AEMO* as having an interest in relation to the *network* planning and development activities covered under Part B of Chapter 5 or in the determination of *plant standards* covered under clause 5.3.3(b2).
- (b) Despite the definition in (a) above, in clauses 5.16.4, 5.16.5, 5.17.4 and 5.17.5, the meaning given to it in clause 5.15.1.
- (c) In Chapter 6 or Chapter 6A, a person (not being a *Registered Participant* or *AEMO*) that has, in the *AER's* opinion, or identifies itself to the *AER* as having, an interest in the *Transmission Ring-Fencing Guidelines* or the *Distribution Ring-Fencing Guidelines*.
- (d) In Chapter 2, a person including an end user or its *representative* who, in *AEMO's* opinion, has or identifies itself to *AEMO* as having an interest in relation to the structure of *Participant fees*.
- (e) In Chapter 7, a person that has, in *AEMO's* opinion, or identifies itself to *AEMO* as having, an interest in the relevant procedure in Chapter 7.

interim statement

Has the meaning given in clause 3.3.11(a)(1).

intermediary

A person who is registered by *AEMO* as a *Generator* or a *Network Service Provider* instead of another person who, in the absence of an exemption under clause 2.9.3, would be required to be registered as such under the *Rules*.

intermittent

A description of a *generating unit* whose output is not readily predictable, including, without limitation, solar generators, wave turbine generators, wind turbine generators and hydro-generators without any material storage capability.

inter-network test

A test conducted for the purpose of verifying the magnitude of the *power transfer capability* of more than one *transmission network* in accordance with clause 5.7.7.

inter-network testing constraint

A *constraint* on a *transmission network* as contemplated by clause 5.7.7.

inter-regional

Between *regions*.

inter-regional loss factor

A *marginal loss factor* determined according to clause 3.6.1.

inter-regional losses

Has the meaning given to it by clause 3.6.1(a).

interruptible load

A *load* which is able to be *disconnected*, either manually or automatically initiated, which is provided for the restoration or control of the *power system frequency* by AEMO to cater for *contingency events* or shortages of *supply*.

interval energy data

The data that results from the measurement of the flow of electricity in a power conductor where the data is prepared and recorded by the *metering installation* in intervals which correspond to a *trading interval* or are submultiples of a *trading interval*. *Interval energy data* is held in the *metering installation*.

interval metering data

The *interval energy data*, once collected from a *metering installation*, is *interval metering data*. *Interval metering data* is held in a *metering data services database* and the *metering database*.

intervention price dispatch interval

A *dispatch interval* declared by AEMO to be an *intervention price dispatch interval* in accordance with clause 3.9.3.

intervention price trading interval

A *trading interval* in which AEMO has declared an *intervention price dispatch interval* in accordance with clause 3.9.3.

intervention settlement timetable

Has the meaning given in clause 3.12.1(b).

intra-regional

Within a *region*.

intra-regional loss factor

A *marginal loss factor* determined according to clause 3.6.2.

intra-regional losses

Has the meaning given to it by clause 3.6.2(a).

invoiced amount

The aggregate of the *settlement statements*, *interim*, *preliminary* or *final*, which at the time of issue of a *call notice* are unpaid by the *Market Participant*, notwithstanding that the usual time for issue or payment of those *settlement statements* has not been reached.

islanded, islanding

In relation to an *inertia sub-network* or a combination of two or more *inertia sub-networks*, temporary loss of synchronous *connection* to all adjacent parts of the *national grid*.

isolation

Electrical isolation of one part of a communication system from another but where the passage of *electronic data transfer* is not prevented.

jurisdictional derogation

Has the meaning given in the *National Electricity Law*. The jurisdictional derogations are included in Chapter 9.

jurisdictional electricity legislation

Has the meaning given to that term in the *National Electricity Law*.

jurisdictional metrology material

Jurisdictional metrology matters that are to be included in the *metrology procedure* for one or more of the *participating jurisdictions* and which is submitted by the *Ministers of the MCE* to *AEMO* under clause 7.16.4.

Jurisdictional NMI Standing Data schedule

The schedules described in clause 3.13.12(a), as amended from time to time in accordance with clause 3.13.12(b).

Jurisdictional NMI Standing Data suppliers

Registered Participants which are required by the relevant *participating jurisdiction's* legislation or licensing requirements to supply *NMI Standing Data* in respect of *connection points* in that *participating jurisdiction* to *AEMO*.

jurisdictional planning body

The entity nominated by the relevant *Minister of a participating jurisdiction* as having *transmission system* planning responsibility in that *participating jurisdiction*.

jurisdictional planning representative

The *representative* from the *jurisdictional planning body* for a *participating jurisdiction* nominated by that *jurisdictional planning body* as the *jurisdictional planning representative* for that *participating jurisdiction*.

Jurisdictional Regulator

The person authorised by a *participating jurisdiction* to regulate *distribution service* prices in that jurisdiction.

jurisdictional scheme

Has the meaning given in clause 6.18.7A(d).

jurisdictional scheme amounts

In respect of a *jurisdictional scheme*, the amounts a *Distribution Network Service Provider* is required under the *jurisdictional scheme obligations* to:

- (a) pay to a person;
- (b) pay into a fund established under an Act of a *participating jurisdiction*;
- (c) credit against charges payable by a person; or
- (d) reimburse a person,

less any amounts recovered by the *Distribution Network Service Provider* from any person in respect of those amounts other than under these *Rules*.

jurisdictional scheme eligibility criteria

The criteria specified in clause 6.18.7A(x)

jurisdictional scheme obligations

Obligations imposed on a *Distribution Network Service Provider* under:

- (a) an Act of a *participating jurisdiction* or an instrument, direction or order made under an Act of a *participating jurisdiction* (other than the *National Electricity Law* and these *Rules*); or
- (b) a condition of a distribution licence or authority held by a *Distribution Network Service Provider* in a *participating jurisdiction*.

Jurisdictional System Security Coordinator

A person appointed by the *Minister* of a *participating jurisdiction* in accordance with section 110 of the *National Electricity Law*.

lack of reserve (LOR)

A condition declared by AEMO under clause 4.8.4(b).

large customer

- (a) In a *participating jurisdiction* where the *National Energy Retail Law* applies as a law of that *participating jurisdiction*, has the meaning given in the *National Energy Retail Law*.
- (b) Otherwise, has the meaning given in *jurisdictional electricity legislation*, or a *retail customer* that is not a *small customer*.

large DCA service

A service provided by means of a *large dedicated connection asset*.

large DCA services access dispute

A dispute between a *Dedicated Connection Asset Service Provider* and a person seeking access to *large DCA services* as referred to in clause 5.5.1(c), that is for determination by a *commercial arbitrator* under rule 5.5.

large dedicated connection asset

A *dedicated connection asset* where the total route length for any power lines forming part of the *dedicated connection asset* is 30 kilometres or longer.

last jurisdictional scheme approval date

For an *approved jurisdictional scheme* of a *Distribution Network Service Provider*, means the later of:

- (a) if the *approved jurisdictional scheme* is a *jurisdictional scheme* referred to in clause 6.18.7A(e), 1 July 2010;
- (b) if the *approved jurisdictional scheme* is not a *jurisdictional scheme* referred to in paragraph (a), the date on which the AER determined under clause 6.18.7A(l) that the scheme was a *jurisdictional scheme*;
- (c) if the *approved jurisdictional scheme* is a *jurisdictional scheme* in respect of which:
 - (i) a request has been made under clause 6.18.7A(o) or an assessment initiated under clause 6.18.7A(r); and
 - (ii) the AER has determined under clause 6.18.7A(u) that the scheme should not cease to be a *jurisdictional scheme*,

the date of that determination; or

- (d) if in a previous *pricing proposal* the *Distribution Network Service Provider* provided information in respect of that *approved jurisdictional scheme* to the *AER* under clause 6.18.2(b)(6B), the date that such a *pricing proposal* was submitted.

last resort planning power

The *AEMC*'s power to direct a *Registered Participant* under rule 5.22(c).

last resort planning power guidelines

The guidelines made by the *AEMC* relating to the exercise of the *last resort planning power* and referred to in rule 5.22(n) to (q).

late rebidding period

In respect of a *trading interval*, the period beginning 15 minutes before the commencement of the *trading interval*.

load

A *connection point* or defined set of *connection points* at which electrical power is delivered to a person or to another *network* or the amount of electrical power delivered at a defined instant at a *connection point*, or aggregated over a defined set of *connection points*.

load centre

A geographically concentrated area containing *load* or *loads* with a significant combined consumption capability.

load shedding

Reducing or *disconnecting load* from the *power system*.

load shedding procedures

The procedures developed by *AEMO* for each *participating jurisdiction* in accordance with clause 4.3.2(h)(1) for the implementation of the *load shedding* priority and *sensitive load* priority advised by that *Jurisdictional System Security Coordinator* under clauses 4.3.2(f)(1) and (2).

loading level

The level of output, consumption or power flow (in MW) of a *generating unit*, *load* or *scheduled network service*.

loading price

The price specified for a *price band* and a *trading interval* in a *dispatch offer*, in accordance with clause 3.8.6, for the *dispatch* of a *scheduled generating unit* at a level above its *self-dispatch level*.

local area/local

The geographical area allocated to a *Network Service Provider* by the authority responsible for administering the *jurisdictional electricity legislation* in the relevant *participating jurisdiction*.

local black system procedures

The procedures, described in clause 4.8.12, applicable to a *local area* as approved by *AEMO* from time to time.

local market ancillary service requirement

Has the meaning given to it by clause 3.8.1(e2).

Local Network Service Provider

Within a *local area*, a *Network Service Provider* to which that geographical area has been allocated by the authority responsible for administering the *jurisdictional electricity legislation* in the relevant *participating jurisdiction*.

Local Retailer

In relation to a *local area*, the *Customer* who is:

1. a business unit or *related body corporate* of the relevant *Local Network Service Provider*; or
2. responsible under the laws of the relevant *participating jurisdiction* for the supply of electricity to *franchise customers* in that *local area*; or
3. if neither 1 or 2 is applicable, such other *Customer* as *AEMO* may determine.

local spot price

A price determined according to clause 3.9.1(c).

long run marginal cost

For the purposes of clause 6.18.5, the cost of an incremental change in demand for *direct control services* provided by a *Distribution Network Service Provider* over a period of time in which all factors of production required to provide those *direct control services* can be varied.

loss factor

A multiplier used to describe the *electrical energy loss* for electricity used or transmitted.

low reserve

The conditions described in clause 4.8.4(a).

major supply disruption

The unplanned absence of *voltage* on a part of the *transmission system* affecting one or more *power stations* and which leads to a loss of *supply* to one or more *loads*.

mandatory restrictions

Restrictions imposed by a *participating jurisdiction* by a relevant law, other than the *Rules*, on the use of electricity in a *region*.

mandatory restriction period

The period of *mandatory restrictions*.

mandatory restriction schedule

A schedule prepared in accordance with clause 3.12A.2.

margin requirement

The requirement set out in clause S6.2.2A(d) or clause S6A.2.2A(d), as the case may be.

marginal electrical energy loss

The *electrical energy loss* associated with an infinitesimal increment in electricity produced, transported and/or used.

marginal loss factor

A multiplier used to describe the *marginal electrical energy loss* for electricity used or transmitted.

market

Any of the markets or exchanges described in the *Rules*, for so long as the market or exchange is conducted by *AEMO*.

market ancillary service

A service identified in clause 3.11.2(a).

market ancillary service offer

A notice submitted by an *Ancillary Service Provider* to *AEMO* in respect of a *market ancillary service* in accordance with clause 3.8.7A.

Market Ancillary Service Provider

A person who offers and provides *load* as a *market ancillary service* under Chapter 2 and who is registered by *AEMO* as a *Market Ancillary Service Provider* under Chapter 2. The relevant person does not need to be the *Market Customer* for the relevant *load*.

market ancillary service specification

Has the meaning given in clause 3.11.2(b).

market auditor

A person appointed by AEMO to carry out a review under clause 3.13.10(a).

market commencement

The date declared as such by AEMO, on which trading in the *market* commences.

market connection point

A *connection point* where any *load* is classified in accordance with Chapter 2 as a *market load* or which connects any *market generating unit* to the *national grid*, or where the *network service connected* at that *connection point* is a *market network service*.

Market Customer

A *Customer* who has classified any of its *loads* as a *market load* and who is also registered by AEMO as a *Market Customer* under Chapter 2.

market customer's additional claim

Has the meaning given in clause 3.12.2(g)(4).

market floor price

A price floor on *regional reference prices* as described in clause 3.9.6.

market generating unit

A *generating unit* whose *sent out generation* is not purchased in its entirety by the *Local Retailer* or by a *Customer* located at the same *connection point* and which has been classified as such in accordance with Chapter 2.

Market Generator

A *Generator* who has classified at least one *generating unit* as a *market generating unit* in accordance with Chapter 2 and who is also registered by AEMO as a *Market Generator* under Chapter 2.

market information

Information, other than *confidential information*, concerning the operation of the *spot market* or relating to the operation of, inputs to, or outputs from the *central dispatch* process.

market information bulletin board

A facility established by AEMO on the *electronic communication system* for the posting of information which may then be available to *Registered Participants*.

market load

A *load* at a *connection point* classified by the person *connected* at that *connection point* or, with the consent of that person, by some other person, as a *market load* in accordance with Chapter 2. There can be more than one *market load* at any one *connection point*.

market management systems

AEMO's *market information* systems and associated communications networks used to support the electronic communication by *Registered Participants* and others connected to or making use of the systems and networks in the operation of the *market*.

Market Management Systems Access Procedures

The procedures to be followed by *Registered Participants*, *Metering Providers* and *Metering Data Providers* in connecting to and making use of the *market management systems* from time to time *published* by AEMO under rule 3.19.

market network service

A *network service* which is classified as a *market network service* in accordance with clause 2.5.2.

Market Network Service Provider

A *Network Service Provider* who has classified any of its *network services* as a *market network service* in accordance with Chapter 2 and who is also registered by AEMO as a *Market Network Service Provider* under Chapter 2.

Market Participant

A person who is registered by AEMO as a *Market Generator*, *Market Customer*, *Market Small Generation Aggregator*, *Market Ancillary Service Provider* or *Market Network Service Provider* under Chapter 2.

Market Participant registered data

The data kept on the register in accordance with schedule 5.5.

market price cap

A price cap on *regional reference prices* as described in clause 3.9.4.

market retail contract

Has the same meaning as in the *NERL*.

Market Settlement and Transfer Solution Procedures

The procedures from time to time *published* by AEMO under clause 7.16.2 which include those governing the recording of financial responsibility for *energy flows* at a *connection point*, the transfer of that responsibility between *Market Participants* and the recording of *energy flows* at a *connection point*.

Market Small Generation Aggregator

A person who:

- (a) has classified one or more *small generating units* as a *market generating unit*; and
- (b) is registered by AEMO as a *Market Small Generation Aggregator* under Chapter 2.

market suspension

Suspension of the *spot market* by AEMO in accordance with clause 3.14.3.

material inter-network impact

A material impact on another *Transmission Network Service Provider's network*, which impact may include (without limitation):

- (a) the imposition of *power transfer constraints* within another *Transmission Network Service Provider's network*; or
- (b) an adverse impact on the quality of *supply* in another *Transmission Network Service Provider's network*.

materially

For the purposes of the application of clause 6.6.1, an event results in a *Distribution Network Service Provider* incurring materially higher or materially lower costs if the change in costs (as opposed to the revenue impact) that the *Distribution Network Service Provider* has incurred and is likely to incur in any *regulatory year* of a *regulatory control period*, as a result of that event, exceeds 1% of the *annual revenue requirement* for the *Distribution Network Service Provider* for that *regulatory year*.

For the purposes of the application of clause 6A.7.3, an event (other than a *network support event*) results in a *Transmission Network Service Provider* incurring materially higher or materially lower costs if the change in costs (as opposed to the revenue impact) that the *Transmission Network Service Provider* has incurred and is likely to incur in any *regulatory year* of a *regulatory control period*, as a result of that event, exceeds 1% of the *maximum allowed revenue* for the *Transmission Network Service Provider* for that *regulatory year*.

In other contexts, the word has its ordinary meaning.

maximum allowed revenue

For a *Transmission Network Service Provider*: the amount calculated as such for a *regulatory year* of a *regulatory control period* in accordance with rule 6A.3.

For AEMO: the amount calculated as such for a *regulatory year* of a *regulatory control period* in accordance with clause S6A.4.2(c)(4).

maximum credit allowance

Has (in the context of Chapter 6B) the meaning given in clause 6B.B1.2.

maximum demand

The highest amount of electrical power delivered, or forecast to be delivered, over a defined period (*day*, week, month, season or year) either at a *connection point*, or simultaneously at a defined set of *connection points*.

maximum power input (MPI)

The largest single *supply* input to a particular location or *region*, typically the output of the largest single *generating unit* or group of *generating units* or the highest *power transfer* of a single *transmission line* or *interconnection*.

maximum ramp rate

The *maximum ramp rate* that an item of equipment is capable of achieving in normal circumstances. This may be:

- (a) as specified by the manufacturer; or
- (b) as independently certified from time to time to reflect changes in the physical capabilities of the equipment.

maximum total payment

The amount determined in accordance with clause 3.15.22.

measurement element

An energy measuring component which converts the flow of electricity in a power conductor into an electronic signal and / or a mechanically recorded electrical measurement.

medium term PASA

The *PASA* in respect of the period described in clause 3.7.2(a), as described under clause 3.7.2.

medium term PASA inputs

The inputs to be prepared in accordance with clauses 3.7.2(c) and (d).

Member

A person appointed or elected (as the case may be) to the *Information Exchange Committee* pursuant to the *Information Exchange Committee Election Procedures and Rules*, and includes all membership categories, unless a contrary intention appears.

meter

A device complying with *Australian Standards* which measures and records the production or consumption of electrical *energy*.

meter churn procedures

The procedures established by *AEMO* under clause 7.8.9(f).

metering

Recording the production or consumption of electrical *energy*.

Metering Coordinator

A person who is registered by *AEMO* as a *Metering Coordinator* under Chapter 2.

Metering Coordinator default event

In relation to a *Metering Coordinator*, means any of the following events or circumstances:

- (a) the *Metering Coordinator* ceases to be registered by *AEMO* as a *Metering Coordinator* under Chapter 2;
- (b) an *insolvency official* is appointed in respect of the *Metering Coordinator* or any property of the *Metering Coordinator*; or
- (c) an order is made for the winding up of the *Metering Coordinator* or a resolution is passed for the winding up of *Metering Coordinator*; or
- (d) a breach of the *Rules* or applicable procedures made under the *Rules* in relation to which *AEMO* has issued a *Metering Coordinator default notice* under clause 7.7.3(c)(3).

Metering Coordinator default notice

A notice issued by *AEMO* under clause 7.7.3(c)(3).

metering data

Accumulated metering data, interval metering data, calculated metering data, substituted metering data, estimated metering data and check metering data.

Metering Data Provider

A person who meets the requirements listed in schedule 7.3 and has been accredited and registered by *AEMO* as a *Metering Data Provider*.

metering data services

The services that involve the collection, processing, storage and delivery of *metering data* and the management of relevant *NMI Standing Data* in accordance with the *Rules*.

metering data provision procedures

Procedures for the provision of *metering data* requested under rule 7.14, developed and *published* by AEMO.

metering data services database

The database established and maintained by the *Metering Data Provider* that holds *metering data* and relevant *NMI Standing Data* relating to each *metering installation* for which the *Metering Coordinator* or the *financially responsible Market Participant* or AEMO (as the case may be) has engaged the *Metering Data Provider* to provide *metering data services*.

metering database

A database of *metering data* and *settlements ready data* maintained and administered by AEMO in accordance with clause 7.11.

metering installation

The assembly of components including the *instrument transformer*, if any, measurement element(s) and processes, if any, recording and display equipment, *communications interface*, if any, that are controlled for the purpose of metrology and which lie between the *metering point(s)* and the point at or near the *metering point(s)* where the *energy data* is made available for collection.

Note:

- (1) The assembly of components may include the combination of several *metering points* to derive the *metering data* for a *connection point*.
- (2) The *metering installation* must be classified as being for revenue purposes and/or as a *check metering installation*.

metering installation malfunction

The full or partial failure of the *metering installation* in which the *metering installation* does not:

- (a) meet the requirements of schedule 7.4; or
- (b) record, or incorrectly records, *energy data*; or
- (c) allow, or provides for, collection of *energy data*; or
- (d) in the case of a *small customer metering installation*, meet the requirements of schedule 7.5.

Metering Member

A person nominated and elected as a *Member* by *Metering Member Voters* to represent *Metering Member Voters* in accordance with the *Rules* (including clause 7.17.10(g)) and the *Information Exchange Committee Election Procedures*.

Metering Member Voters

Metering Coordinators, Metering Providers and Metering Data Providers.

metering point

The point of physical connection of the device measuring the current in the power conductor.

Metering Provider

A person who meets the requirements listed in schedule 7.2 and has been accredited by and registered by AEMO as a *Metering Provider*.

metering register

A register of information associated with a *metering installation* as required by schedule 7.1.

metering system

The collection of all components and arrangements installed or existing between each *metering point* and the *metering database*.

metrology procedure

The procedure developed and *published* by AEMO in accordance with rule 7.16.

micro EG connection

Has (in the context of Chapter 5A) the meaning given in clause 5A.A.1

micro embedded generator

Has (in the context of Chapter 5A) the meaning given in clause 5A.A.1

minimum access standard

In relation to a technical requirement of access, a standard of performance, identified in a schedule of Chapter 5 as a minimum access standard for that technical requirement, such that a *plant* that does not meet that standard will be denied access because of that technical requirement.

minimum services specification

The requirements in respect of a *metering installation* set out in Schedule 7.5.

minimum threshold level of inertia

For an *inertia sub-network*, the *minimum threshold level of inertia* determined by AEMO and referred to in clause 5.20B.2(b)(1).

Minister

A Minister that is a “Minister” under the *National Electricity Law*.

Minister of (a, that, another, or other, etc) participating jurisdiction

Has the same meaning as Minister of a participating jurisdiction has in the *National Electricity Law*.

Ministers of the MCE

Ministers of the participating jurisdictions acting as the MCE where MCE has the same meaning as in the *National Electricity Law*.

mis-pricing

For a particular *network* node within a nominated *region*, the difference between:

- (a) the *regional reference price* for the *region*; and
- (b) an estimate of the marginal value of *supply* at the *network* node, which marginal value is determined as the price of meeting an incremental change in *load* at that *network* node.

MLEC CRNP Methodology

For the purposes of calculating the *modified load export charges*, the *CRNP Methodology* (and for the avoidance of doubt, not the *modified CRNP Methodology*) provided that each of the following is satisfied:

- (a) for the purposes of clause S6A.3.2(1), network ‘costs’ are attributed to all *transmission systems* assets of the relevant *Transmission Network Service Provider*; and
- (b) for the purposes of clause S6A.3.2(3):
 - (1) every *trading interval* of the previous *regulatory year* in order to determine the range of actual operating conditions from the previous *regulatory year*; and
 - (2) the peak usage of each *transmission system* asset by each *load* is used to determine the allocation of dispatched *generation* to loads from the previous *regulatory year*.

model standing offer

Has (in the context of Chapter 5A) the meaning given in clause 5A.A.1.

modified CRNP methodology

The cost allocation methodology set out in clause S6A.3.3.

modified load export charges

Charges received by or payable to the *Co-ordinating Network Service Provider* in a *region* by or to a *Co-ordinating Network Service Provider* in an *interconnected region* calculated under rule 6A.29A.2.

monitoring equipment

The testing instruments and devices used to record the performance of *plant* for comparison with expected performance.

month

Unless otherwise specified, the period beginning at 4.30 am on the relevant commencement date and ending at 4.30 am on the date in the next calendar month corresponding to the commencement date of the period.

nameplate rating

The maximum continuous output or consumption in MW of an item of equipment as specified by the manufacturer, or as subsequently modified.

NATA

National Association of Testing Authorities.

National Electricity Law

The National Electricity Law set out in the schedule to the *National Electricity (South Australia) Act 1996* (SA) and applied in each of the *participating jurisdictions*.

National Electricity Market

Has the same meaning as in the *National Electricity Law*.

national electricity objective

The objective stated in section 7 of the Law.

National Energy Retail Law

Means the *National Energy Retail Law* set out in the Schedule to the *National Energy Retail Law (South Australia) Act 2012* of South Australia.

National Energy Retail Rules

Has the same meaning as in the *National Energy Retail Law*.

national grid

The sum of all *connected transmission systems* and *distribution systems* within the *participating jurisdictions*.

National Measurement Act

The *National Measurement Act 1960* of the Commonwealth as amended from time to time.

national transmission flow path

That portion of a *transmission network* or *transmission networks* used to transport significant amounts of electricity between *generation centres* and *load centres*.

national transmission grid

Has the meaning given in the *National Electricity Law*.

negative change event

For a *Distribution Network Service Provider*, a *pass through event* which entails the *Distribution Network Service Provider* incurring *materially* lower costs in providing *direct control services* than it would have incurred but for that event.

For a *Transmission Network Service Provider*, a *pass through event* which entails the *Transmission Network Service Provider* incurring *materially* lower costs in providing *prescribed transmission services* than it would have incurred but for that event.

negative network support event

A *network support event* which entails a *Transmission Network Service Provider* making lower *network support payments* in the preceding *regulatory year* than the amount of the *network support payment allowance* (if any) for that provider for that preceding *regulatory year*.

negative pass through amount

In respect of a *negative change event* for a *Transmission Network Service Provider*, an amount that is not greater than a *required pass through amount* as determined by the AER under clause 6A.7.3(g).

In respect of a *negative change event* for a *Distribution Network Service Provider*, an amount that is not greater than a *required pass through amount* as determined by the AER under clause 6.6.1(g).

negotiable service

- (a) In relation to *transmission services* means *negotiated transmission services*.
- (b) In relation to *distribution services* means *negotiated distribution services*.

negotiated access standard

In relation to a technical requirement of access for a particular *plant*, an agreed standard of performance determined in accordance with clause 5.3.4A and identified as a negotiated access standard for that technical requirement in a *connection agreement*.

negotiated distribution service

A *distribution service* that is a negotiated network service within the meaning of section 2C of the Law;

Negotiated Distribution Service Criteria

The criteria specified in a distribution determination in accordance with clause 6.7.4.

Negotiated Distribution Service Principles

The principles set out in clause 6.7.1.

negotiated transmission service

Any of the following services:

- (a) a *shared transmission service* that:
 - (1) exceeds the *network* performance requirements (whether as to quality or quantity) (if any) as that *shared transmission service* is required to meet under any *jurisdictional electricity legislation*; or
 - (2) except to the extent that the *network* performance requirements which that *shared transmission service* is required to meet are prescribed under any *jurisdictional electricity legislation*, exceeds or does not meet the *network* performance requirements (whether as to quality or quantity) as are set out in schedule 5.1a or 5.1;
- (b) *connection services* that are provided to serve a *Transmission Network User*, or group of *Transmission Network Users*, at a *single transmission network connection point*, other than *connection services* that are provided by one *Network Service Provider* to another *Network Service Provider* to *connect* their *networks* where neither of the *Network Service Providers* is a *Market Network Service Provider*;
- (c) services specified to be *negotiated transmission services* under rule 5.2A.4; or
- (d) undertaking *system strength connection works*,

but does not include an *above-standard system shared transmission service* or a *market network service*.

negotiated use of system charges

The charges described in clause 5.3AA(f)(3).

negotiated use of system service

A *use of system service* in respect of which:

- (a) an *Embedded Generator* may negotiate with a *Distribution Network Service Provider*; or
- (b) a *Market Network Service Provider* may negotiate with a *Distribution Network Service Provider*,

in accordance with clause 5.3AA(f)(3).

negotiating framework

For a *Distribution Network Service Provider*, a negotiating framework as approved or substituted by the AER in its final decision under clause 6.12.1(15).

negotiating principles

Those negotiating principles set out in schedule 5.11.

NEM

The *National Electricity Market*.

NEMMCO

Has the meaning given in the *National Electricity Law*.

NERL

National Energy Retail Law.

NERR

National Energy Retail Rules.

network

The apparatus, equipment, plant and buildings used to convey, and control the conveyance of, electricity to customers (whether wholesale or retail) excluding any *connection assets*. In relation to a *Network Service Provider*, a *network* owned, operated or controlled by that *Network Service Provider*.

network agreement

has the meaning given in the *National Electricity Law*.

network capability

The capability of the *network* or part of the *network* to transfer electricity from one location to another.

network charges

Has (in the context of Chapter 6B) the meaning given in clause 6B.A1.2.

network connection

The formation of a physical link between the *facilities* of two *Registered Participants* or a *Registered Participant* and a customer being a *connection* to a *transmission* or *distribution network* via *connection assets*.

network connection asset

Those components of a *transmission system* which are used to provide *connection services* between *Network Service Providers* (excluding a *Market Network Service Provider*).

network constraint

A *constraint* on a *transmission network* or *distribution network*.

network coupling point

The point at which *connection assets* join a *distribution network*, used to identify the *distribution service price* payable by a *Customer*.

network device

Apparatus or equipment that:

- (a) enables a *Local Network Service Provider* to monitor, operate or control the *network* for the purposes of providing *network services*, which may include switching devices, measurement equipment and control equipment;
- (b) is located at or adjacent to a *metering installation* at the *connection point* of a *retail customer*; and
- (c) does not have the capability to generate electricity.

network dispatch offer

An notice submitted by a *Scheduled Network Service Provider* to AEMO relating to the *dispatch* of a *scheduled network service* in accordance with clause 3.8.6A.

network element

A single identifiable major component of a *transmission system* or *distribution system* involving:

- (a) an individual *transmission* or *distribution* circuit or a phase of that circuit;
or
- (b) a major item of apparatus or equipment associated with the function or operation of a *transmission line*, *distribution line* or an associated *substation* or *switchyard* which may include *transformers*, circuit breakers, *synchronous condensers*, *reactive plant* and *monitoring equipment* and control equipment.

network loop

A set of *network elements* that are *connected* together in the form of a closed path, that is in such a way that by progressing from each element to the next it is possible to return to the starting point.

network losses

Energy losses incurred in the transfer of electricity over a transmission network or distribution network.

network operating agreement

An agreement described in clause 5.2A.7.

network option

A means by which an *identified need* can be fully or partly addressed by expenditure on a transmission asset or a distribution asset which is undertaken by a *Network Service Provider*.

For the purposes of this definition, **transmission asset** and **distribution asset** has the same meaning as in clause 5.10.2.

network pricing objective

The network pricing objective set out in paragraph 6.18.5(a).

network service

Transmission service or distribution service associated with the conveyance, and controlling the conveyance, of electricity through the *network*.

Network Service Provider

A person who engages in the activity of owning, controlling or operating a *transmission or distribution system* and who is registered by AEMO as a *Network Service Provider* under Chapter 2.

network service provider performance report

A report prepared by the AER under section 28V of the Law.

network support agreement

An agreement under which a person agrees to provide one or more *network support and control ancillary services* to a *Network Service Provider*, including *network support services* to improve *network capability* by providing a non-*network* alternative to a *network augmentation*.

***network support and control ancillary service* or NSCAS**

A service (excluding an *inertia network service* or *system strength service*) with the capability to control the *active power* or *reactive power* flow into or out of a *transmission network* to address an *NSCAS need*.

network support event

- (a) If, at the end of a *regulatory year* of a *regulatory control period*, the amount of *network support payments* made by a *Transmission Network Service Provider* for that previous *regulatory year* is higher or lower than the

amount of the *network support payment allowance* (if any) for the *Transmission Network Service Provider* for that previous *regulatory year*, this constitutes a *network support event*.

- (b) In calculating the amount for the purposes of a *network support event* referred to in paragraph (a), the amount of *network support payments* made by a *Transmission Network Service Provider* must not include an amount of *network support payments* that are a substitute for a *network augmentation* where an allowance for capital expenditure in relation to that *network augmentation* has been provided for in the *revenue determination* or an *approved pass through amount* arising from an *inertia shortfall event* or a *fault level shortfall event*.

network support pass through amount

The amount that should be passed through to *Transmission Network Users* in the *regulatory year* following the preceding *regulatory year*, in respect of a *network support event* for a *Transmission Network Service Provider*.

network support payment

Any of the following payments:

- (a) a payment made by a *Transmission Network Service Provider* to:
 - (1) any *Generator* providing *network support services* in accordance with rule 5.3A.12; or
 - (2) any other person providing a *network support service* that is an alternative to *network augmentation*;
- (b) an *inertia service payment*; and
- (c) a *system strength service payment*.

network support payment allowance

The amount of *network support payments* (if any) that is provided for a *Transmission Network Service Provider* for a *regulatory year* in:

- (a) the *annual building block revenue requirement* for the *Transmission Network Service Provider* for that *regulatory year*; or
- (b) any *approved pass through amount* for the *Transmission Network Service Provider* for that *regulatory year* arising from an *inertia shortfall event* or a *fault level shortfall event*,

less the amount (expressed as a positive) of avoided *network support payments* (if any) that is provided for in any *required pass through amount* for the *Transmission Network Service Provider* for that *regulatory year* arising from an *inertia shortfall event* or a *fault level shortfall event*.

Network User

A *Generator*, a *Transmission Customer*, a *Distribution Customer* or a *Market Network Service Provider*.

new connection

Has (in the context of Chapter 5A) the meaning given in clause 5A.A.1

NMAS provider

A person who agrees to provide one or more *non-market ancillary services* to AEMO under an *ancillary services agreement*.

NMI

A National Metering Identifier as described in clause 7.8.2(c).

NMI Standing Data

The following data in respect of a *connection point*:

- (a) the *NMI* of the *connection point* and the street address of the relevant *connection point* to which that *NMI* is referable;
- (b) the *NMI* checksum for the *connection point*;
- (c) the identity of the *Local Network Service Provider* or, if the *connection point* is a *child connection point*, the identity of the *Embedded Network Manager* and the *Exempt Embedded Network Service Provider*;
- (d) the code (known as a TNI) identifying the relevant *transmission node* which identifies the *transmission loss factor* and/or *transmission use of system* charge for the *connection point* and, if the *connection point* is a *child connection point*, the *NMI* of the *parent connection point* on that *embedded network*;
- (e) the relevant *distribution loss factor* applicable to the *connection point*;
- (f) the Network Tariff (identified by a code) applicable in respect of the *connection point*;
- (g) the *NMI* classification code (as set out in the *Market Settlement and Transfer Solution Procedures*) of the *connection point*;
- (h) the read cycle date, or date of next scheduled read or date in a relevant code representing the read cycle date or date of next scheduled read, for that *connection point*;
- (i) the profile type applicable to the *connection point*; and
- (j) such other categories of data as may be referred to in the *Market Settlement and Transfer Solution Procedures* as forming *NMI Standing Data*,

and, for the avoidance of doubt, does not include any *metering data* or other details of an end-user's consumption at that *connection point*.

nomenclature standards

The standards approved by *AEMO* in conjunction with the *Network Service Providers* relating to numbering, terminology and abbreviations used for information transfer between *Registered Participants* as provided for in clause 4.12.

nominal voltage

The design *voltage* level, nominated for a particular location on the *power system*, such that power lines and circuits that are electrically connected other than through *transformers* have the same *nominal voltage* regardless of operating *voltage* and *normal voltage*.

nominated pass through event considerations

The *nominated pass through event considerations* are:

- (a) whether the event proposed is an event covered by a category of *pass through event* specified in clause 6.6.1(a1)(1) to(4) (in the case of a distribution determination) or clause 6A.7.3(a1)(1) to(4) (in the case of a transmission determination);
- (b) whether the nature or type of event can be clearly identified at the time the determination is made for the service provider;
- (c) whether a prudent service provider could reasonably prevent an event of that nature or type from occurring or substantially mitigate the cost impact of such an event;
- (d) whether the relevant service provider could insure against the event, having regard to:
 - (1) the availability (including the extent of availability in terms of liability limits) of insurance against the event on reasonable commercial terms; or
 - (2) whether the event can be self-insured on the basis that:
 - (i) it is possible to calculate the self-insurance premium; and
 - (ii) the potential cost to the relevant service provider would not have a significant impact on the service provider's ability to provide *network services*; and.
- (e) any other matter the *AER* considers relevant and which the *AER* has notified *Network Service Providers* is a nominated pass through event consideration.

non-contestable IUSA components

Those components of the *identified user shared asset* that do not satisfy the criteria set out in clause 5.2A.4(c).

non-credible contingency event

An event described in clause 4.2.3(e).

Non-market ancillary service or NMAS

Any of the following services:

- (a) *network support and control ancillary services* and other services acquired by *Transmission Network Service Providers* under *connection agreements* or *network support agreements* to meet the service standards linked to the technical requirements of schedule 5.1 or in *applicable regulatory instruments* (but to avoid doubt, excluding *inertia network services* and *system strength services*); and
- (b) *system restart ancillary services* and *network support and control ancillary services* acquired by AEMO under *ancillary services agreements*.

non-market generating unit

A *generating unit* whose *sent out generation* is purchased in its entirety by the *Local Retailer* or by a *Customer* located at the same *connection point* and which has been classified as such in accordance with Chapter 2.

Non-Market Generator

A *Generator* who has classified a *generating unit* as a *non-market generating unit* in accordance with Chapter 2.

non-network option

A means by which an *identified need* can be fully or partly addressed other than by a *network option*.

Non-Registered Customer

A person who:

- 1. purchases electricity through a *connection point* with the *national grid* other than from the *spot market*; and
- 2. is eligible to be registered by AEMO as a *Customer* and to classify the *load* described in (1) as a *first-tier load* or a *second-tier load*, but is not so registered.

non-registered embedded generator

In the context of clause 6.7A, has the meaning given in chapter 5A.

non-regulated transmission services

A *transmission service* that is neither a *prescribed transmission service* nor a *negotiated transmission service*.

non-scheduled generating unit

A *generating unit* so classified in accordance with Chapter 2.

non-scheduled generating system

A *generating system* comprising *non-scheduled generating units*.

Non-Scheduled Generator

A *Generator* in respect of which any *generating unit* is classified as a *non-scheduled generating unit* in accordance with Chapter 2.

non-scheduled load

A *market load* which is not a *scheduled load*.

non semi-dispatch interval

For a *semi-scheduled generating unit*, a *dispatch interval* other than a *semi-dispatch interval*.

non-suspension decision

A decision made by AEMO under clause 3.15.21(c1)(2) or (3) not to suspend some or all of the activities of a *defaulting Market Participant* following an *external administration default event*.

normal operating frequency band

In relation to the *frequency* of the *power system*, means the range 49.9Hz to 50.1Hz or such other range so specified in the *power system security standards*.

normal operating frequency excursion band

In relation to the *frequency* of the *power system*, means the range specified as being acceptable for infrequent and momentary excursions of *frequency* outside the *normal operating frequency band*, being the range of 49.75 Hz to 50.25 Hz or such other range so specified in the *power system security standards*.

normal voltage

In respect of a *connection point*, its *nominal voltage* or such other *voltage* up to 10% higher or lower than *nominal voltage*, as approved by AEMO, for that *connection point* at the request of the *Network Service Provider* who provides *connection* to the *power system*.

normally off

Describes a *scheduled load* which, unless *dispatched* in accordance with its *dispatch bid*, and in accordance with clause 3.8.7(j), should be considered as being switched off.

normally on

Describes a *scheduled load* which, unless *dispatched* in accordance with its *dispatch bid*, and in accordance with clause 3.8.7(i), should be considered as being switched on.

NSCAS gap

Any *NSCAS need* that *AEMO* forecasts will arise at any time within a planning horizon of at least 5 years from the beginning of the year in which the most recent *NTNDP* applies.

NSCAS need

- (a) Subject to paragraphs (b) and (c), *network support and control ancillary service* required to:
 - (1) maintain *power system security* and reliability of *supply* of the *transmission network* in accordance with the *power system security standards* and the *reliability standard*; and
 - (2) maintain or increase the *power transfer capability* of that *transmission network* so as to maximise the present value of net economic benefit to all those who produce, consume or transport electricity in the *market*.
- (b) Any requirement for a service that satisfies paragraph (a) and is also capable of being made available as an *inertia network service* to address an *inertia shortfall* through the arrangements in rule 5.20B must be treated as an *inertia shortfall* and is not an *NSCAS need*.
- (c) Any requirement for a service that satisfies paragraph (a) and is also capable of being made available as a *system strength service* to address a *fault level shortfall* through the arrangements in rule 5.20C must be treated as a *fault level shortfall* and is not an *NSCAS need*.

NSCAS preferred tenderers

Persons that submitted tenders for *NSCAS* that are deemed to be non-competitive as selected by *AEMO* in accordance with clause 3.11.5(g).

NSCAS Provider

A person who agrees to provide one or more *network support and control ancillary services* to *AEMO* under an *ancillary services agreement*.

NTNDP

The National Transmission Network Development Plan as defined in the *National Electricity Law*.

NTNDP database

The database that AEMO is required to establish and maintain under clause 5.20.4.

NTNDP inputs

Has the meaning given in clause 5.20.4.

NTP functions

Has the meaning given in the *National Electricity Law*.

off-loading price

The price specified for a *price band* and a *trading interval* in a *dispatch offer*, in accordance with clause 3.8.6, for the *off-loading* of a *scheduled generating unit* below its *self-dispatch level*.

off-loading price band

A *price band* submitted for *off-loading* below a *self-dispatch level* for a *trading interval* in a *dispatch offer*.

off-loading, off-load

The reduction in electricity output or consumption.

operating expenditure criteria

For a *Transmission Network Service Provider* – the matters listed in clause 6A.6.6(c)(1)–(3).

For a *Distribution Network Service Provider* – the matters listed in clause 6.5.6(c)(1)–(3).

operating expenditure factors

For a *Transmission Network Service Provider* - the factors listed in clause 6A.6.6(e)(1)–(14).

For a *Distribution Network Service Provider* - the factors listed in clause 6.5.6(e)(1)–(12).

operating expenditure objectives

For a *Transmission Network Service Provider* – the objectives set out in clause 6A.6.6(a).

For a *Distribution Network Service Provider* – the objectives set out in clause 6.5.6(a).

operational communication

A communication concerning the arrangements for, or actual operation of, the *power system* in accordance with the *Rules*.

operational frequency tolerance band

The range of *frequency* within which the *power system* is to be operated to cater for the occurrence of a *contingency event* as specified in the *power system security standards*.

ordinary majority

At least 60% of the number of *Members*.

outage

Any full or partial unavailability of equipment or *facility*.

outstandings

In relation to a *Market Participant*, the dollar amount determined by the formula in clause 3.3.9.

over frequency scheme

An *emergency frequency control scheme* with capability to respond when *frequency* is above or climbing above the *normal operating frequency band*.

over-recovery amount

Any amount by which the revenue earned from the provision of *prescribed transmission services* in previous *regulatory years* exceeds the sum of the *AARR* in those *regulatory years*.

overspending requirement

The requirement set out in clause S6.2.2A(c) or clause S6A.2.2A(c), as the case may be.

parent connection point

The *connection point* between an *embedded network* and a *Network Service Provider's network*.

Participant compensation fund

The fund of that name referred to in clause 3.16.

participant derogation

Has the meaning given in the *National Electricity Law*. The participant derogations are included in Chapter 8A.

Participant fees

The fees payable by *Registered Participants* described in clause 2.11.

participating jurisdiction

A jurisdiction that is a “participating jurisdiction” under the *National Electricity Law*.

PASA availability

The *physical plant capability* (taking ambient weather conditions into account in the manner described in the procedure prepared under clause 3.7.2(g)) of a *scheduled generating unit*, *scheduled load* or *scheduled network service* available in a particular period, including any *physical plant capability* that can be made available during that period, on 24 hours’ notice.

pass through event

For a distribution determination - the events specified in clause 6.6.1(a1)

For a *transmission determination* – the events specified in clause 6A.7.3(a1).

payment date

The 20th *business day* after the end of a *billing period*.

peak load

Maximum *load*.

performance incentive scheme parameters

For a *service target performance incentive scheme*, those parameters that are *published* by the AER in respect of that scheme pursuant to clause 6A.7.4(c).

performance standard

A standard of performance that:

- (a) is established as a result of it being taken to be an applicable performance standard in accordance with clause 5.3.4A(i); or
- (b) is included in the register of *performance standards* established and maintained by AEMO under rule 4.14(n),

as the case may be.

performance standards commencement date

For:

- (a) *Generators*, *Customers* and *Network Service Providers* who plan, own, operate or control a *facility* located in a *participating jurisdiction* (other than

Tasmania), the *performance standards commencement date* is, in relation to that *facility*, 16 November 2003; and

- (b) *Generators, Customers and Network Service Providers* who plan, own, operate or control a *facility* located in Tasmania, the *performance standards commencement date* is, in relation to that *facility*, the date that Tasmania becomes a *participating jurisdiction*.

physical plant capability

The maximum MW output or consumption which an item of electrical equipment is capable of achieving for a given period.

planned network event

An event which has been planned by a *Transmission Network Service Provider*, *AEMO* or a *Market Participant* that is likely to materially affect *network constraints* in relation to a *transmission system*, including but not limited to:

- (a) a *network outage*;
- (b) the *connection* or *disconnection* of *generating units* or *load*;
- (c) the commissioning or decommissioning of a *network asset* or the provision of new or modified *network support and control ancillary services*; and
- (d) the provision of *network support and control ancillary services* under a *network support agreement*.

plant

- (a) In relation to a *connection point*, includes all equipment involved in generating, utilising or transmitting electrical energy.
- (b) In relation to *dispatch bids* and *offers*, controllable generating equipment and controllable loads.
- (c) In relation to the *statement of opportunities* prepared by *AEMO*, individually controllable generating facilities registered or capable of being registered with *AEMO*.
- (d) In relation to the *regulatory investment test for transmission*, any of the definitions of *plant* in paragraphs (a) to (c) relevant to the application of the *regulatory investment test for transmission* to a RIT-T project.
- (e) In relation to the *regulatory investment test for distribution*, any of any of the definitions of *plant* in paragraphs (a) to (c) relevant to the application of the *regulatory investment test for distribution* to a RIT-D project.
- (f) In relation to a *system strength remediation scheme*, includes all equipment involved in the implementation of the scheme.

plant availability

The *active power capability* of a *generating unit* (in MW), based on the availability of its electrical power conversion process and assuming no fuel supply limitations on the *energy* available for input to that electrical power conversion process.

plant standard

An Australian or international standard or a part thereof that:

- (a) the *Reliability Panel* determines to be an acceptable alternative to a particular *minimum access standard* or *automatic access standard* for a particular class of *plant*, or
- (b) a schedule in Chapter 5 establishes as an acceptable alternative to a particular *minimum access standard* or *automatic access standard* for a particular class of *plant*.

positive change event

For a *Distribution Network Service Provider*:

- (a) a *pass through event*, other than a *retailer insolvency event*, which entails the *Distribution Network Service Provider* incurring *materially* higher costs in providing *direct control services* than it would have incurred but for that event, but does not include a *contingent project* or an associated *trigger event*; or
- (b) a *retailer insolvency event*.

For a *Transmission Network Service Provider*, a *pass through event* which entails the *Transmission Network Service Provider* incurring *materially* higher costs in providing *prescribed transmission services* than it would have incurred but for that event, but does not include a *contingent project* or an associated *trigger event*.

positive network support event

A *network support event* which entails a *Transmission Network Service Provider* making higher *network support payments* in the preceding *regulatory year* than the amount of the *network support payment allowance* (if any) for that provider for that preceding *regulatory year*.

positive pass through amount

For a *Transmission Network Service Provider*, an amount (not exceeding the *eligible pass through amount*) proposed by the provider under clause 6A.7.3(c).

For a *Distribution Network Service Provider*, an amount (not exceeding the *eligible pass through amount*) proposed by the provider under clause 6.6.1(c).

postage-stamp basis

A system of charging *Network Users* for *transmission service* or *distribution service* in which the price per unit is the same regardless of how much *energy* is used by the *Network User* or the location in the *transmission network* or *distribution network* of the *Network User*.

post-tax revenue model

For a *Transmission Network Service Provider*, the model prepared and *published* by the *AER* in accordance with clause 6A.5.2.

For a *Distribution Network Service Provider*, the model prepared and *published* by the *AER* in accordance with clause 6.4.1.

potential value

In relation to a *transaction* for a *Market Participant*, the dollar amount determined by the procedure in clause 3.3.14.

power factor

The ratio of the *active power* to the *apparent power* at a *metering point*.

power station

In relation to a *Generator*, a *facility* in which any of that *Generator's generating units* are located.

power system

The electricity power system of the *national grid* including associated *generation* and *transmission and distribution networks* for the *supply* of electricity, operated as an integrated arrangement.

power system damping

The rate at which disturbances to the *satisfactory operating state* reduce in magnitude.

power system demand

The total *load* (in MW) supplied by the *power system*.

Power System Design Data Sheet

The data sheet *published* by *AEMO* under clause S5.5.7(a)(1).

Power System Model Guidelines

The guidelines *published* by *AEMO* under clause S5.5.7(a)(3).

Power System Setting Data Sheet

The data sheet *published* by *AEMO* under clause S5.5.7(a)(2).

power system frequency risk review

A review described in clause 5.20A.1(c).

power system operating procedures

The procedures to be followed by *Registered Participants* in carrying out operations and/or maintenance activities on or in relation to primary and secondary equipment connected to or forming part of the power system or connection points, as described in clause 4.10.1.

power system reserve constraint

A constraint in the central dispatch due to the need to provide or maintain a specified type and level of scheduled reserve.

power system security

The safe scheduling, operation and control of the power system on a continuous basis in accordance with the principles set out in clause 4.2.6.

power system security standards

The standards (other than the reliability standard and the system restart standard) governing power system security and reliability of the power system to be approved by the Reliability Panel on the advice of AEMO, but which may include but are not limited to standards for the frequency of the power system in operation and contingency capacity reserves (including guidelines for assessing requirements).

power transfer

The instantaneous rate at which active energy is transferred between connection points.

power transfer capability

The maximum permitted power transfer through a transmission or distribution network or part thereof.

pre-adjusted locational component

Has the meaning given to it in clause 6A.23.3(a).

pre-adjusted non-locational component

Has the meaning given to it in clause 6A.23.3(a).

pre-dispatch

Forecast of dispatch performed one day before the trading day on which dispatch is scheduled to occur.

pre-dispatch schedule

A schedule prepared in accordance with clause 3.8.20(a).

preliminary program

The program to be prepared by a *Network Service Provider* showing proposed milestones for *connection* and access activities as specified in clause 5.3.3(b)(6).

preliminary statement

Has the meaning given in clause 3.15.14(a).

premises connection assets

Has (in the context of Chapter 5A) the meaning given in clause 5A.A.1

prescribed common transmission services

Prescribed transmission services that provide equivalent benefits to

- (a) all *Transmission Customers* who have a *connection point* with the relevant *transmission network* without any differentiation based on their location within the *transmission system*; and
- (b) *Transmission Network Service Providers* in *interconnected regions*, without any differentiation based on the location of their direct or indirect *connection* or *interconnection* with the relevant *transmission system*.

prescribed connection services

Services that are either *prescribed entry services* or *prescribed exit services*.

prescribed entry services

Entry services that are *prescribed transmission services* by virtue of the operation of clause 11.6.11.

prescribed exit services

Exit services that are *prescribed transmission services* by virtue of the operation of clause 11.6.11 and *exit services* provided to *Distribution Network Service Providers*.

prescribed shared transmission services

Shared transmission services that are *prescribed TUOS services* or *prescribed common transmission services*.

prescribed transmission service

Any of the following services:

- (a) a *shared transmission service* that:

- (1) does not exceed such *network* performance requirements (whether as to quality or quantity) as that *shared transmission service* is required to meet under any *jurisdictional electricity legislation*;
 - (2) except to the extent that the *network* performance requirements which that *shared transmission service* is required to meet are prescribed under any *jurisdictional electricity legislation*, does not exceed such *network* performance requirements (whether as to quality or quantity) as are set out in schedule 5.1a or 5.1; or
 - (3) is an *above-standard system shared transmission service*;
- (b) services that are required to be provided by a *Transmission Network Service Provider* under the *Rules*, or in accordance with *jurisdictional electricity legislation*, to the extent such services relate to the provision of the services referred to in paragraph (a), including such of those services as are:
- (1) required by *AEMO* to be provided under the *Rules*, but excluding those acquired by *AEMO* under rule 3.11; and
 - (2) necessary to ensure the integrity of a *transmission network*, including through the maintenance of *power system security* and assisting in the planning of the *power system*; or
- (c) *connection services* that are provided by a *Transmission Network Service Provider* to another *Network Service Provider* to connect their *networks* where neither of the *Network Service Providers* is a *Market Network Service Provider*,

but does not include a *negotiated transmission service* or a *market network service*.

prescribed TUOS services or prescribed transmission use of system services;

Prescribed transmission services that are not *prescribed common transmission services*, *prescribed entry services* or *prescribed exit services*, and that provide specific benefits to:

- (a) *Transmission Customers* who have a *connection point* with the relevant *transmission network*, based on the location of that *connection point* within the *transmission system*; and
- (b) *Transmission Network Service Providers* who have a direct or indirect *connection* or an *interconnection* with the relevant *transmission network*, based on the location of that *connection* or *interconnection* within the relevant *transmission system*.

price band

A MW quantity specified in a *dispatch bid*, *dispatch offer* or *market ancillary service offer* as being available for *dispatch* at a specified price.

pricing methodology

For a *Transmission Network Service Provider*, means the pricing methodology approved by the *AER* for that *Transmission Network Service Provider* and included in a *transmission determination* as referred to in rule 6A.24.

pricing methodology guidelines

Guidelines made by the *AER* under rule 6A.25 that contain the matters set out in clause 6A.25.2.

pricing principles for direct control services

The requirements set out in clause 6.18.5.

Pricing Principles for Prescribed Transmission Services

The principles set out in rule 6A.23.

pricing proposal

A pricing proposal under Part I of Chapter 6.

pricing zone

A geographic area within which *Network Users* are charged a specific set of *distribution service* prices.

Primary Transmission Network Service Provider

The *Transmission Network Service Provider* who operates the largest *transmission network* in each *participating jurisdiction* but does not include a *Transmission Network Service Provider* for a *declared transmission system*.

profile

Metering data or costs for a period longer than a *trading interval* allocated into *trading intervals*.

projected assessment of system adequacy process (“PASA”)

The medium term and short term processes described in clause 3.7 to be administered by *AEMO*.

Proponent

In respect of clause 5.7.7 has the meaning given in clause 5.7.7(a).

proposed contingent capital expenditure

For a *Distribution Network Service Provider*, the total forecast capital expenditure for the relevant *proposed contingent project*, as included in the *regulatory proposal* for that project.

For a *Transmission Network Service Provider*, the total forecast capital expenditure for the relevant *proposed contingent project*, as included in the *Revenue Proposal* for that project.

proposed contingent project

A proposal by a *Distribution Network Service Provider* as part of a *regulatory proposal* for a project to be determined by the *AER* as a *contingent project* for the purposes of a distribution determination accordance with clause 6.6A.1(b)(1).

A proposal by a *Transmission Network Service Provider* as part of a *Revenue Proposal* for a project to be determined by the *AER* as a *contingent project* for the purposes of a *revenue determination* in accordance with clause 6A.8.1(b)(1).

prospective reallocation

A *reallocation transaction* that occurs in a *trading interval* that takes place at a time after the *reallocation request* is made.

protected event

Has the meaning given in clause 4.2.3(f).

protected event EFCS standard

For an *emergency frequency control scheme* means the standard for the scheme determined by the *Reliability Panel* under clause 8.8.4 setting out:

- (a) a general description of the scheme including how it is proposed to operate and the new, existing or modified *facilities* likely to comprise the scheme; and
- (b) the *target capabilities* applicable to the scheme.

protected information

Has the meaning given in the *National Electricity Law*.

protection system

A system, which includes equipment, used to protect a *Registered Participant's facilities* from damage due to an electrical or mechanical fault or due to certain conditions of the *power system*.

prudential requirements

The requirements which must be satisfied as a condition of eligibility to remain a *Market Participant* in accordance with clause 3.3.

publish/publication

A document is published by the *AER* if it is:

- (a) published on the *AER's* website; and

- (b) made available for public inspection at the *AER's* public offices; and
- (c) in the case of a document inviting submissions from members of the public – published in a newspaper circulating generally throughout Australia.

In Part B of Chapter 5, a document is published by the *Distribution Network Service Provider* if it is published on the *Distribution Network Service Provider's* website.

Otherwise, a document is published by someone else if it is made available to *Registered Participants* electronically.

ramp rate

The rate of change of *active power* (expressed as MW/minute) required for *dispatch*.

Rate of Return Guidelines

Guidelines made by the *AER* under clause 6.5.2(m) or clause 6A.6.2(m), as the case may be.

rated active power

- (1) In relation to a *generating unit*, the maximum amount of *active power* that the *generating unit* can continuously deliver at the *connection point* when operating at its *nameplate rating*.
- (2) In relation to a *generating system*, the combined maximum amount of *active power* that its in-service *generating units* can deliver at the *connection point*, when its in-service *generating units* are operating at their *nameplate ratings*.

reactive energy

A measure, in varhour (varh), of the alternating exchange of stored energy in inductors and capacitors, which is the time-integral of the product of *voltage* and the out-of-phase component of current flow across a *connection point*.

reactive plant

Plant which is normally specifically provided to be capable of providing or absorbing *reactive power* and includes the *plant* identified in clause 4.5.1(g).

reactive power

The rate at which *reactive energy* is transferred.

Reactive power is a necessary component of alternating current electricity which is separate from *active power* and is predominantly consumed in the creation of magnetic fields in motors and *transformers* and produced by *plant* such as:

- (a) alternating current generators;

- (b) capacitors, including the capacitive effect of parallel *transmission* wires;
and
- (c) *synchronous condensers*.

reactive power capability

The maximum rate at which *reactive energy* may be transferred from a *generating unit* to a *connection point* as specified or proposed to be specified in a *connection agreement* (as the case may be).

reactive power reserve

Unutilised sources of *reactive power* arranged to be available to cater for the possibility of the unavailability of another source of *reactive power* or increased requirements for *reactive power*.

reactive power support/reactive support

The provision of *reactive power*.

reactor

A device, similar to a *transformer*, specifically arranged to be *connected* into the *transmission system* during periods of low *load* demand or low *reactive power* demand to counteract the natural capacitive effects of long *transmission lines* in generating excess *reactive power* and so correct any *transmission voltage* effects during these periods.

real estate developer

Has the meaning given in clause 5A.A.1

real estate development

Has the meaning given in clause 5A.A.1

reallocation

A process under which two *Market Participants* request *AEMO* to make matching debits and credits to the position of those *Market Participants* with *AEMO*.

reallocation amount

In respect of a *Market Participant*, the positive or negative dollar amount in respect of a *reallocation transaction* being an amount payable to or by the *Market Participant*.

reallocation procedures

The procedures *published* by *AEMO* under clause 3.15.11A.

reallocation request

A request to *AEMO* for a *reallocation*, pursuant to clause 3.15.11(c).

reallocation transaction

A *transaction* which occurs when the applicable *trading interval* specified in a *reallocation request* occurs and the *reallocation request* has been registered and not deregistered before the expiration of the *trading interval*.

Reallocator

A person registered as a Reallocator by AEMO in accordance with rule 2.5B.

rebid

A variation to a bid or offer made in accordance with clause 3.8.22(b).

reconnect, reconnected, reconnection

The operation of switching equipment or other action so as to enable the flow of electricity at a *connection point* following a *disconnection*.

Referred Affected Participant

An *Affected Participant* who has a claim referred to an independent expert pursuant to clauses 3.12.2(l) or 3.12.2(m).

Referred Directed Participant

A *Directed Participant* who has a claim referred to an independent expert pursuant to clauses 3.15.7B(c) or 3.15.7B(d).

Referred Market Customer

A *Market Customer* who has a claim referred to an independent expert pursuant to clauses 3.12.2(l) or 3.12.2(m).

region, regional

An area determined by the AEMC in accordance with Chapter 2A, being an area served by a particular part of the *transmission network* containing one or more major *load centres* or *generation centres* or both.

regional benefit directions procedures

Has the meaning given in clause 3.15.8(b2).

regional reference node

A location on a *transmission* or *distribution network* to be determined for each *region* by the AEMC in accordance with Chapter 2A.

regional reference price

Spot price at the *regional reference node*.

regional specific power system operating procedures

The procedures described in clause 4.10.1(a)(3).

Regions Publication

The document *published* by AEMO under clause 2A.1.3 that provides a list of all *regions*, *regional reference nodes* and the *region* to which each *market connection point* is assigned.

Registered Participant

A person who is registered by AEMO in any one or more of the categories listed in rules 2.2 to 2.7. However:

- (a) in the case of a person who is registered by AEMO as a *Trader*, such a person is only a *Registered Participant* for the purposes referred to in rule 2.5A;
- (b) in the case of a person who is registered by AEMO as a *Metering Coordinator*, such a person is only a *Registered Participant* for the purposes referred to in clause 2.4A.1(d);
- (c) as set out in rule 2.11.1A, for the purposes of rule 2.11 only, *Third Party B2B Participants* (other than *Third Party B2B Participants* who are also *Embedded Network Managers*) are also deemed to be *Registered Participants*;
- (d) as set out in clause 8.2.1(a1) and 8.2A.2(b), for the purposes of some provisions of rule 8.2 only, AEMO, *Connection Applicants*, *Metering Providers*, *Metering Data Providers*, *Third Party B2B Participants* and *B2B Change Parties* who are not otherwise *Registered Participants* are also deemed to be *Registered Participants*;
- (e) as set out in clause 8.6.1A, for the purposes of Part C of Chapter 8 only, *Metering Providers*, *Metering Data Providers* and *Third Party B2B Participants* who are not otherwise *Registered Participants* are also deemed to be *Registered Participants*; and
- (f) as set out in clause 4.8.12(a3), for the purposes of Part C of Chapter 8 only, *Jurisdictional System Security Coordinators* are also deemed to be *Registered Participants*.

Registered Participant Agent

An agent of a *Registered Participant* appointed under clause 4.11.5.

registration category

Has the meaning given in clause 3.15.21(c1)(1).

regulated interconnector

An *interconnector* which is referred to in clause 11.8.2 of the *Rules* and is subject to *transmission service* regulation and pricing arrangements in Chapter 6A.

regulating capability

The capability to perform *regulating duty*.

regulating capability constraints

Constraints on the formulation of a realisable *dispatch* or *predispatch schedule* due to the need to provide for *regulating capability*.

regulating duty

In relation to a *generating unit*, the duty to have its *generated* output adjusted frequently so that any *power system frequency* variations can be corrected.

regulating lower service

The service of controlling the level of *generation* or *load* associated with a particular *facility*, in accordance with the requirements of the *market ancillary service specification*, in accordance with electronic signals from AEMO in order to lower the *frequency* of the *power system*.

regulating raise service

The service of controlling the level of *generation* or *load* associated with a particular *facility*, in accordance with the requirements of the *market ancillary service specification*, in accordance with electronic signals from AEMO in order to raise the *frequency* of the *power system*.

regulation services

The *regulating raise service* and *regulating lower service*.

regulatory change event

A change in a *regulatory obligation* or *requirement* that:

- (a) falls within no other category of *pass through event*; and
- (b) occurs during the course of a *regulatory control period*; and
- (c) substantially affects the manner in which the *Transmission Network Service Provider* provides *prescribed transmission services* or the *Distribution Network Service Provider* provides *direct control services* (as the case requires); and
- (d) *materially* increases or *materially* decreases the costs of providing those services.

regulatory control period

- (a) In respect of a *Transmission Network Service Provider*, a period of not less than 5 *regulatory years* in which a *total revenue cap* applies to that provider by virtue of a *revenue determination*.

- (b) In respect of a *Distribution Network Service Provider*, a period of not less than 5 *regulatory years* for which the provider is subject to a control mechanism imposed by a distribution determination.

regulatory information instrument

Has the meaning given in the *National Electricity Law*.

regulatory investment test for distribution

The test developed and *published* by the AER in accordance with clauses 5.17.1 and 5.17.2, as in force from time to time, and includes amendments made in accordance with clause 5.17.2.

regulatory investment test for transmission

The test developed and *published* by the AER in accordance with clauses 5.16.1 and 5.16.2, as in force from time to time, and includes amendments made in accordance with clause 5.16.2.

regulatory obligation or requirement

Has the meaning assigned in the Law.

regulatory proposal

A proposal (by a *Distribution Network Service Provider*) under rule 6.8.

regulatory year

Each consecutive period of 12 calendar months in a *regulatory control period*, the first such 12 month period commencing at the beginning of the *regulatory control period* and the final 12 month period ending at the end of the *regulatory control period*. For AEMO, each *financial year* is a *regulatory year*.

related body corporate

In relation to a body corporate, a body corporate that is related to the first-mentioned body by virtue of the *Corporations Act 2001* (Cth).

releasable user guide

A document associated with a functional block diagram and model source code provided under clause S5.2.4(b) (combined, forming the **model**), that contains sufficient information to enable a *Registered Participant* to use model source code provided under clause 3.13.3(l) to carry out *power system* studies for planning and operational purposes. The information in a releasable user guide must include, but is not limited to:

- (1) the **model** parameters and their values;
- (2) information about how the **model** parameter values vary with the operating state or output level of the *plant* or with the operating state or output level of any associated *plant*;

- (3) instructions relevant to the use and operation of the model source code provided under clause 3.13.3(l);
- (4) settings of *protection systems* that are relevant to load flow or dynamic simulation studies;
- (5) information provided in accordance with Schedule 5.5 only to the extent that the information is not a part of the **model** or the **model** parameters and that is reasonably necessary to allow modelling of the *generating unit*, *generating system* or related *plant* in *power system* load flow or dynamic simulation studies;
- (6) *connection point* details including its parameters and values, location, network augmentations or modifications and other relevant connection information;
- (7) in regards to any relevant *generating unit* or *generating system*, the date on which any of the following has occurred or is expected to occur:
 - (i) *an application to connect* is made under clause 5.3.4(a);
 - (ii) a *connection agreement* is entered into under clause 5.3.7;
 - (iii) the *Generator* submits a proposal to alter a *connected generating system* or a *generating system*, for which *performance standards* have previously been accepted by AEMO, under clause 5.3.9;
 - (iv) the *Generator* is notified that the *Network Service Provider* and AEMO are satisfied with the proposed alterations to the *generating plant* under clause 5.3.10;
 - (v) *connection*;
 - (vi) commencement of commissioning; and
 - (vii) conclusion of commissioning; and
- (8) the date this document was prepared or updated.

relevant AEMO intervention event

A *AEMO intervention event* that involves the exercise of the *reliability and emergency reserve trader* in accordance with rule 3.20 as referred to in paragraph (b) of the definition of *AEMO intervention event*.

relevant tax

Any tax payable by a *Transmission Network Service Provider* or a *Distribution Network Service Provider* other than:

- (a) income tax and capital gains tax;
- (b) stamp duty, financial institutions duty and bank accounts debits tax;

- (c) penalties, charges, fees and interest on late payments, or deficiencies in payments, relating to any tax; or
- (d) any tax that replaces or is the equivalent of or similar to any of the taxes referred to in paragraphs (a) to (b) (including any State equivalent tax).

Relevant Transmission Network Service Provider, Relevant TNSP

In respect of clause 5.7.7 has the meaning given in clause 5.7.7(a).

reliability

The probability of a system, device, *plant* or equipment performing its function adequately for the period of time intended, under the operating conditions encountered.

reliability and emergency reserve trader (RERT)

The actions taken by *AEMO* as referred to in clause 3.20.2, in accordance with rule 3.20, to ensure reliability of *supply*.

reliability augmentation

A *transmission network augmentation* that is necessitated principally by inability to meet the minimum *network* performance requirements set out in schedule 5.1 or in relevant legislation, regulations or any statutory instrument of a *participating jurisdiction*.

Reliability Panel

The panel established by the *AEMC* under section 38 of the *National Electricity Law*.

reliability settings

The following market settings:

- (a) the *market price cap*;
- (b) the *cumulative price threshold*;
- (c) the *market floor price*; and
- (d) the *administered price cap*.

reliability standard

The standard specified in clause 3.9.3C.

reliability standard and settings guidelines

The guidelines developed under clause 3.9.3A(a).

reliability standard and settings review

A review of the *reliability standard* and the *reliability settings*, including the manner of indexing the *market price cap* and the *cumulative price threshold*, conducted in accordance with clause 3.9.3A.

reliability standard implementation guidelines

The guidelines developed under clause 3.9.3D.

reliable

The expression of a recognised degree of confidence in the certainty of an event or action occurring when expected.

reliable operating state

In relation to the *power system*, has the meaning set out in clause 4.2.7.

remote acquisition

The acquisition of *interval metering data* from a *telecommunications network* connected to a *metering installation* that:

- (a) does not, at any time, require the presence of a person at, or near, the *interval metering installation* for the purposes of data collection or data verification (whether this occurs manually as a walk-by reading or through the use of a vehicle as a close proximity drive-by reading); and
- (b) includes but is not limited to methods that transmit data via:
 - (1) fixed-line telephone ('direct dial-up');
 - (2) satellite;
 - (3) the internet;
 - (4) wireless or radio, including mobile telephone networks;
 - (5) power line carrier; or
 - (6) any other equivalent technology.

Note:

For the requirements of clause 7.8.9(b) *remote acquisition* may collect data other than *interval metering data*.

remote control equipment

Equipment used to control the operation of elements of a *power station* or *substation* from a *control centre*.

remote monitoring equipment

Equipment installed to enable monitoring of a *facility* from a *control centre*.

representative

In relation to a person, any employee, agent or professional adviser of:

- (a) that person; or
- (b) a *related body corporate* of that person; or
- (c) a third party contractor to that person.

required pass through amount

In respect of a *negative change event* for a *Transmission Network Service Provider*, the costs in the provision of *prescribed transmission services* that, as a result of that *negative change event*, the *Transmission Network Service Provider* has saved and is likely to save (as opposed to the revenue impact of that event) until:

- (a) unless paragraph(b) applies – the end of the *regulatory control period* in which the *negative change event* occurred; or
- (b) if the *transmission determination* for the *regulatory control period* following that in which the *negative change event* occurred does not make any allowance for the pass through of the saved costs (whether or not in the forecast operating expenditure or forecast capital expenditure accepted or substituted by the *AER* for that *regulatory control period*) – the end of the *regulatory control period* following that in which the *negative change event* occurred.

In respect of a *negative change event* for a *Distribution Network Service Provider*, the costs in the provision of *direct control services* that, as a result of the *negative change event*, the *Distribution Network Service Provider* has saved and is likely to save (as opposed to the revenue impact of that event) until:

- (a) unless paragraph(b) applies – the end of the *regulatory control period* in which the *negative change event* occurred; or
- (b) if the distribution determination for the *regulatory control period* following that in which the *negative change event* occurred does not make any allowance for the pass through of the saved costs (whether or not in the forecast operating expenditure or forecast capital expenditure accepted or substituted by the *AER* for that *regulatory control period*) – the end of the *regulatory control period* following that in which the *negative change event* occurred.

RERT guidelines

The guidelines developed and *published* by the *Reliability Panel* under clause 3.20.8.

RERT principles

The principles referred to in clause 3.20.2(b).

reserve

Scheduled reserve or unscheduled reserve.

reserve contract

A scheduled reserve contract or an unscheduled reserve contract.

reserve level declaration guidelines

The guidelines *published* by AEMO under clause 4.8.4A(a).

response breakpoint

- (a) In relation to a *market ancillary service offer* to raise the *frequency* of the *power system*, the level of associated *generation* or *load* (in MW) above which the amount of response specified in the *offer* reduces with increased *generation* or *load* level; and
- (b) in relation to a *market ancillary service offer* to lower the *frequency* of the *power system*, the level of associated *generation* or *load* (in MW) below which the amount of response specified in the *offer* reduces with decreased *generation* or *load* level.

response capability

- (a) In relation to a *market ancillary service offer* to raise the *frequency* of the *power system*, the amount of the response in (MW) which is specified in the *offer* for every level of associated *generation* or *load* below the associated *response breakpoint*; and
- (b) in relation to a *market ancillary service offer* to lower the *frequency* of the *power system*, the amount of the response in (MW) which is specified in the *offer* for every level of associated *generation* or *load* above the associated *response breakpoint*.

responsible person

For the purposes of the *National Energy Retail Law*, the *Metering Coordinator*.

Note:

References to 'responsible person' in the *Rules* or a document produced under the *Rules* are deemed to be references to the *Metering Coordinator* under clause 11.86.4.

restricted asset

An item of equipment that is electrically connected to a *retail customer's connection point* at a location that is on the same side of that *connection point* as the *metering point*, but excludes:

- (a) such an item of equipment where that *retail customer* is a *Distribution Network Service Provider* and that *Distribution Network Service Provider* is the *Local Network Service Provider* for that *connection point*; or
- (b) a *network device*.

restriction demand reduction

The reduction in a *Market Customer's* demand due to the imposition of *mandatory restrictions* as reasonably determined by an independent expert in accordance with clause 3.12A.7. For the avoidance of doubt, the reduction of a *Market Customer's* demand due to the imposition of *mandatory restrictions* should exclude any reduction in its demand which the *Market Customer* claims was due to the operation of *generation* and as reasonably verified by the independent expert in a similar manner to that used by the independent expert to determine restrictions due to demand management.

restriction offer

An offer by a *Scheduled Generator* or a *Scheduled Network Service Provider* to provide capacity to AEMO for all or part of a *mandatory restriction period* made in accordance with the *restriction offer procedures*.

restriction offer procedures

The procedures developed by AEMO in accordance with clause 3.12A.1.

restriction shortfall amount

The amount determined in accordance with clause 3.12A.7(b).

retail billing period

Has (in the context of Chapter 6B) the meaning given in clause 6B.A1.2.

retail customer

A *small customer* or a *large customer*.

Note:

In the context of Chapter 5A, the above definition has been supplemented by a definition specifically applicable to that Chapter, See clause 5A.A.1.

Retail Market Procedures

Procedures made under these *Rules* for or in *connection* with the sale and *supply* of electricity to *retail customers* or the operation of retail electricity *markets* including:

- (a) *B2B procedures*; and
- (b) the *Market Settlement and Transfer Solution Procedures*; and
- (c) the *metrology procedures*; and

- (d) other procedures dealing with, or incidental to, the retail sale or *supply* of electricity or related services.

retailer

Has the same meaning as in the *National Electricity Law*.

Otherwise, a *Customer* who engages in the activity of selling electricity to end users.

retailer insolvency costs

For a *Distribution Network Service Provider*:

- (a) *billed but unpaid charges*;
- (b) the actual amount of unbilled *network charges* accrued by a *failed retailer*; and
- (c) other costs that the *Distribution Network Service Provider* has incurred or is likely to incur as a result of a *retailer insolvency event*.

retailer insolvency event

The failure of a *retailer* during a *regulatory control period*, to pay a *Distribution Network Service Provider* an amount to which the service provider is entitled for the provision of *direct control services*, if:

- (a) an *insolvency official* has been appointed in respect of that *retailer*; and
- (b) the *Distribution Network Service Provider* is not entitled to payment of that amount in full under the terms of any *credit support* provided in respect of that *retailer*.

Retailer Member

A person nominated and elected as a *Member* by *Retailer Member Voters* to represent *Retailer Member Voters* in accordance with the *Rules* (including clause 7.17.10(f)) and *Information Exchange Committee Election Procedures*.

Retailer Member Voters

Retailers and *Local Retailers*.

retailer planned interruption

- (a) In a *participating jurisdiction* where the *National Energy Retail Rules* apply as a law of that *participating jurisdiction*, has the meaning given in the *National Energy Retail Rules*.
- (b) Otherwise, if defined in *jurisdictional electricity legislation*, has the meaning given in *jurisdictional electricity legislation*.

revenue determination

A determination referred to in clause 6A.2.2(1) and rule 6A.4 as substituted (if at all) pursuant to clause 6A.7.1 or rule 6A.15 or as amended pursuant to clause 6A.8.2.

Revenue Proposal

For a *Transmission Network Service Provider*, a proposal submitted or resubmitted by the *Transmission Network Service Provider* to the *AER* pursuant to clause 6A.10.1(a), clause 6A.11.2 or clause 6A.12.3(a) (as the context requires).

review

An examination of the specified matters conducted to the standard specified for a "review" in Auditing Standard AUS106: "Explanatory Framework for standards on Audit and Audit Related Services" prepared by the Auditing Standards Board, as varied from time to time.

revised statement

A statement issued by *AEMO* under clause 3.15.19 following the resolution of a dispute regarding a *final statement*.

RMS phase voltage

The *voltage of supply* measured as the average of the root mean square of the *voltages* between each pair of phases.

roll forward model

According to context:

- (a) the model developed and published by the *AER* for the roll forward of the regulatory asset base for *transmission systems* in accordance with clause 6A.6.1;
- (b) the model developed and published by the *AER* for the roll forward of the regulatory asset base for *distribution systems* in accordance with clause 6.5.1.

RoLR cost recovery scheme distributor payment determination

Has the same meaning as in the *National Energy Retail Law*.

RoLR Procedures

Has the same meaning as in the *National Energy Retail Law*.

RoLR

Has the same meaning as in the *National Energy Retail Law*.

routine revised statement

A *settlement statement* issued by AEMO under clause 3.15.19(b).

Rule fund

A fund referred to in clause 1.11(a).

Rules

The rules called the National Electricity Rules made under Part 7 of the *National Electricity Law* as amended from time to time in accordance with that Part.

Rules bodies

Any person or body, other than AEMO, the AER, the AEMC, or the ACCC, that is appointed or constituted by the *Rules* to perform functions under the *Rules*.

Rules consultation procedures

The procedures for consultation with *Registered Participants* or other persons as set out in clause 8.9.

satisfactory operating state

In relation to the *power system*, has the meaning given in clause 4.2.2.

scheduled generating unit

- (a) A *generating unit* so classified in accordance with Chapter 2.
- (b) For the purposes of Chapter 3 (except clause 3.8.3A(b)(1)(iv)) and rule 4.9, two or more *generating units* referred to in paragraph (a) that have been aggregated in accordance with clause 3.8.3.

scheduled generating system

A *generating system* comprising *scheduled generating units*.

Scheduled Generator

A *Generator* in respect of which any *generating unit* is classified as a *scheduled generating unit* in accordance with Chapter 2.

scheduled high price

The dollar amount per MWh or MW, as the case may be, determined as such by AEMO pursuant to clause 3.3.17.

scheduled load

- (a) A *market load* which has been classified by AEMO in accordance with Chapter 2 as a *scheduled load* at the *Market Customer's* request. Under Chapter 3, a *Market Customer* may submit *dispatch bids* in relation to *scheduled loads*.

- (b) For the purposes of Chapter 3 (except clause 3.8.3A(b)(1)(ii)) and rule 4.9, two or more *scheduled loads* referred to in paragraph (a) that have been aggregated in accordance with clause 3.8.3.

scheduled low price

The dollar amount per MWh or MW, as the case may be, determined as such by AEMO pursuant to clause 3.3.17.

scheduled network service

- (a) A *network service* which is classified as a *scheduled network service* in accordance with Chapter 2.
- (b) For the purposes of Chapter 3 (except clause 3.8.3A(b)(1)(ii)) and rule 4.9, two or more *scheduled network services* referred to in paragraph (a) that have been aggregated in accordance with clause 3.8.3.

Scheduled Network Service Provider

A *Network Service Provider* who has classified any of its *network services* as a *scheduled network service*.

scheduled plant

In respect of a *Registered Participant*, a *scheduled generating unit*, a *semi-scheduled generating unit*, a *scheduled network service* or a *scheduled load* classified by or in respect to that *Registered Participant* in accordance with Chapter 2.

scheduled reserve

The amount of surplus or unused capacity:

- (a) of *scheduled generating units*;
- (b) of *scheduled network services*; or
- (c) arising out of the ability to reduce *scheduled loads*.

scheduled reserve contract

A contract entered into by AEMO for the provision of *scheduled reserve* in accordance with rule 3.20.

scheduling error

Scheduling error means any of the events described in clause 3.8.24(a).

secondary equipment

Those assets of a *Market Participant's facility* which do not carry the *energy* being traded, but which are required for control, protection or operation of assets which carry such *energy*.

Second-Tier Customer

A *Customer* which has classified any *load* as a *second-tier load* in accordance with Chapter 2.

second-tier load

Electricity purchased at a *connection point* in its entirety other than directly from the *Local Retailer* or the *spot market* and which is classified as a *second-tier load* in accordance with Chapter 2.

secure operating level of inertia

For an *inertia sub-network*, the *secure operating level of inertia* determined by AEMO and referred to in clause 5.20B.2(b)(2).

secure operating state

In relation to the *power system* has the meaning given in clause 4.2.4.

self-commitment, self-commit

Commitment, where the decision to *commit* a *generating unit* was made by the relevant *Generator* without instruction or direction from AEMO.

self-decommitment

Decommitment, where the decision to *decommit* a *generating unit* was made by the relevant *Generator* without instruction or direction from AEMO.

semi-dispatch interval

For a *semi-scheduled generating unit*, a *dispatch interval* for which either:

- (a) a *network constraint* would be violated if the *semi-scheduled generating unit's generation* were to exceed the *dispatch level* specified in the related *dispatch instruction* at the end of the *dispatch interval*; or
- (b) the *dispatch level* specified in that *dispatch instruction* is less than the *unconstrained intermittent generation forecast* at the end of the *dispatch interval*,

and which is notified by AEMO in that *dispatch instruction* to be a *semi-dispatch interval*.

self-dispatch level

The level of *generation* in MW, as specified in a *dispatch offer* for a *generating unit* and a *trading interval*, which is the level at which that *generating unit* must be *dispatched* by AEMO in that *trading interval* unless otherwise *dispatched* in accordance with clause 3.8 or unless required to operate under a *direction* issued by AEMO in accordance with clause 4.8.9.

semi-scheduled generating system

A *generating system* comprising *semi-scheduled generating units*.

semi-scheduled generating unit

- (a) A *generating unit* classified in accordance with clause 2.2.7.
- (b) For the purposes of Chapter 3 and rule 4.9, two or more *generating units* referred to in paragraph (a) that have been aggregated in accordance with clause 3.8.3.

Semi-Scheduled Generator

A *Generator* in respect of which any *generating unit* is classified as a *semi-scheduled generating unit* in accordance with Chapter 2.

sensitive loads

Loads defined as sensitive for each *participating jurisdiction* by the *Jurisdictional System Security Coordinator* for that *participating jurisdiction*.

sent out generation

In relation to a *generating unit*, the amount of electricity *supplied* to the *transmission* or *distribution network* at its *connection point*.

Service Applicant

A person who asks a *Distribution Network Service Provider* for access to a *distribution service*.

service level procedures

The procedures established by AEMO in accordance with clause 7.16.6.

service standard event

A legislative or administrative act or decision that:

- (a) has the effect of:
 - (i) substantially varying, during the course of a *regulatory control period*, the manner in which a *Transmission Network Service Provider* is required to provide a *prescribed transmission service*, or a *Distribution Network Service Provider* is required to provide a *direct control service*; or
 - (ii) imposing, removing or varying, during the course of a *regulatory control period*, minimum service standards applicable to *prescribed transmission services* or *direct control services*; or
 - (iii) altering, during the course of a *regulatory control period*, the nature or scope of the *prescribed transmission services* or *direct control services*, provided by the service provider; and

- (b) *materially* increases or *materially* decreases the costs to the service provider of providing *prescribed transmission services* or *direct control services*.

service target performance incentive scheme

A For a *Transmission Network Service Provider* – a scheme developed and published by the AER in accordance with clause 6A.7.4.

For a *Distribution Network Service Provider* – a scheme developed and published by the AER in accordance with clause 6.6.2.

settlement amount

The amount calculated by AEMO pursuant to clause 3.15.12.

settlement statement

Includes an *interim statement*, *preliminary statement* and *final statement*.

settlements

The activity of producing bills and credit notes for *Market Participants*.

settlements ready data

The *metering data* that has undergone a validation and substitution process by AEMO for the purpose of *settlements* and is held in the *metering database*.

settlements residue

Any surplus or deficit of funds retained by AEMO upon completion of *settlements* to all *Market Participants* in respect of a *trading interval*, being either *inter-regional settlements residue* or *intra-regional settlements residue*.

settlement residue committee

The committee established by AEMO in accordance with clause 3.18.5.

settlement residue distribution agreement* or *SRD agreement

Has the meaning given in clause 3.18.1(b).

Shared Asset Guidelines

Guidelines made by the AER under clause 6.4.4(d) or clause 6A.5.5(d), as the case may be.

shared asset principles

Has the meaning given to it by clause 6.4.4(c) or clause 6A.5.5(c), as the case may be.

shared customer

Has (in the context of Chapter 6B) the meaning given in clause 6B.A1.2.

shared distribution service

A service provided to a *Distribution Network User* for use of a *distribution network* for the conveyance of electricity (including a service that ensures the integrity of the related *distribution system*).

shared network capability service

Has the meaning given in the *National Electricity Law*.

shared transmission service

A service provided to a *Transmission Network User* for use of a *transmission network* for the conveyance of electricity (including a service that ensures the integrity of the related *transmission system*).

short circuit fault

A fault having a metallic conducting path between any two or more conductors or between any conductor and ground, including touching conductors and faults through earthing facilities, and excluding faults within equipment at a station.

short term PASA

The *PASA* in respect of the period described in clause 3.7.3(b), as described under clause 3.7.3.

short term PASA inputs

The inputs to be prepared in accordance with clauses 3.7.3(d) and (e).

shunt capacitor

A type of *plant connected to a network* to generate *reactive power*.

shunt reactor

A type of *plant connected to a network* to absorb *reactive power*.

single contingency

In respect of a *transmission* or *distribution network* and *Network Users*, a sequence of related events which result in the removal from service of one *Network User*, *transmission* or *distribution line*, or *transformer*. The sequence of events may include the application and clearance of a fault of defined severity.

slow lower service

The service of providing, in accordance with the requirements of the *market ancillary service specification*, the capability of controlling the level of *generation* or *load* associated with a particular *facility* in response to the locally sensed *frequency* of the *power system* in order to stabilise a rise in that *frequency*.

slow raise service

The service of providing, in accordance with the requirements of the *market ancillary service specification*, the capability of controlling the level of *generation* or *load* associated with a particular *facility* in response to the locally sensed *frequency* of the *power system* in order to stabilise a fall in that *frequency*.

slow start generating unit

A *generating unit* described in clause 3.8.17(a).

slow start reserve generating unit

A *slow start generating unit* providing *scheduled reserve*.

small customer

- (a) In a *participating jurisdiction* where the *National Energy Retail Law* applies as a law of that *participating jurisdiction*, has the meaning given in the *National Energy Retail Law*.
- (b) Otherwise, has the meaning given in *jurisdictional electricity legislation*.

small customer metering installation

A *metering installation* in respect of the *connection point* of a *small customer* which meets the *minimum services specification* or which is required to meet the *minimum services specification* under clause 7.8.3(a), clause 7.8.4(c) or clause 7.8.4(h)(2).

small dedicated connection asset

A *dedicated connection asset* that is not a *large dedicated connection asset*.

small generating unit

A *generating unit*:

- (a) with a *nameplate rating* that is less than 30MW; and
- (b) which is owned, controlled or operated by a person that AEMO has exempted from the requirement to register as a *Generator* in respect of that *generating unit* in accordance with clause 2.2.1(c).

Small Generation Aggregator

A person who:

- (a) intends to supply, or supplies, electricity from one or more *small generating units* that are connected to a *transmission or distribution system*; and
- (b) is registered by AEMO as a *Small Generation Aggregator* under Chapter 2.

small-scale incentive scheme

A scheme developed and *published* by the *AER* in accordance with clause 6.6.4 or clause 6A.7.5, as the case may be.

Special Participant

A *System Operator* or a *Distribution System Operator*.

special revised statement

A *settlement statement* issued by *AEMO* under clause 3.15.19(a)(3).

spot market

The spot market established and operated by *AEMO* in accordance with clause 3.4.1.

spot market transaction

A transaction as defined pursuant to clause 3.15.6 which occurs in the *spot market*.

spot price

The price for electricity in a *trading interval* at a *regional reference node* or a *connection point* as determined in accordance with clause 3.9.2.

spot price forecast

A forecast of the *spot price*.

SRAS Guideline

The guideline developed and *published* by *AEMO* in accordance with clause 3.11.7(c) as in force from time to time and includes amendments made in accordance with clauses 3.11.7(f) and 3.11.7(g).

SRAS Objective

The objective for *system restart ancillary services* is to minimise the expected costs of a *major supply disruption*, to the extent appropriate having regard to the *national electricity objective*.

SRAS Provider

A person who agrees to provide one or more *system restart ancillary services* to *AEMO* under an *ancillary services agreement*.

SRAS Procurement Objective

Has the meaning given in clause 3.11.7(a1).

SRD unit

A unit that represents a right for an *eligible person* to receive a portion of the net *settlements residue* under clause 3.6.5 allocated to a *directional interconnector* for the period specified in a *SRD agreement* entered into between that *eligible person* and AEMO in respect of that right.

stand-alone amount

For a *category of prescribed transmission services*, the costs of a *transmission system asset* that would have been incurred had that *transmission system asset* been developed, exclusively to provide that *category of prescribed transmission services*.

standard connection service

Has (in the context of Chapter 5A) the meaning given in clause 5A.A.1.

standard control service

A *direct control service* that is subject to a control mechanism based on a *Distribution Network Service Provider's total revenue requirement*.

Standards Australia

The Standards Association of Australia and includes its heirs or successors in business.

statement of charges

Has (in the context of Chapter 6B) the meaning given in clause 6B.A1.2.

statement of opportunities

A statement prepared by AEMO to provide information to assist *Scheduled Generators*, *Semi-Scheduled Generators*, *Transmission Network Service Providers* and *Market Participants* in making an assessment of the future need for electricity generating or demand management capacity or augmentation of the *power system*.

static excitation system

An *excitation control system* in which the power to the rotor of a *synchronous generating unit* is transmitted through high power solid-state electronic devices.

static VAR compensator

A device specifically provided on a *network* to provide the ability to generate and absorb *reactive power* and to respond automatically and rapidly to *voltage fluctuations* or *voltage instability* arising from a disturbance or disruption on the *network*.

substation

A *facility* at which two or more lines are switched for operational purposes. May include one or more *transformers* so that some *connected* lines operate at different nominal *voltages* to others.

substituted metering data

The substituted values of *accumulated metering data*, *interval metering data* or *calculated metering data* prepared in accordance with the *metrology procedure*. *Substituted metering data* is held in a *metering data services database* and the *metering database*.

super majority

At least 70% of the number of *Members*.

supplementary carbon dioxide equivalent intensity indicator

Any indicators relating to a subset of *scheduled generating units* and *market generating units* published by *AEMO* in accordance with clause 3.13.14(h).

supply

The delivery of electricity.

supply service

Has (in the context of Chapter 5A) the meaning given in clause 5A.A.1

survey period

An agreed sample period used to determine the allocation of costs and prices for use of *transmission network* or *distribution network* assets.

suspended region

A region in which the *spot market* is suspended in accordance with clause 3.14.4.

suspension notice

A notice issued by *AEMO* to a *defaulting Market Participant* pursuant to clause 3.15.21(c) or (c1) under which *AEMO* notifies the *defaulting Market Participant*:

- (a) of the date and time from which it is suspended from specified activities;
- (b) the *registration categories* of the *defaulting Market Participant* to which the suspension relates; and
- (c) in respect of the *registration categories* referred to in paragraph (b), the activities (or subset of activities) of the *Market Participant* that have been suspended.

switchyard

The *connection point* of a *generating unit* into the *network*, generally involving the ability to *connect* the *generating unit* to one or more outgoing *network* circuits.

Sydney time

Eastern Standard Time or *Eastern Daylight Saving Time* as applicable in Sydney.

synchronise

The act of *synchronising* a *generating unit* or a *scheduled network service* to the *power system*.

synchronising, synchronisation

To electrically *connect* a *generating unit* or a *scheduled network service* to the *power system*.

synchronous condensers

Apparatus or equipment similar in construction to a *synchronous generating unit*, which operates at the equivalent speed of the *frequency* of the *power system*.

synchronous generating unit

The alternating current generators of most thermal and hydro (water) driven power turbines which operate at the equivalent speed of the *frequency* of the *power system* in its *satisfactory operating state*.

synchronous generator voltage control

The automatic *voltage control system* of a *generating unit* of the *synchronous generator* category which changes the output *voltage* of the *generating unit* through the adjustment of the generator rotor current and effectively changes the *reactive power* output from that *generating unit*.

System Operator

A person whom *AEMO* has engaged as its agent, or appointed as its delegate, under clause 4.3.3 to carry out some or all of *AEMO*'s rights, functions and obligations under Chapter 4 of the *Rules* and who is registered by *AEMO* as a *System Operator* under Chapter 2.

system restart ancillary service* or *SRAS

A service provided by *facilities* with *black start capability* which allows:

- (a) *energy* to be supplied; and
- (b) a *connection* to be established,

sufficient to restart large *generating units* following a *major supply disruption*.

system restart plan

The plan described in clause 4.8.12(a).

system restart standard

The standard as determined by the *Reliability Panel* in accordance with clause 8.8.3(aa), for the acquisition of *system restart ancillary services*.

system standard

A standard for the performance of the *power system* as set out in schedule 5.1a.

system strength connection works

Investment in a *transmission or distribution system* in order to remedy or avoid an *adverse system strength impact* arising from establishing a *connection* for a *generating system* or *market network service facility* or from any alteration to a *generating system* to which clause 5.3.9 applies.

system strength generating unit

A *generating unit* registered with AEMO under clause 5.20C.4(b).

system strength impact assessment

Power system studies to assess the impact of the *connection* of a new *generating system* or *market network service facility* or of any proposed alteration to a *generating system* to which clause 5.3.9 applies on the ability under different operating conditions of:

- (a) the *power system* to maintain system stability in accordance with clause S5.1a.3; and
- (b) *generating systems* and *market network service facilities* forming part of the *power system* to maintain stable operation including following any *credible contingency event* or *protected event*,

so as to maintain the *power system* in a *secure operating state*.

system strength impact assessment guidelines

The guidelines for conducting *system strength impact assessments* developed by AEMO under clause 4.6.6.

system strength remediation scheme

A scheme agreed or determined under clause 5.3.4B required to be implemented as a condition of a *connection agreement* to remedy or avoid an *adverse system strength impact*.

system strength requirements

The matters determined by AEMO for a *region* under clause 5.20C.1(a).

system strength requirements methodology

The process *AEMO* uses to determine the *system strength requirements* for each *region* published by *AEMO* under clause 5.20.1(a)(3).

system strength service

A service for the provision of a contribution to the *three phase fault level* at a *fault level node*.

system strength service payment

A payment by a *Transmission Network Service Provider* made under a *system strength services agreement* where:

- (a) the payment is made for *system strength services* to be made available or provided as a service to the *Transmission Network Service Provider* in its capacity as a *System Strength Service Provider* to satisfy an obligation under clause 5.20C.3; and
- (b) the *system strength services* are made available or provided in accordance with applicable technical specifications and performance standards approved by *AEMO*.

System Strength Service Provider

The *System Strength Service Provider* for a *region* as specified under clause 5.20C.3(a).

system strength services agreement

An agreement made under which a person agrees to provide one or more *system strength services* to a *System Strength Service Provider*.

system-wide benefits

Benefits that extend beyond a *Transmission Network User*, or group of *Transmission Network Users*, at a single *transmission network connection point* to other *Transmission Network Users*.

take or pay contract

A contract between a buyer and a seller of an asset-based service under which the buyer undertakes to pay regularly to the seller a fixed or minimum sum regardless of the actual level of consumption of the service by the buyer. The contract has the effect of transferring market risk associated with the assets from the seller (as the owner of the assets) to the buyer.

tap-changing transformer

A *transformer* with the capability to allow internal adjustment of output *voltages* which can be automatically or manually initiated and which is used as a major component in the control of the *voltage* of *transmission* and *distribution networks* in conjunction with the operation of *reactive plant*. The *connection point* of a

generating unit may have an associated tap-changing transformer, usually provided by the *Generator*.

target capabilities

For an *emergency frequency control scheme* means the technical parameters required to define the intended (but not guaranteed) service provided by the scheme which may include:

- (a) *power system* conditions within which the scheme is capable of responding;
- (b) the nature of the scheme's response (*load shedding* or *generation shedding* for the purposes of managing *frequency*);
- (c) the speed of the response;
- (d) the amount of *load shedding* or *generation shedding* that may occur when the scheme responds; and
- (e) capability to dynamically sense *power system* conditions.

tariff class

A class of *retail customers* for one or more *direct control services* who are subject to a particular tariff or particular tariffs.

tariff structure statement

For a *Distribution Network Service Provider*, means the *tariff structure statement* referred to in clause 6.18.1A that has been approved by the *AER* for that *Distribution Network Service Provider*.

tax

Any tax, levy, impost, deduction, charge, rate, rebate, duty, fee or withholding which is levied or imposed by an *Authority*.

tax change event

A tax change event occurs if:

- (a) any of the following occurs during the course of a *regulatory control period* for a *Transmission Network Service Provider* or a *Distribution Network Service Provider*:
 - (i) a change in a *relevant tax*, in the application or official interpretation of a *relevant tax*, in the rate of a *relevant tax*, or in the way a *relevant tax* is calculated;
 - (ii) the removal of a *relevant tax*;
 - (iii) the imposition of a *relevant tax*; and

- (b) in consequence, the costs to the service provider of providing *prescribed transmission services* or *direct control services* are *materially* increased or decreased.

technical envelope

The limits described in clause 4.2.5.

telecommunications network

A telecommunications network that provides access for public use or an alternate telecommunications network that has been approved by AEMO for the *remote acquisition of energy data*.

template for generator compliance programs

The template determined and *published* by the *Reliability Panel* under clause 8.8.3 of the *Rules*.

terms and conditions of access

According to context:

- (a) the terms and conditions described in clause 5.5.1(c); or
- (b) the terms and conditions described in clause 6.1.3.

test program

In respect of an *inter-network test*, means the program and co-ordination arrangements for the test including, without limitation:

- (1) test procedures;
- (2) the proposed timing of the test;
- (3) operational procedures to manage *power system security* during the test;
- (4) required *power system* conditions for conducting the test;
- (5) test facilitation services including, as necessary, *ancillary services* required to achieve those *power system* conditions;
- (6) criteria for continuing or concluding a test and the decision-making process relevant to the test; and
- (7) contingency arrangements.

Third Party B2B Participant

A *B2B e-Hub Participant* who is not also a *Distribution Network Service Provider*, *retailer*, *Local Retailer*, *Metering Coordinator*, *Metering Provider* or *Metering Data Provider*.

Third Party B2B Participant Member

A person who is nominated and elected as a *Member* by *Third Party B2B Participants* to represent *Third Party B2B Participants* in accordance with the *Rules* (including clause 7.17.10(h)) and the *Information Exchange Committee Election Procedures*.

third party DCA

A *dedicated connection asset* for which a person other than the *Primary Transmission Network Service Provider* is registered under Chapter 2.

third party IUSA

Those *contestable IUSA components* of an *identified user shared asset* that are not, or will not be, owned or leased by the *Primary Transmission Network Service Provider*.

three phase fault level

Measured in MVA at a location on a *transmission network* or a *distribution network*, the product of the pre-fault *nominal voltage* (measured in kV between a pair of phases), the fault current in each phase for a three phase fault at the location (measured in kA), and the square root of 3.

tie

Identically priced *dispatch bids* or *dispatch offers*.

time

Eastern Standard Time.

time stamp

The means of identifying the *time* and date at which data is transmitted or received.

timetable

The timetable published by AEMO under clause 3.4.3 for the operation of the *spot market* and the provision of *market* information.

total revenue cap

For a *Transmission Network Service Provider* for a *regulatory control period*, the sum of the *maximum allowed revenues* for that provider for each *regulatory year* of that *regulatory control period* as calculated in accordance with clause 6A.5.3 and set out in a *revenue determination*.

total revenue requirement

For a *Distribution Network Service Provider*, an amount representing revenue calculated for the whole of a *regulatory control period* in accordance with Part C of Chapter 6.

Trader

A person who is registered by *AEMO* as a *Trader* under Chapter 2.

trading amount

The positive or negative dollar amount resulting from a *transaction*, determined pursuant to clauses 3.15.6, 3.15.6A or 3.15.11.

trading day

The 24 hour period commencing at 4.00 am and finishing at 4.00 am on the following *day*.

trading interval

A 30 minute period ending on the hour (*EST*) or on the half hour and, where identified by a time, means the 30 minute period ending at that time.

trading limit

A dollar amount for a *Market Participant*, determined pursuant to clause 3.3.10.

trading margin

Has the meaning given in clause 3.3.15.

transaction

A *spot market transaction*, *reallocation transaction* or any other transaction either in the *market* or to which *AEMO* is a party.

transformer

A *plant* or device that reduces or increases the *voltage* of alternating current.

transformer tap position

Where a tap changer is fitted to a *transformer*, each tap position represents a change in *voltage* ratio of the *transformer* which can be manually or automatically adjusted to change the *transformer* output *voltage*. The tap position is used as a reference for the output *voltage* of the *transformer*.

transmission

Activities pertaining to a *transmission system* including the conveyance of electricity through that *transmission system*.

Transmission Annual Planning Report

A report prepared by a *Transmission Network Service Provider* under clause 5.12.2.

Transmission Confidentiality Guidelines

Guidelines made by the *AER* under clause 6A.16A.

transmission consultation procedures

The procedures set out in Part H of Chapter 6A that must be followed by:

- (a) the *AER* in making, developing or amending guidelines, models or schemes or in reviewing methodologies; or
- (b) the *AEMC* in developing or amending guidelines.

Transmission Customer

A *Customer*, *Non-Registered Customer* or *Distribution Network Service Provider* having a *connection point* with a *transmission network*.

transmission determination

Has the meaning given in the *National Electricity Law*, and includes a determination by the *AER* as described in rule 6A.2.

transmission element

A single identifiable major component of a *transmission system* involving:

- (a) an individual *transmission* circuit or a phase of that circuit;
- (b) a major item of *transmission plant* necessary for the functioning of a particular *transmission* circuit or *connection point* (such as a *transformer* or a circuit breaker).

transmission investment

Expenditure on assets and services which is undertaken by a *Transmission Network Service Provider* or any other person to address an *identified need* in respect of its *transmission network*.

transmission line

A power line that is part of a *transmission network*.

transmission network

A *network* within any *participating jurisdiction* operating at nominal *voltages* of 220kV and above plus:

- (a) any part of a *network* operating at nominal *voltages* between 66 kV and 220 kV that operates in parallel to and provides support to the higher voltage *transmission network*;
- (b) any part of a *network* operating at nominal *voltages* between 66kV and 220 kV that is not referred to in paragraph (a) but is deemed by the *AER* to be part of the *transmission network*.

For a *participating jurisdiction* other than the State of Victoria, an *identified shared user asset* owned, controlled or operated by a *Primary Transmission*

Network Service Provider (including a *third party IUSA* that is the subject of a *network operating agreement*) forms part of that *Primary Transmission Network Service Provider's* transmission network.

transmission network connection point

A connection point on a transmission network.

Transmission Network Service Provider

A person who engages in the activity of owning, controlling or operating a transmission system.

Transmission Network User

In relation to a transmission network, a *Transmission Customer* and:

- (a) a *Generator* whose generating unit;
- (b) a *Network Service Provider* whose network;
- (c) to the extent that a *Dedicated Connection Asset Service Provider* is not also one of the persons listed above, a *Dedicated Connection Asset Service Provider* whose dedicated connection asset,

is connected to the transmission network.

transmission or distribution system

A transmission system or distribution system that:

- 1. is used to convey, and control the conveyance of, electricity to customers (whether wholesale or retail); and
- 2. is connected to another such system.

transmission plant

Apparatus or equipment associated with the function or operation of a transmission line or an associated substation or switchyard, which may include transformers, circuit breakers, reactive plant and monitoring equipment and control equipment.

Transmission Ring-Fencing Guidelines

The Guidelines made under rule 6A.21.

transmission service

The services provided by means of, or in connection with, a transmission system.

transmission services access dispute

A dispute between a *Transmission Network Service Provider* and a *Connection Applicant* as to terms and conditions of access for the provision of prescribed

transmission services or for the provision of *negotiated transmission services* as referred to in clause 5.5.1(c), that is for determination by a *commercial arbitrator* under rule 5.5.

transmission standard control service

Has the meaning given in rule 6.25(a).

transmission standard control service revenue

Has the meaning given in rule 6.26(b)(1).

transmission system

A *transmission network*, together with the *connection assets* associated with the *transmission network*, which is *connected* to another *transmission* or *distribution system*.

For a *participating jurisdiction* other than the State of Victoria, a *transmission system* includes for the purposes of Chapter 2, a *third party DCA*, which is not a Notified Existing DCA within the meaning of clause 11.98.1.

Note

An *identified user shared asset* or a *dedicated connection asset* for which the *Primary Transmission Network Service Provider* is registered will form part of that provider's broader *transmission system* (even if the *dedicated connection asset* is operating at a *distribution voltage*) rather than constituting a separate *transmission system* requiring separate registration under Chapter 2. A person owning, controlling or operating a *third party DCA* is required to be registered under Chapter 2 as a *Transmission Network Service Provider*.

transmission use of system, transmission use of system service

A *Generator transmission use of system service* or a *Customer transmission use of system service*.

trigger event

For a *Distribution Network Service Provider*, in relation to a *proposed contingent project* or a *contingent project*, a specific condition or event described in clause 6.6A.1(c), the occurrence of which, during the relevant *regulatory control period*, may result in the amendment of a distribution determination under clause 6.6A.2.

For a *Transmission Network Service Provider*, in relation to a *proposed contingent project* or a *contingent project*, a specific condition or event described in clause 6A.8.1(c), the occurrence of which, during the relevant *regulatory control period*, may result in the amendment of a *revenue determination* under clause 6A.8.2.

two-terminal link

One or more *network elements* that together enable the transfer of *energy* between two, and only two, *connection points*.

type 5 accumulation boundary

The volume of *energy* for a *connection point* that has a type 5 *metering installation* above which the *metering data* must be collected as *interval metering data* for the purpose of producing *settlements ready data*.

Note:

Below the type 5 accumulation boundary, the metering data may be collected from the metering installation as accumulated metering data for the purpose of producing settlements ready data, in which case the metering installation must be registered with AEMO as a type 6 metering installation. Otherwise, the metering data may be collected as interval metering data for the purpose of producing settlements ready data in which case the metering installation must be registered with AEMO as a type 5 metering installation.

typical accrual

Has the meaning given in clause 3.3.12(a).

uncompleted transaction

Has the meaning given in clause 3.3.16(b).

unconstrained

Free of *constraint*.

unconstrained intermittent generation forecast

The forecast prepared by AEMO in accordance with rule 3.7B of the *available capacity* of each *semi-scheduled generating unit*.

under frequency scheme

An *emergency frequency control scheme* with capability to respond when *power system frequency* is below or falling below the *normal operating frequency band*.

under-recovery amount

Any amount by which the sum of the AARR in previous *regulatory years* exceeds the revenue earned from the provision of *prescribed transmission services* in those *regulatory years*.

unscheduled reserve

The amount of surplus or unused capacity:

- (a) of *generating units* (other than *scheduled generating units*); or
- (b) arising out of the ability to reduce demand (other than a *scheduled load*).

unscheduled reserve contract

A contract entered into by AEMO for the provision of *unscheduled reserve* in accordance with rule 3.20.

unserved energy

The amount of *energy* demanded, but not supplied, in a *region* determined in accordance with clause 3.9.3C(b), expressed as:

- (a) GWh; or
- (b) a percentage of the total *energy* demanded in that *region* over a specific period of time such as a *financial year*.

use of system

Includes *transmission use of system* and *distribution use of system*.

use of system services

Transmission use of system service and *distribution use of system service*.

violation

In relation to *power system security*, a failure to meet the requirements of Chapter 4 or the *power system security standards*.

virtual transmission node

A non-physical node used for the purpose of *market settlements*, having a *transmission loss factor* determined in accordance with clause 3.6.2(b)(3).

voltage

The electronic force or electric potential between two points that gives rise to the flow of electricity.

voltage transformer (VT)

A *transformer* for use with *meters* and/or protection devices in which the *voltage* across the secondary terminals is, within prescribed error limits, proportional to and in phase with the *voltage* across the primary terminals.

Voter Category

Means:

- (a) in respect of the *Distribution Network Service Provider Member*, *Distribution Network Service Providers*;
- (b) in respect of the *Retailer Member*, *Retailer Member Voters*, collectively;
- (c) respect of the *Metering Member*, *Metering Member Voters*, collectively; and
- (d) in respect of the *Third Party B2B Participant Member*, *Third Party B2B Participants*.

CHAPTER 11

11. Savings and Transitional Rules

Part A Definitions

For the purposes of this Chapter:

old clause 6A.7.4(f) means clause 6A.7.4(f) of the *Rules* (and all definitions in, and relevant provisions of, the *Rules* amended by the National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2012) as in force immediately prior to the commencement of Schedules 1 to 3 and 5 of the National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2012.

statement of regulatory intent means the relevant statement adopting values, methods and credit rating levels for *Distribution Network Service Providers* or for specified classes of *Distribution Network Service Providers* issued by the AER before the commencement of Schedules 1 to 3 and 5 of the National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2012.

submission guidelines mean the relevant guidelines made by the AER for the purposes of guiding a *Transmission Network Service Provider* in the submission of a *Revenue Proposal* under Part E of Chapter 6A before the commencement of Schedules 1 to 3 and 5 of the National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2012.

WACC means the relevant weighted average cost of capital being for a *Network Service Provider* for a *regulatory control period*, being the return on capital for that *Network Service Provider* for that *regulatory control period* calculated in accordance with Chapters 6 or 6A (as the case may be) before the commencement of Schedules 1 to 3 and 5 of the National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2012.

Part B System Restart Ancillary Services (2006 amendments)

11.2 Rules consequent on making of the National Electricity Amendment (System Restart Ancillary Services and pricing under market suspension) Rule 2006

11.2.1 Transitional provision for acquisition of non-market ancillary services

(a) For the purposes of clause 11.2.1:

Amending Rule means the National Electricity Amendment (System Restart Ancillary Services and pricing under market suspension) Rule 2006.

Existing NMAS contract means an *ancillary services agreement* between NEMMCO and another person to acquire *non-market ancillary services* from that person, entered into prior to the NMAS commencement date.

NMAS commencement date means the date of commencement of the National Electricity Amendment (System Restart Ancillary Services and pricing under market suspension) Rule 2006;

(b) On the *NMAS* commencement date

- (1) Any action taken by *NEMMCO* or a *Rules body* prior to the *NMAS* commencement date in anticipation of the commencement of the Amending Rule is deemed to have been taken for the purpose of the Amending Rule and continues to have effect for that purpose.
- (2) *NEMMCO* may continue to acquire *non-market ancillary services* under an existing *NMAS* contract and may extend the period of an existing *NMAS* contract for such period as *NEMMCO* and that person reasonably determine.
- (3) At any time when no *system restart standard* under clause 8.8.1(a)(1a) is in force, *NEMMCO* must develop and *publish* an interim *system restart standard* that is:
 - (i) consistent with the requirements in clause 8.8.3(aa); and
 - (ii) approved by the *Reliability Panel*;

and the interim *system restart standard* applies until such time as the *Reliability Panel* determines a *system restart standard*.

11.3 [Deleted]

Part C Dispute Resolution for Regulatory Test (2006 amendments)

11.4 Rules consequent on making of the National Electricity Amendment (Dispute Resolution for Regulatory Test) Rule 2006

11.4.1 Continuation of things done under old clause 5.6.6

(a) For the purposes of clause 11.4.1:

amending Rule means the National Electricity Amendment (Dispute Resolution for Regulatory Test) Rule 2006

commencement date means the date of commencement of the amending Rule

new clause 5.6.6 means clause 5.6.6 after the commencement of the amending Rule

old clause 5.6.6 means clause 5.6.6 before the commencement of the amending Rule.

(b) On the commencement date:

- (1) any dispute commenced under the old clause 5.6.6 and not completed before the commencement date, must continue to be conducted and completed as if it were a dispute commenced in accordance with the old clause 5.6.6.
- (2) Subject to clause 11.4.1(b)(1), any action taken under the old clause 5.6.6 is deemed to have been taken for the purposes of the corresponding requirement in the new clause 5.6.6 and continues to have effect for those purposes.

Part D Metrology (2006 amendments)

11.5 Rules consequential on the making of the National Electricity Amendment (Metrology) Rule 2006

11.5.1 Definitions

For the purposes of this rule 11.5:

Amending Rule means the *National Electricity Amendment (Metrology) Rule 2006*.

commencement date means the day on which the Amending Rule commences operation.

old Chapter 7 means Chapter 7 of the *Rules* as in force immediately before the commencement date.

new Chapter 7 means Chapter 7 of the *Rules* as in force immediately after the commencement date.

11.5.2 Metrology procedures continues to apply until 31 December 2006

A metrology procedure as in force under the old Chapter 7 continues in force in accordance with the old Chapter 7 until 31 December 2006.

11.5.3 Responsible person

A *Local Network Service Provider* who is the responsible person for a *metering installation* under Chapter 9 of the *Rules* immediately before the commencement date continues to be the *responsible person* for that *metering installation* for the purposes of clause 7.2.3.

11.5.4 NEMMCO's responsibility to develop a metrology procedure

- (a) Subject to this clause 11.5.4, *NEMMCO* must *publish* an initial metrology procedure by 1 January 2007 in accordance with the new Chapter 7 and this procedure must commence operation on 1 January 2007.
- (b) The requirement in clause 7.14.1(b) that requires a minimum period of 3 months between the date the *metrology procedure* is published and the date

the *metrology procedure* commences does not apply to the initial metrology procedure developed and published under this clause 11.5.4.

- (c) Any action taken by *NEMMCO* for the purpose of developing and publishing an initial metrology procedure prior to the commencement date is taken to satisfy the equivalent actions required for a *metrology procedure* under the new Chapter 7.
- (d) *NEMMCO* may dispense with, or not comply with, any relevant action under rule 7.14, if the action duplicates or is consistent with action that has already been taken under paragraph (c).
- (e) An initial metrology procedure developed and published under this clause 11.5.4 is taken to be the *metrology procedure* for the purposes of Chapter 7 of the *Rules*.
- (f) The initial metrology procedure is not required to incorporate the matters referred to in clause 7.14.1(c)(4) until 30 June 2008 and *NEMMCO* may develop a separate procedure for those matters during that period to 30 June 2008.

11.5.5 Jurisdictional metrology material in the metrology procedure

- (a) For the purposes of this clause 11.5.5, expiry date means 1 January 2009.
- (b) Until the expiry date, the *Ministers of the MCE* is taken to be each *Minister of the participating jurisdictions*, acting on behalf of that jurisdiction and undertaking the role of the *Ministers of the MCE* in relation to *jurisdictional metrology material* under clause 7.14.2.
- (c) For the avoidance of doubt, a *Minister of a participating jurisdiction* may delegate the role of submitting *jurisdictional metrology material* to *NEMMCO* under paragraph (b) by instrument in writing.
- (d) A certified copy of any delegation given under paragraph (c) must be provided to *NEMMCO* at the time any *jurisdictional metrology material* is submitted to *NEMMCO* under clause 7.14.2.

Note:

Ministers of participating jurisdiction have powers of delegation under their own jurisdictional legislation governing the procedure for conferring such delegations.

Part E Economic Regulation of Transmission Services (2006 amendments)

11.6 Rules consequent on making of the National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006

11.6.1 Definitions

Subject to this rule 11.6, in this rule 11.6:

Amending Rule 2006 means the *National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006*.

commencement date means the date on which the *Amending Rule 2006* commences operation.

current regulatory control period means the regulatory control period applicable to an existing revenue determination.

distribution matters includes matters relating to the economic regulation of *distribution services*, including, but not limited to, existing determinations, decisions, instruments, agreements or any other relevant action.

ElectraNet means ElectraNet Pty Ltd ACN 094 482 416 trading as ElectraNet.

existing revenue determination means any determination made, or deemed to be made, by the ACCC or the AER on or prior to the commencement date for the purpose of regulating the revenues of a *Transmission Network Service Provider*.

first regulatory control period means a *regulatory control period* immediately after a current regulatory control period.

first revenue cap determination means the first *revenue cap determination* after an existing revenue cap determination.

new Chapter 6A means Chapter 6A of the *Rules* as in force immediately after the commencement of the *Amending Rule 2006*.

old Chapter 6 means Chapter 6 of the *Rules* as in force immediately before the commencement of the *Amending Rule 2006*.

old clause 6.5.9 means clause 6.5.9 of the *Rules* as in force immediately before the commencement of the *Amending Rule 2006*.

old Part C means Part C (Transmission Pricing) of Chapter 6 of the *Rules* as in force immediately before the commencement of the *Amending Rule 2006*.

old Part F means Part F (Interconnections) of Chapter 6 of the *Rules* as in force immediately before the commencement of the *Amending Rule 2006*.

relevant action includes (without limitation) any of the following actions in relation to *distribution* matters:

- (a) the performance or exercise of any function, power, obligation or right;
- (b) the making or publishing of any guideline, standard, procedure, report, negotiating framework or other document;
- (c) the giving, publishing, service or receipt of any communication, notice or other document;
- (d) the provision or receipt of any submission or information;
- (e) the making or receiving any inquiry, request or application;
- (f) the undertaking or completion of any transaction;
- (g) the payment of any monetary amount or fee.

renumbered Chapter 6 means Chapter 6 of the *Rules* as in force immediately after the commencement of the *Amending Rule* 2006.

SP AusNet means SPI PowerNet Pty Ltd ACN 079 798 173.

Statement of Regulatory Principles means the Statement of Principles published by the *AER* as part of the Compendium of Electricity Transmission Regulatory Guidelines dated August 2005.

VENCorp means the Victorian Energy Networks Corporation established under the *Gas Industry Act 1994* (Vic) and continued under the *Gas Industry Act 2001* (Vic).

11.6.2 New Chapter 6A does not affect existing revenue determinations

- (a) Subject to this rule 11.6, the old Chapter 6 continues to apply to and in respect of, existing revenue determinations as if the new Chapter 6A had not been made.
- (b) The Amending Rule 2006 has no effect on the continuing operation of clause 9.8.4G.
- (c) The Amending Rule 2006 has no effect on the continuing operation of clause 9.16.5 in so far as it:
 - (1) applies to deem a revenue cap for the *financial year* commencing on 1 July 2004;
 - (2) specifies the basis on which prices for certain transmission services during the *financial year* commencing on 1 July 2004 are to be determined;

- (3) specifies the manner in which clause 6.4.3C of the old Chapter 6 is to apply for the *financial year* commencing on 1 July 2005; and
- (4) deems a revenue cap for the period commencing on 1 July 2004 until the end of 30 June 2009 to be for a period of five years.

11.6.3 Old Part C and Schedules 6.2, 6.3, 6.4, 6.7 and 6.8 of old Chapter 6

Subject to this rule 11.6 and rule 11.8, old Part C (including Schedules 6.2, 6.3, 6.4, 6.7 and 6.8) continues to apply for the duration of a current regulatory control period.

11.6.4 Old Part F of Chapter 6

Subject to this rule 11.6, old Part F of Chapter 6 continues to apply for the duration of a current regulatory control period.

11.6.5 Application of new Chapter 6A to Transmission Network Service Providers

Subject to this rule 11.6, a *Transmission Network Service Provider* is not required to submit a *Revenue Proposal* or a proposed *negotiating framework* to the AER under the new Chapter 6A until a date that is 13 months before the expiry of a current regulatory control period.

11.6.6 Application of Chapter 6 to old distribution matters

- (a) The restructuring and renumbering of provisions of the old Chapter 6 by the *Amending Rule 2006* does not affect:
 - (1) *distribution* matters occurring or in existence before the commencement date; or
 - (2) anything done or omitted to be done in respect of *distribution* matters before the commencement date.
- (b) Without limiting paragraph (a), anything done or omitted to be done under a provision of the old Chapter 6 in respect of *distribution* matters before the commencement date is deemed to have been done or omitted to be done under the corresponding provision of that Chapter as restructured and renumbered by the *Amending Rule 2006*, as if that Rule had been in operation when the thing was done or omitted to be done.

11.6.7 References to the old Chapter 6

Unless the context otherwise requires, on and from the commencement date every reference to the old Chapter 6 in a document (however described) is deemed to be a reference to the renumbered Chapter 6 or the new Chapter 6A (as the case may be).

11.6.8 References to provisions of the old Chapter 6

Unless the context otherwise requires, on and from the commencement date every reference to a provision of the old Chapter 6 in a document (however described) is deemed to be a reference to the corresponding provision of the renumbered Chapter 6 or the corresponding provision (if any) of the new Chapter 6A (as the case may be).

11.6.9 Roll forward of regulatory asset base for first regulatory control period

In making a *revenue determination* for the first *regulatory control period*, the value of the regulatory asset base at the beginning of the first *regulatory year* of that period calculated in accordance with clause S6A.2.1(f), may be adjusted having regard to an existing revenue determination and any other arrangements agreed between the AER and the *Transmission Network Service Provider*.

11.6.10 Other adjustment carry-over mechanisms from current to first regulatory control period

The *maximum allowed revenue* that a *Transmission Network Service Provider* may earn in any *regulatory year* of the first *regulatory control period* may be adjusted for any carry-over mechanisms provided for in the relevant existing revenue determination and in any other arrangements agreed between the AER and the *Transmission Network Service Provider* for the purposes of, and in accordance with, the existing revenue determination.

11.6.11 Clause consequent upon making National Electricity Amendment (Cost Allocation Arrangements for Transmission Services) Rule No 2009 No 3 - Transition to new Chapter 6A: existing prescribed connection services

Definitions

(a) In this clause 11.6.11:

existing asset means an asset that as at 9 February 2006:

- (1) was used in connection with a *transmission system* where the value, or a portion of the value, of that asset was included in the regulatory asset base; or
- (2) was committed to be constructed for use in connection with a *transmission system* where the forecast value, or a portion of the forecast value, of that asset was included in the forecast capital expenditure,

for that *transmission system* under a revenue determination in force as at 9 February 2006.

For the purpose of this definition, an asset is, and is only, to be taken to be committed to be constructed if it satisfied the criteria which a project needed

to satisfy to be a “committed project” for the purpose of the *regulatory test* in force as at 9 February 2006.

replacement asset means:

- (1) an asset which replaces an existing asset after 9 February 2006; or
- (2) an asset which replaces an asset referred to in this clause 11.6.11(a) after 9 February 2006.

For the purpose of this definition, an asset will be treated as replacing another asset even if it provides an increased or different functionality to the asset it replaces, provided that the increased or different functionality was not requested by the relevant *Transmission Network User*.

eligible asset means, subject to clause 11.6.11(d)(3):

- (1) an existing asset which was, immediately before the commencement date, or was or is, when first commissioned after the commencement date, wholly and exclusively used by a *Transmission Network Service Provider* to provide *connection services* to a *Transmission Network User* or a group of *Transmission Network Users* at a *transmission network connection point*; and
- (2) a replacement asset which is wholly and exclusively used after the commencement date by a *Transmission Network Service Provider* to continue providing *connection services* to a *Transmission Network User* or a group of *Transmission Network Users* at a *transmission network connection point*,

and excludes:

- (3) an existing asset or a replacement asset to the extent that it ceases to be used after the commencement date to provide *connection services* to a *Transmission Network User* or a group of *Transmission Network Users* at a *transmission network connection point*; and
- (4) an existing asset or replacement asset that, as at the 2009 commencement date, was wholly and exclusively used by a *Transmission Network Service Provider* to provide connection services to a *Transmission Network User* or a group of *Transmission Network Users* at a *transmission network connection point* but had all of its costs treated as directly attributable to, or incurred in providing, *transmission use of system services* at that date.

prescribed connection service means a *connection service* provided by a *Transmission Network Service Provider* to a *Transmission Network User* at a *transmission network connection point* on or after the 2009 commencement date in respect of which the following criteria are satisfied:

- (1) the relevant service is provided by using assets that include eligible assets;

- (2) the whole of the relevant service is being provided under a *connection agreement* which was first entered into before the commencement date (as extended, amended or novated from time to time);
- (3) the *connection agreement* has not at any time after the 2009 commencement date been amended at the request of the *Transmission Network User* for the purposes of altering the relevant service; and
- (4) the relevant service would not otherwise be a *prescribed transmission service* for the purposes of new Chapter 6A but for this clause 11.6.11.

If, at the date a *Transmission Network Service Provider* submits a *Revenue Proposal* after the 2009 commencement date to the *AER* under new Chapter 6A, a *connection service* does not satisfy each of the above criteria, then the *connection service* remains a prescribed connection service until the start of the next *regulatory control period* to which the *Revenue Proposal* relates, from which time it ceases to be a prescribed connection service.

2009 commencement date means the date on which the National Electricity Amendment (Cost Allocation Arrangements for Transmission Services) Rule 2009 commences operation.

Prescribed transmission services

- (b) References to *prescribed transmission services* in new Chapter 6A include prescribed connection services and, where a service is a *prescribed transmission service* by virtue of the operation of this clause 11.6.11, that service is taken not to be a *negotiated transmission service*.

Interaction with new Chapter 6A

- (c) For the purposes of new Chapter 6A:
 - (1) the costs of the *transmission system* assets that from time to time may be treated as:
 - (i) directly attributable to the provision of a prescribed connection service; or
 - (ii) incurred in providing a prescribed connection service, to a *Transmission Network User* or a group of *Transmission Network Users* at a *transmission network connection point* are limited to the costs of the eligible assets which, from time to time, provide that prescribed connection service;
 - (2) any costs of an existing asset or a replacement asset (or of any portion of an existing asset or a replacement asset) that:
 - (i) is not an eligible asset (other than as a result of clause 11.6.11(d)); and

- (ii) is used by a *Transmission Network Service Provider* to provide *connection services* to a *Transmission Network User* or a group of *Transmission Network Users* at a *transmission network connection point*,

must be treated as costs that are directly attributable to the provision of, or are incurred in providing, *prescribed TUOS services* and, to avoid doubt, the services provided by those assets which would otherwise be *connection services* are taken to be *prescribed TUOS services*; and

- (3) the *stand-alone amount* for *prescribed TUOS services* is taken to include any portion of the costs referred to in clause 11.6.11(c)(2) that has not been allocated under clause 6A.23.2(d)(1).

Cessation of prescribed connection services

- (d) If a *connection service* ceases to be a prescribed connection service at the start of a *regulatory control period* for the relevant *Transmission Network Service Provider*:
 - (1) the *connection service* is taken to be a *negotiated transmission service*;
 - (2) despite clause 6A.19.2(7), the costs which were allocated to the prescribed connection service may be reallocated to *negotiated transmission services*;
 - (3) the eligible assets that previously provided the prescribed connection service cease to be eligible assets; and
 - (4) despite clause S6A.2.3, the value of the eligible assets which previously provided the prescribed connection service may be removed from the regulatory asset base of the *Transmission Network Service Provider*.

11.6.12 Powerlink transitional provisions

Definitions

- (a) In this clause 11.6.12:

contingent project means a project identified in the transitional revenue determination as a contingent project.

Powerlink means the Queensland Electricity Transmission Corporation Limited (ACN 078 849 233), trading as Powerlink Queensland.

transitional regulatory control period means the regulatory control period commencing on 1 July 2007 and ending on 30 June 2012.

transitional revenue determination means a final revenue determination by the *AER* for the Powerlink transmission network, in respect of the transitional regulatory control period.

trigger means the unique investment driver identified in the transitional revenue determination as a trigger for a contingent project.

Scope and application

- (b) This clause 11.6.12:
 - (1) applies only in respect of the Powerlink *transmission network* and applies only until 30 June 2012; and
 - (2) prevails, to the extent of any inconsistency, over any other clause in the *Rules*.

Transitional revenue determination

- (c) Except as provided in this clause 11.6.12, and despite any changes to the old Chapter 6:
 - (1) the old Chapter 6 continues to apply in respect of the *AER* setting the revenue cap for the transitional regulatory control period for the Powerlink *transmission network*; and
 - (2) in setting the revenue cap for the transitional regulatory control period, the *AER* must substantially adhere to the Statement of Regulatory Principles including the ex ante approach to setting the revenue cap set out in the statement.
- (d) The *AER* must calculate the *weighted average cost of capital* for the transitional regulatory control period, in accordance with the values, methodologies or benchmarks in the new Chapter 6A, in respect of the following items:
 - (1) the nominal risk free rate including the maturity period and source of the benchmark;
 - (2) the debt risk premium including the maturity period and source of the benchmark;
 - (3) the equity beta;
 - (4) the market risk premium; and
 - (5) the ratio of the market value of debt as a proportion of the market value of equity and debt.
- (e) In calculating the WACC for the transitional regulatory control period, the *AER* must use an average gamma of 0.5.

Contingent projects

- (f) Where the trigger event identified in respect of a contingent project occurs prior to 30 June 2012, the *AER* must, in accordance with the transitional revenue determination:
 - (1) determine:
 - (i) the amount of capital and incremental operating expenditure for that contingent project for each remaining regulatory year of the transitional regulatory control period, which the *AER* considers is reasonably required for the purpose of undertaking the contingent project;
 - (ii) the likely commencement and completion dates for the contingent project;
 - (iii) the incremental revenue which is likely to be earned by Powerlink in each remaining regulatory year of the transitional regulatory control period as a result of the contingent project being undertaken; and
 - (iv) the *maximum allowed revenue* for each regulatory year in the remainder of the transitional regulatory control period by adding the incremental revenue for that regulatory year; and
 - (2) calculate the estimate referred to in subparagraph (1)(iii):
 - (i) on the basis of the rate of return for Powerlink for the transitional regulatory control period in accordance with the transitional revenue determination; and
 - (ii) consistently with the manner in which depreciation is calculated under the transitional revenue determination; and
 - (3) amend the transitional revenue determination to apply for the remainder of the transitional regulatory control period in accordance with paragraph (g).
- (g) The *AER* may only vary the transitional revenue determination to the extent necessary:
 - (1) to adjust the forecast capital expenditure for the transitional regulatory control period to accommodate the amount of additional capital expenditure determined under paragraph (f)(1)(i);
 - (2) to adjust the forecast operating expenditure for the current regulatory control period to accommodate the amount of additional operating expenditure determined under paragraph (f)(1)(i); and
 - (3) to reflect the effect of any resultant increase in forecast capital expenditure and incremental operating expenditure on the maximum

allowed revenue for each regulatory year in the remainder of the transitional regulatory control period.

- (h) An application for approval of a contingent project may only be made if the intended date for commencing the contingent project is during the transitional regulatory control period.
- (i) For the first *regulatory control period* after the transitional regulatory control period, the forecast of capital expenditure for that first *regulatory control period* must be determined by applying the provisions of clause 6A.6.7 of the new Chapter 6A, in respect of the capital expenditure for a contingent project, with such modifications as are necessary to properly apply clause 6A.6.7.

Cost pass-through

- (j) For the duration of the transitional regulatory control period:
 - (1) subject to subparagraph (2), clause 6A.7.2 of the new Chapter 6A applies to a *network support event* under the transitional revenue determination;
 - (2) the process to apply to the calculation, presentation and approval of pass through resulting from a network support event is as set out in the transitional revenue determination; and
 - (3) in respect of any *positive change event* or *negative change event*, the new Chapter 6A applies, with any modifications that are necessary to apply the relevant provisions to the transitional revenue determination.

Roll forward of regulatory asset base

- (k) For the avoidance of doubt, in making a *revenue determination* for the first *regulatory control period* after the transitional regulatory control period, the value of the regulatory asset base at the beginning of the first *regulatory year* of that period calculated in accordance with clause S6A.2.1(f), may be adjusted having regard to the transitional revenue determination and any other arrangements agreed between the AER and Powerlink.

Application of efficiency benefit sharing scheme

- (l) The *efficiency benefit sharing scheme* in force under clause 6A.6.5 applies to Powerlink during the transitional regulatory control period.

Power to re-open transitional revenue determination

- (m) Clause 6A.7.1 applies to the transitional revenue determination, and a reference in the clause to:
 - (1) ***revenue determination*** is taken to be a reference to the transitional revenue determination;

- (2) **regulatory control period** is taken to be a reference to the transitional regulatory control period;
 - (3) **contingent project** has the meaning referred to in paragraph (a); and
 - (4) **X Factor** has the same meaning as in the transitional revenue determination.
- (n) Subject to rule 11.8, old Part C (including Schedules 6.2, 6.3, 6.4, 6.7 and 6.8 of old Chapter 6) continues to apply for the duration of the transitional regulatory control period

11.6.13 ElectraNet easements transitional provisions

- (a) In this clause 11.6.13:

current regulatory control period means the regulatory control period for ElectraNet commencing on 1 January 2003 and ending on 30 June 2008.

Determination means the South Australian Transmission Network Revenue Cap Decision of the ACCC dated 11 December 2002.

easement means easements referred to in the Determination.

- (b) Without limiting the operation of the new Chapter 6A, in establishing the opening regulatory asset base for ElectraNet for the regulatory control period subsequent to ElectraNet's current regulatory control period, the AER may also consider adjustments to the regulatory asset base for ElectraNet that relate to easements, as agreed by letter dated 3 August 2004, between the ACCC and ElectraNet.

11.6.14 TransGrid contingent projects

- (a) In this clause 11.6.14:

contingent project means a project identified in the Determination as a contingent project.

current regulatory control period means the period 1 July 2004 to 30 June 2009.

Determination means the "Final Decision, NSW and ACT Transmission Network Revenue Cap TransGrid 2004-05 to 2008-09" dated 27 April 2005 determined by the ACCC pursuant to clause 6.2.4(b) of the National Electricity Code.

TransGrid means the energy services corporation constituted under section 6A of the *Energy Services Corporations Act 1995* (NSW) and specified in Part 1A of Schedule 1 to that Act.

- (b) For the purposes of the application of clause 11.6.2(a) to the Determination, a reference to the old Chapter 6 is a reference to the old Chapter 6 as modified by rule 8A.1.
- (c) For the first *regulatory control period* after the current regulatory control period, the forecast of capital expenditure for TransGrid for that first *regulatory control period* must be determined by applying the provisions of clause 6A.6.7 in respect of the capital expenditure for a contingent project, with such modifications as are necessary to properly apply clause 6A.6.7.

11.6.15 Transmission determination includes existing revenue determinations

The definition of a *transmission determination* may, where the context so requires, include a determination (or substituted determination) made, or deemed to be made, by the *AER* or the *ACCC* prior to the commencement date.

11.6.16 References to regulatory control period

A reference to a *regulatory control period* may, where the context so requires, include a period during which a revenue cap applied by virtue of a determination (or substituted determination) made, or deemed to be made, by the *AER* or the *ACCC* prior to the commencement date.

11.6.17 Consultation procedure for first proposed guidelines

- (a) In this clause 11.6.17:

guideline means:

- (1) the *post-tax revenue model* referred to in rule 6A.5.2;
 - (2) the *roll forward model* referred to in rule 6A.6.1;
 - (3) an *efficiency benefit sharing scheme* referred to in rule 6A.6.5;
 - (4) a *service target performance incentive scheme* referred to in rule 6A.7.4;
 - (5) submission guidelines referred to in rule 6A.10.2; and
 - (6) *Cost Allocation Guidelines* referred to in rule 6A.19.3.
- (b) The *AER* must develop and *publish* the first proposed guidelines on or before 31 January 2007, and may carry out consultation in the preparation of those proposed guidelines as the *AER* considers appropriate.
 - (c) Each proposed guideline must be *published* in accordance with the requirements of rule 6A.20(b), including an explanatory statement and an invitation for written submissions.

- (d) The invitation for written submissions for the proposed guidelines must allow no less than 60 *business days* for the making of submissions.
- (e) The *AER* may *publish* papers and hold conferences or information sessions in relation to the proposed guidelines as provided by rule 6A.20(d).
- (f) Rule 6A.20(e)-(f) applies to the publication of the final decision of the *AER* in relation to the first guidelines, which must be published under rule 6A.20 on or before 30 September 2007.

11.6.18 Reliance on proposed guidelines for SP AusNet, VENCORP and ElectraNet

- (a) In this clause 11.6.18:

guideline has the same meaning as in clause 11.6.17.

proposed guideline means a proposed guideline published under clause 11.6.17.

relevant provider means SP AusNet, VENCORP or ElectraNet.

2008 determination means a transmission determination to be made in 2008 for a relevant provider.

- (b) For the purposes of making a 2008 determination for the regulatory control period to be covered by a 2008 determination, anything that must be done in accordance with a guideline must instead be done in accordance with the corresponding proposed guideline.
- (c) Unless sooner revoked, a proposed guideline ceases to have effect in relation to a relevant provider at the end of the regulatory control period covered by a 2008 determination applying to the provider. For the avoidance of doubt, a proposed guideline does not apply to or in respect of the making of a subsequent transmission determination.
- (d) For the purposes of making a 2008 determination for the regulatory control period to be covered by a 2008 determination, a relevant provider is taken to have complied with a requirement to comply with a *Cost Allocation Methodology* under the new Chapter 6A if the *AER* is satisfied that the relevant provider has complied with the relevant proposed guideline for cost allocation referred to in clause 11.6.17(a)(6), but only until the *AER* has approved a *Cost Allocation Methodology* for that provider under clause 6A.19.4.

11.6.19 EnergyAustralia transitional provisions

- (a) In this clause 11.6.19:

contingent project means a project approved by the *ACCC* and identified in the Determination as a contingent project.

current regulatory control period means the period 1 July 2004 to 30 June 2009.

Determination means the “Final Decision, NSW and ACT Transmission Network Revenue Cap EnergyAustralia 2004-05 to 2008-09”.

EnergyAustralia means the energy services corporation constituted under section 7 of the *Energy Services Corporations Act 1995* (NSW) and specified in Part 2 of Schedule 1 to that Act.

maximum allowed revenue means the maximum allowed revenue in the Determination.

trigger event means an event identified as a trigger in Appendix A of the Determination in respect of a contingent project.

triggered contingent project means the contingent project referred to in Appendix A of the Determination as “A.1 Replacement of Feeders 908/909”.

Application of Chapter 6A to Determination

- (b) Subject to paragraph (c), clauses 6A.7.1, 6A.7.2 and 6A.7.3 apply to the Determination from the commencement date.
- (c) In applying clause 6A.7.1 to the Determination, a reference in the clause to:
 - (1) **revenue determination** is taken to be a reference to the Determination;
 - (2) **regulatory control period** is taken to be a reference to the current regulatory control period;
 - (3) **contingent project** has the meaning referred to in paragraph (a); and
 - (4) **X Factor** has the same meaning as in the Determination.

Treatment of contingent projects

- (d) Where the trigger event identified in respect of a contingent project occurs prior to 1 July 2009, the AER must, in accordance with the Determination:
 - (1) determine:
 - (i) the total capital expenditure which the AER considers is reasonably required for the purpose of undertaking the *contingent project* including any amount for forecast capital expenditure already included in the Determination in respect of the triggered contingent project;
 - (ii) the forecast capital and incremental operating expenditure for that contingent project (in addition to any amount for forecast capital expenditure already included in the Determination in

- respect of the triggered contingent project) for each remaining regulatory year of the current regulatory control period, which the *AER* considers is reasonably required for the purpose of undertaking the contingent project in accordance with Appendix A of the Determination;
- (iii) the likely commencement and completion dates for the contingent project;
 - (iv) the incremental revenue which is likely to be earned by EnergyAustralia in each remaining regulatory year of the current regulatory control period as a result of the contingent project being undertaken; and
 - (v) the maximum allowed revenue for each regulatory year in the remainder of the current regulatory control period by adding the incremental revenue for that regulatory year;
- (2) calculate the estimate referred to in subparagraph (1)(iv) in accordance with the Determination, including:
- (i) on the basis of the rate of return for EnergyAustralia for the current regulatory control period; and
 - (ii) consistently with the manner in which depreciation is calculated under the Determination; and
- (3) vary the Determination to apply for the remainder of the current regulatory control period in accordance with paragraph (e).
- (e) The *AER* may only vary the Determination to the extent necessary:
- (1) to adjust the forecast capital expenditure for the current regulatory control period to accommodate the amount of additional capital expenditure determined under paragraph (d)(1)(ii); and
 - (2) to adjust the forecast operating expenditure for the current regulatory control period to accommodate the amount of additional operating expenditure determined under paragraph (d)(1)(ii); and
 - (3) to reflect the effect of any resultant increase in forecast capital expenditure and incremental operating expenditure on the maximum allowed revenue for each regulatory year in the remainder of the current regulatory control period.
- (f) The intended date for commencing the contingent project must be during the current regulatory control period.
- (g) For the first *regulatory control period* after the current regulatory control period, the forecast of capital expenditure for EnergyAustralia for that first *regulatory control period* must be determined by applying the provisions of

clause 6A.6.7 in respect of the capital expenditure for a contingent project, with such modifications as are necessary to properly apply clause 6A.6.7.

11.6.20 Basslink transitional provisions

Definitions

(a) In this clause 11.6.20:

Basslink has the meaning provided in the *Electricity Supply Industry Act 1995* of Tasmania, and means the interconnection between the electricity grids of the States of Tasmania and Victoria by means of:

- (1) a high voltage, direct current, submarine cable across Bass Strait;
- (2) converter stations in those States;
- (3) direct current connecting lines to those converter stations;
- (4) alternating current transmission connections to the transmission networks of those States; and
- (5) related infrastructure.

previous regulatory approach means the methodologies, objectives and principles for determination of a regulatory asset base applied in the previous regulatory determinations.

previous regulatory determinations means the decision (including the reasons for decision) made under clause 2.5.2(c) of the National Electricity Code or clause 2.5.2(c) of the *Rules* (as the case may be):

- (1) by the ACCC, entitled the “Murraylink Transmission Company Application for Conversion and Maximum Allowable Revenue” dated 1 October 2003; and
- (2) by the AER, entitled “Directlink Joint Ventures’ Application for Conversion and Revenue Cap” dated 3 March 2006.

Application

- (b) Where, after the commencement date, a service provided by means of, or in connection with, the Basslink *transmission system* ceases to be classified as a *market network service*:
- (1) paragraph (c) applies to that service to the exclusion of clause 2.5.2(c); and
 - (2) paragraphs (d),(e),(f) and (g) apply to that service to the exclusion of clause S6A.2.1(e)(1) and (2).
- (c) If, after the commencement date, a *network service* provided by means of, or in connection with, the Basslink *transmission system* ceases to be

classified as a *market network service*, it may at the discretion of the *AER* be determined to be a *prescribed transmission service*, in which case the relevant *total revenue cap* may be adjusted in accordance with Chapter 6A and this clause 11.6.20 to include to an appropriate extent the relevant *network* elements which provide those *network services*.

- (d) Where services are determined to be *prescribed transmission services* as referred to in paragraph (c), the value of the regulatory asset base, as at the beginning of the first *regulatory year* of the first *regulatory control period* for which those *prescribed transmission services* are to be regulated under a *revenue determination*, is the amount that is determined by the *AER* in accordance with paragraphs (e), (f) and (g).
- (e) Subject to paragraph (f), the *AER* must determine the value of the regulatory asset base for the Basslink *transmission system* for the purposes of paragraph (d) by applying the previous regulatory approach to the circumstances of that *transmission system*.
- (f) In the event of an inconsistency between the previous regulatory approach adopted in each of the previous regulatory determinations, the approach adopted in a decision of the *AER* regarding the Directlink *transmission system* prevails over the approach adopted in the decision of the *ACCC* regarding the Murraylink *transmission system* to the extent of the inconsistency.
- (g) Without limiting paragraph (e), the *AER* must, when exercising any discretion in relation to the application of paragraph (e) above:
 - (1) have regard to the prudent and efficient value of the assets that are used by the relevant *Transmission Network Service Provider* to provide those *prescribed transmission services* (but only to the extent that those assets are used to provide such services); and
 - (2) for this purpose, determine that value having regard to the matters referred to in clause S6A.2.2.

11.6.21 SPI Powernet savings and transitional provision

Definitions

- (a) In this clause 11.6.21:

easements tax change event means a *change* in the amount of land *tax* that is payable by SPI PowerNet in respect of the easements which are used for the purposes of SPI PowerNet's *transmission network*. For the purposes of this definition, the *change* in the amount of land tax that is payable by SPI PowerNet must be calculated as the difference between:

- (1) the amount of land tax that is payable in each *regulatory year* by SPI PowerNet, as advised by the Commissioner of State Revenue, Victoria; and

- (2) the amount of land tax which is forecast for the purposes of and included in the *revenue determination* for each *regulatory year* of the *regulatory control period*.

Regulated owner and **SPI PowerNet** both have the meaning provided in clause 9.3.1(2) of the *Rules*.

Transition to new Chapter 6A: existing prescribed transmission services

- (b) Notwithstanding clause 11.5.11, references to *prescribed transmission services* in the new Chapter 6A include a service provided by an asset used in connection with, or committed to be constructed for use in connection with, a *transmission system* as at 9 February 2006, where that asset is the subject of an agreement between SPI PowerNet and any of:
 - (1) VENCorp;
 - (2) a Distributor;
 - (3) a Regulated owner;
 - (4) a *Generator*; or
 - (5) a *Market Network Service Provider*,and:
 - (6) the agreement provides or contemplates that following an interim period the relevant asset will become subject to regulation under a revenue determination applicable to SPI PowerNet; and
 - (7) in the case of an agreement with a *Generator* or a *Market Network Service Provider*, the service the subject of the agreement is for *connection assets* provided on a non-contestable basis.

Method of adjustment of value of regulatory asset base

- (c) For the avoidance of doubt, in adjusting the previous value of the regulatory asset base for SPI PowerNet's *transmission system* as required by clause S6A.2.1(f), the previous value of the regulatory asset base must be increased by the amount of capital expenditure specified in, or that forms the basis of, agreements pursuant to which SPI PowerNet constructed assets during the previous regulatory control period used to provide *prescribed transmission services*, adjusted for outturn inflation and depreciation in accordance with the terms of those agreements.
- (d) For the purposes of a *revenue determination* for SPI PowerNet (including but not limited to, a 2008 determination as defined in clause 11.6.18(a)) and clause 6A.7.3, easements tax change event is deemed to be:
 - (1) a *pass through event*; and

- (2) a *positive change event* or *negative change event*, as the case may be, whether or not the easements tax change event would be *material* for the purposes of those definitions.

11.6.22 Interim arrangements pricing-related information

- (a) Clause 6.2.5(a1) as in force immediately before the commencement date continues to apply during the current regulatory control period.
- (b) The *information guidelines* may, in addition to the matter referred to in clause 6A.17.2(e), require the inclusion in the certified annual statements of:
 - (1) information on the amount of each instance, during the relevant reporting period, of any reduction in the prices payable by a *Transmission Customer* for *prescribed transmission services* provided by the *Transmission Network Service Provider*;
 - (2) information on each instance, during the relevant reporting period, of a reduction in the prices payable by a *Transmission Customer* for *prescribed transmission use of system services* or *prescribed common transmission services* (or both) that were recovered from other *Transmission Customers* for *prescribed transmission use of system services* or *prescribed common transmission services*; and
 - (3) information to substantiate any claim by the *Transmission Network Service Provider* that the information provided to the AER with respect to reductions in the prices payable by a *Transmission Customer* for the relevant *prescribed transmission services* under subparagraphs (2) or (3) is confidential information.

Part F Reform of Regulatory Test Principles (2006 amendments)

11.7 Rules consequent on making of the National Electricity Amendment (Reform of the Regulatory Test Principles) Rule 2006

11.7.1 Definitions

For the purposes of this rule 11.7:

Amending Rule means the *National Electricity Amendment (Reform of the Regulatory Test Principles) Rule 2006 No.19*.

commencement date means the date on which the Amending Rule commences operation.

current application means any action taken or process commenced under the *Rules*, which relies on or is referenced to, the *regulatory test*, and is not completed as at the commencement date.

new clause 5.6.5A means clause 5.6.5A of the *Rules* as in force immediately after the commencement of the Amending Rule.

old clause 5.6.5A means clause 5.6.5A of the *Rules* as in force immediately before the commencement of the Amending Rule.

transitional application means any action taken or process commenced under the *Rules*, which relies on or is referenced to, the *regulatory test* and is not completed on 31 December 2007, or the date on which amendments (if any) to the *regulatory test* commence, whichever is the earlier.

11.7.2 Amending Rule does not affect old clause 5.6.5A

- (a) On the commencement date, the *regulatory test* promulgated by the AER in accordance with the old clause 5.6.5A and in effect immediately before the commencement date, continues in effect and is taken to be consistent with the new clause 5.6.5A until 31 December 2007.
- (b) Old clause 5.6.5A, and the *regulatory test* promulgated under that clause 5.6.5A, continues to apply to and in respect of, any current application and any transitional application.

Part G Pricing of Prescribed Transmission Services (2006 amendments)

11.8 Rules consequent on making the National Electricity Amendment (Pricing of Prescribed Transmission Services) Rule 2006

11.8.1 Definitions

Subject to this rule 11.8, in this rule 11.8:

agreed interim requirements means interim requirements that are equivalent to the requirements of the *pricing methodology guidelines* referred to in rule 6A.25 and have been developed in consultation with the relevant providers for the purposes of a proposed 2008 pricing methodology.

ElectraNet means ElectraNet Pty Ltd ACN 094 482 416 trading as ElectraNet.

existing assets means *transmission system* assets in existence as at 24 August 2006.

previous regulatory determinations means the decision (including the reasons for decision) made under clause 2.5.2(c) of the National Electricity Code or clause 2.5.2(c) of the *Rules* (as the case may be):

- (1) by the ACCC, entitled the “Murraylink Transmission Company Application for Conversion and Maximum Allowable Revenue” dated 1 October 2003; and

- (2) by the *AER*, entitled “Directlink Joint Ventures’ Application for Conversion and Revenue Cap” dated 3 March 2006.

Pricing Rule commencement date means the date on which the National Electricity Amendment (Pricing of Prescribed Transmission Services) Rule 2006 commences operation.

relevant provider means SPAusNet, ElectraNet or VENCORP.

SPAusNet means SPI PowerNet Pty Ltd ACN 079 798 173.

2008 pricing methodology means a pricing methodology to be made in 2008 for a relevant provider.

VENCORP means the Victorian Energy Networks Corporation established under the *Gas Industry Act 1994*(Vic) and continued under the *Gas Industry Act 2001*(Vic).

11.8.2 Regulated interconnectors

- (a) All *interconnectors* that formed part of the *power system* in the *participating jurisdictions* as at 31 December 1997 continue to be taken to be *regulated interconnectors*.
- (b) All *interconnectors* that ceased to be classified as a *market network service* by a previous regulatory determination made before 28 December 2006 are taken to be *regulated interconnectors*.
- (c) All *interconnectors* that, by a decision made after 28 December 2006 under clause 2.5.2(c) of the *Rules* cease to be classified as a *market network service* are taken to be *regulated interconnectors*.

11.8.3 Application of new Part J of Chapter 6A to Transmission Network Service Providers

- (a) Subject to this rule 11.8, a *Transmission Network Service Provider* is not required to submit a proposed *pricing methodology* to the *AER* under the new Part J of Chapter 6A until a date that is 13 months before the expiry of a current *regulatory control period*.
- (b) For the purposes of this clause 11.8.3, the transitional regulatory control period referred to in rule 11.6.12 (a) for Powerlink is taken to be the current *regulatory control period*.

11.8.4 Reliance on agreed interim guideline for ElectraNet, SPAusNet, and VenCorp

For the purpose of making a 2008 pricing methodology, anything that must be done in accordance with the *pricing methodology guidelines* must instead be done in accordance with the agreed interim requirements.

11.8.5 Prudent discounts under existing agreements

- (a) A *Transmission Network Service Provider* may continue to recover discounts arising as a result of agreements that were entered into prior to 10 October 2001 so long as the agreement remains in effect and its terms are not renegotiated.
- (b) A *Transmission Network Service Provider* may continue to recover discounts arising as a result of agreements that were entered into prior to 28 December 2006 so long as the agreement remains in effect and its terms are not renegotiated.
- (c) The *AER* is not required to re-approve discounts arising under paragraphs (a) or (b) that were approved prior to 28 December 2006, and any approval for the recovery of such discounts is valid so long as the agreement between the *Transmission Network Service Provider* and the *Transmission Customer* remains in effect and its terms are not renegotiated.

11.8.6 Application of prudent discounts regime under rule 6A.26

- (a) Despite clause 11.6.3, a *Transmission Network Service Provider* may apply rule 6A.26 during a current regulatory control period (as defined in clause 11.6.1).
- (b) Where a *Transmission Network Service Provider* applies to the *AER* under clause 6A.26.2 for approval to recover a proposed recovery amount in circumstances where paragraph (a) applies, the *AER* must make a determination in accordance with clause 6A.26.2 notwithstanding that there is no approved *pricing methodology* for that provider.

11.8.7 Prudent discounts pending approval of pricing methodology

- (a) This clause 11.8.7 applies where:
 - (1) a *Transmission Network Service Provider* has submitted or resubmitted a proposed *pricing methodology* to the *AER* under clause 6A.10.1, 6A.11.2 or 6A.12.3;
 - (2) the *AER* has not made a final decision approving or amending that methodology under rule 6A.13; and
 - (3) a *Transmission Customer* requests the provider to charge lower prices for *prescribed TUOS services* or *prescribed common transmission services* than the prices determined in accordance with the provider's *pricing methodology* as referred to in clause 6A.26.1(d).
- (b) Despite clause 6A.26.1, a *Transmission Network Service Provider* may agree to charge lower prices for *prescribed TUOS services* or *prescribed common transmission services* than the prices determined as referred to in clause 6A.26.1(d) in accordance with:

- (1) in the case where the *AER* has made a draft decision in which it proposes to approve a proposed *pricing methodology*, - that proposed *pricing methodology*; or
 - (2) if subparagraph (1) does not apply, the *pricing methodology* most recently approved for that *Transmission Network Service Provider* prior to the proposed *pricing methodology* referred to in subparagraph (a)(1); or
 - (3) if there is no a previously approved *pricing methodology* for that *Transmission Network Service Provider*, - the previous method used by the *Transmission Network Service Provider* to establish prices, however determined must be used in place of an approved *pricing methodology*.
- (c) Where a *Transmission Network Service Provider* applies to the *AER* under clause 6A.26.2 for approval to recover a proposed recovery amount in circumstances where paragraphs (a) and (b) apply, the *AER* must make a determination in accordance with clause 6A.26.2 notwithstanding that the reduced charges were agreed before a *pricing methodology* was approved.
- (d) The subsequent approval by the *AER* of a *pricing methodology* for a *Transmission Network Service Provider* does not require the provider to adjust, reverse or recompense any amounts to *Transmission Customers* in connection with charges for services established pursuant to this clause 11.8.7.

Part H Reallocations (2007 amendments)

11.9 Rules consequent on the making of the National Electricity Amendment (Reallocations) Rule 2007

11.9.1 Definitions

For the purposes of this rule 11.9:

Amending Rule means the *National Electricity Amendment (Reallocations) Rule 2007*.

commencement date means the day on which the Amending Rule commences operation.

existing reallocation means a *reallocation* in place immediately before the commencement date.

new reallocation means a *reallocation* undertaken in accordance with the *Rules* after the date of *publication* of the *reallocation procedures* under clause 3.15.11A(d).

transitional reallocation means a *reallocation* in place immediately after the commencement date but prior to the date of *publication* of the *reallocation procedures* by NEMMCO under clause 3.15.11A(d).

11.9.2 Existing and transitional reallocations

- (a) Subject to paragraph (c), an existing reallocation is to be treated as if the Amending Rule had not been made.
- (b) Subject to paragraph (c), a transitional reallocation is to be treated as if the Amending Rule had not been made.
- (c) A *Market Participant* who is a party to an existing reallocation or a transitional reallocation may elect to have the reallocation treated as a new reallocation if the participant obtains the agreement of the *Market Participant* who is the other party to the reallocation.

Part I Technical Standards for Wind Generation (2007 amendments)

11.10 Rules consequent on making of the National Electricity Amendment (Technical Standards for Wind Generation and other Generator Connections) Rule 2007

11.10.1 Definitions

Subject to this rule 11.10, in this rule 11.10:

Amending Rule means the *National Electricity Amendment (Technical Standards for Wind Generation and other Generator Connections) Rule 2007*.

commencement date means the date on which the Amending Rule commences operation.

new Chapter 5 means Chapter 5 of the *Rules* in force immediately after the commencement date.

old Chapter 5 means Chapter 5 of the *Rules* in force immediately prior to the commencement date.

11.10.2 Provision of information under S5.2.4 in registration application

- (a) Any requirements in the Amending Rule that require a person who is applying to be a *Registered Participant* to submit information in relation to clause S5.2.4 for the purposes of clause 2.9.2 does not apply to any person who has, in accordance with clause 2.9.1:
 - (1) submitted an application to be registered as a *Registered Participant*;
 - (2) commenced a process for submitting further information in relation to the application referred to in subparagraph (1); or

- (3) has submitted further information in relation to the application referred to in subparagraph (1),

and, at the commencement date, has not been registered by *NEMMCO* in accordance with clause 2.9.2 as a *Registered Participant*.

- (b) A person registered in accordance with this clause 11.10.2:

- (1) subject to subparagraph (2), is taken to be registered in accordance with the requirements of the *Rules* as amended by the Amending Rule; and

- (2) must submit all information required under clause S5.2.4 within six months of the commencement date.

11.10.3 Access standards made under the old Chapter 5

- (a) Any *automatic access standard* or *negotiated access standard* that applied to a *generating unit* or *generating system* under the old Chapter 5 continues to apply to that system or unit as if the Amending Rule had not been made.
- (b) Unless a *Generator* and a *Network Service Provider* otherwise agree, a *negotiated access standard* that is the subject of a negotiating process as at the commencement date, is to be negotiated in accordance with the old Chapter 5, as if the Amending Rule had not been made.

11.10.4 Modifications to plant by Generators

Unless the *Generator* and the relevant *Network Service Provider* otherwise agree, a *Generator* who at the commencement date has proposed to modify a *plant* and has commenced negotiations with a *Network Service Provider* under the old Chapter 5 is to continue the negotiating process in accordance with the old Chapter 5 as if the Amending Rule had not been made.

11.10.5 Technical Details to Support Application for Connection and Connection Agreement

- (a) Subject to paragraphs (b) and (c), any decision or action taken by *NEMMCO* for the purpose of developing and *publishing* an initial *Generating System Design Data Sheet*, an initial *Generating System Setting Data Sheet* and initial *Generating System Model Guidelines* under clause S5.5.7 prior to the commencement date has continuing effect as if the decision had been made or the action had been taken under the Amending Rule.
- (b) Pending the final *publication* of the *Generating System Design Data Sheet* and the *Generating System Setting Data Sheet* under clause S5.5.7:
 - (1) schedule 5.5.1 of the *Rules* as in force immediately before the commencement date is taken to be the interim *Generating System Design Data Sheet*; and

- (2) schedule 5.5.2 of the *Rules* as in force immediately before the commencement date is taken to be the interim *Generating System Setting Data Sheet*.
- (c) The interim *Generating System Design Data Sheet* and interim *Generating System Setting Data Sheet* referred to in paragraph (b) continue in force until *NEMMCO publishes* the equivalent data sheet under S5.5.7 which must be no later than 29 February 2008.

11.10.6 Transitional arrangements for establishment of performance standards

For the purposes of the definition of performance requirement in clause 4.16.1, clauses S5.2.8 and S5.2.9 of the old Chapter 5 applies as if the Amending Rule had not been made.

11.10.7 Jurisdictional Derogations for Queensland

- (a) For the purposes of clause 9.37.12, clause S5.2.5.2(c) of the old Chapter 5 applies as if the Amending Rule had not been made.
- (b) For the purposes of clause 9.37.21, clause S5.2.5.13 of the old Chapter 5 applies as if the Amending Rule had not been made.

11.10A Rules consequent on the making of the National Electricity Amendment (Central Dispatch and Integration of Wind and Other Intermittent Generation) Rule 2008

11.10A.1 Definitions

In this rule 11.10A:

Amending Rule means the *National Electricity Amendment (Central Dispatch and Integration of Wind and Other Intermittent Generation) Rule 2008*.

classified generating unit means a *non-scheduled generating unit* or *scheduled generating unit* immediately before the registration date that could be classified as a *semi-scheduled generating unit* immediately after the registration date.

commencement date means the date on which Schedule 2 of the Amending Rule commences operation.

committed project means a project that *NEMMCO* considers has been fully committed by the project proponent taking into account the following factors:

- (a) the project proponent's rights to land for the construction of the project;
- (b) whether contracts for the supply and construction of the project's major plant or equipment, including contract provisions for project cancellation payments, have been executed;

- (c) the status of all planning and construction approvals and licences necessary for the commencement of construction of the project, including completed and approved environmental impact statements;
- (d) the level of commitment to financing arrangements for the project; and
- (e) whether project construction has commenced or a firm date has been set for it to commence.

initial ECM guidelines has the meaning given in clause 11.10A.8.

potential semi-scheduled generating unit means a *generating unit* that, at the time of registration of that unit under Chapter 2, could have been classified as a *semi-scheduled generating unit* in accordance with clause 2.2.7 and:

- (a) is listed in “Table 4.22: Committed NEM Wind Farms” of the 2007 *statement of opportunities*; or
- (b) is considered by NEMMCO to be a committed project as at 1 January 2008,

and, for the avoidance of doubt, does not include a classified generating unit.

registered generating unit means a *generating unit* which has had its classification as a *semi-scheduled generating unit* approved by NEMMCO on or after the registration date and before the commencement date.

registration date means the date on which Schedule 1 of the Amending Rule commences operation.

11.10A.2 Registration and reclassification of classified generating units

- (a) On and after the registration date, a *Non-Scheduled Generator* or *Scheduled Generator* with a classified generating unit will not be required to register as a *Semi-Scheduled Generator* and reclassify the classified generating unit as a *semi-scheduled generating unit*.
- (b) For a period of 2 years after the commencement date, a *Generator* who:
 - (1) as at the commencement date has classified generating units; and
 - (2) subsequently reclassifies those generating units as *semi-scheduled generating units*,

is not required to pay *Participant fees* in accordance with rule 2.11.

- (c) Classified generating units that are reclassified as *semi-scheduled generating units* after the registration date but prior to the commencement date are taken to be *non-scheduled generating units* or *scheduled generating units* (as the case may be) until the commencement date.

11.10A.3 Registered generating unit

- (a) Subject to paragraph (b) and clause 11.10A.4, until the commencement date, a registered generating unit is taken to be a *non-scheduled generating unit* for the purposes of the *Rules*.
- (b) A registered generating unit must meet the technical requirements for a *semi-scheduled generating unit* in schedule 5.2.
- (c) A registered generating unit that:
 - (1) prior to the registration date is classified as a *scheduled generating unit*; and
 - (2) on or after the registration date but prior to the commencement date is reclassified as a *semi-scheduled generating unit*,is taken to continue to be a *scheduled generating unit* until the commencement date.

11.10A.4 Classification of potential semi-scheduled generating unit

- (a) On and after the registration date, a person may apply to *NEMMCO* to classify a potential semi-scheduled generating unit as:
 - (1) a *scheduled generating unit* in accordance with clause 2.2.2; or
 - (2) a *non-scheduled generating unit* in accordance with clause 2.2.3.
- (b) *NEMMCO* must treat an application received under paragraph (a) as:
 - (1) in the case of an application referred to paragraph (a)(1), as an application to be classified as a *scheduled generating unit*; or
 - (2) in the case of an application referred to in paragraph (a)(2), as an application to be classified as a *non-scheduled generating unit*.
- (c) In assessing an application referred to in paragraph (a)(2), *NEMMCO* must approve the classification if *NEMMCO* is satisfied that the output of the *generating unit* is *intermittent* even where the *generating unit* does not meet the requirements of clause 2.2.3(b)(1) or (2).
- (d) If an application for classification of a potential semi-scheduled generating unit made under this clause 11.10A.4 is approved by *NEMMCO* in accordance with clause 2.2.2 or, subject to paragraph (c), clause 2.2.3, the relevant unit is taken to be a *scheduled generating unit* or *non-scheduled generating unit* (as the case may be) for the purposes of the *Rules*.

11.10A.5 Participant fees

Until *NEMMCO* determines a structure of *Participant fees* under rule 2.11 which provides for *Semi-Scheduled Generators*, references to *Scheduled Generators* in

NEMMCO's "Structure of Participant Fees under rule 2.11 of the National Electricity Rules" publication dated 24 March 2006, will be taken to include Semi-Scheduled Generators.

11.10A.6 Timetable

- (a) *NEMMCO* must amend the *timetable* in accordance with clause 3.4.3(b) to take into account the Amending Rule with those amendments to take effect from the commencement date.
- (b) All actions taken by *NEMMCO* prior to the commencement date in anticipation of the commencement date to amend the *timetable* as required under paragraph (a) are taken to satisfy the equivalent action required under clause 3.4.3(b).

11.10A.7 Procedure for contribution factors for ancillary service transactions

- (a) *NEMMCO* must amend the procedure prepared by *NEMMCO* under clause 3.15.6A(k) in accordance with clause 3.15.6A(m) to take into account the Amending Rule with those amendments to take effect from the commencement date.
- (b) All actions taken by *NEMMCO* prior to the commencement date in anticipation of the commencement date to amend the procedure prepared by *NEMMCO* under clause 3.15.6A(k) as required under paragraph (a) are taken to satisfy the equivalent action under clause 3.15.6A(m).

11.10A.8 Guidelines for energy conversion model information

- (a) Subject to paragraph (b), for the purposes of clause 2.2.7(d) *NEMMCO* must *publish* guidelines by no later than the registration date setting out the information to be contained in *energy conversion models* (the **initial ECM guidelines**).
- (b) The initial ECM guidelines do not need to be prepared in consultation with *Semi-Scheduled Generators*. *NEMMCO* must replace the initial ECM guidelines as soon as reasonably practicable with guidelines described in clause 2.2.7(d) which have been prepared in consultation with *Semi-Scheduled Generators* and such other person that *NEMMCO*, acting reasonably, considers appropriate.

Part J Cost Recovery of Localised Regulation Services (2007 amendments)

11.11 Rules consequent on making of the National Electricity Amendment (Cost Recovery of Localised Regulation Services) Rule 2007

11.11.1 Definitions

For the purposes of this rule 11.11:

Amending Rule means the *National Electricity Amendment (Cost Recovery of Localised Regulation Services) Rule 2007*.

commencement date means 1 January 2009.

11.11.2 Action taken by NEMMCO for the purposes of Amending Rule

- (a) Any action taken by *NEMMCO* prior to the commencement date for the purpose of amending the procedure prepared by *NEMMCO* under clause 3.15.6A(k) for the purpose of the Amending Rule is taken to have satisfied the equivalent action under the *Rules*.
- (b) Any action taken by *NEMMCO* prior to the commencement date to calculate the *local market ancillary service requirement* to include *regulation services* for the purposes of the Amending Rule is taken to have satisfied the equivalent action under the *Rules*.

11.12 [Deleted]

Part L [Deleted]

Division 1 General Provisions

11.14 General provisions

11.14.1 Application of this Division

This Division has no application in relation to Victoria.

11.14.2 Definitions

amending rules means the *National Electricity (Economic Regulation of Distribution Services) Amendment Rules 2007*.

current Chapter 6 means Chapter 6 of these *Rules* as currently in force.

former Chapter 6 means Chapter 6 of these *Rules* as in force before the substitution of the current Chapter 6 by the amending rules.

jurisdictional pricing determination for a *participating jurisdiction* means a determination regulating *distribution service* pricing made by the *Jurisdictional Regulator* for the *participating jurisdiction* and in force immediately before the date of the relevant amendment.

new regulatory provisions means the provisions of current Chapter 6 or (if applicable) of later Divisions of this Part providing for the economic regulation of *distribution services* after the transitional regulatory period comes to an end.

old regulatory regime for a *participating jurisdiction* includes:

- (a) the jurisdictional pricing determination for the *participating jurisdiction*; and
- (b) the laws (including the former Chapter 6) governing the making, monitoring, administration and enforcement of the jurisdictional pricing determination;
- (c) any other determination, guideline, code or document (whatever its description) of a kind contemplated by the former Chapter 6 that was made for the *participating jurisdiction* by the relevant *Jurisdictional Regulator* and was in force immediately before the date of the relevant amendment;
- (d) any other obligation imposed by or under the former Chapter 6;
- (e) any power or function of the *Jurisdictional Regulator* under the former Chapter 6.

new regulatory regime means the system for the economic regulation of *distribution services* contemplated by the new regulatory provisions.

relevant amendment means the substitution of the current Chapter 6 for the former Chapter 6 by the amending rules.

transitional regulatory period for a *participating jurisdiction* means the *regulatory control period* for which the jurisdictional pricing determination for the relevant *participating jurisdiction* was made.

11.14.3 Preservation of old regulatory regime

- (a) Subject to this Part, a *Distribution Network Service Provider* who was providing *distribution services* in a *participating jurisdiction* at the date of the relevant amendment
 - (1) remains subject to the old regulatory regime for the duration of the transitional regulatory period; and
 - (2) does not become subject to the new regulatory regime until the end of the transitional regulatory period.

Examples:

1. Reporting, monitoring and other compliance requirements continue under the old regulatory regime until the end of the transitional regulatory period and (subject to this Part) are unaffected by the new regulatory provisions.
2. Price regulation continues under the old regulatory regime until the end of the transitional regulatory period and is unaffected by the new regulatory provisions.
3. Prudential, billing and settlement issues are governed by rules 6.7 and 6.8 of former Chapter 6 and any applicable regulatory instruments (rather than Parts J and K of current Chapter 6).
4. Access disputes are dealt with under the old regulatory regime (and cannot be notified under Part L of current Chapter 6).

(b) However:

- (1) the new regulatory provisions govern the making of a distribution determination for the *Distribution Network Service Provider* at the end of the transitional regulatory period; and
- (2) in that respect the new regulatory provisions apply to a *Distribution Network Service Provider* who is still subject to the old regulatory regime as if the jurisdictional pricing determination were a distribution determination approaching the end of its *regulatory control period*.

11.14.4 Transfer of regulatory responsibility

- (a) The Minister for a *participating jurisdiction* may, during the course of the transitional regulatory period, transfer responsibility for the economic regulation of *distribution services* in the relevant jurisdiction from the *Jurisdictional Regulator* to the *AER*.
- (b) A Minister for a *participating jurisdiction* makes (or is taken to make) a transfer of regulatory responsibility under this clause:
 - (1) by giving notice of the transfer to the *Jurisdictional Regulator* and the *AER*; or
 - (2) if powers exist apart from this clause under the law of the *participating jurisdiction* to transfer regulatory responsibility from the *Jurisdictional Regulator* to the *AER* – by exercising those powers.
- (c) If the Minister makes a transfer of regulatory responsibility under this clause:
 - (1) the *AER* is subrogated to the position of the *Jurisdictional Regulator*; and
 - (2) the *AER* may therefore exercise powers and functions of the *Jurisdictional Regulator* (including legislative powers and functions) under the old regulatory regime; and

Note:

The *AER* may also use its powers (e.g. for information gathering) under the Law.

- (3) references to the *Jurisdictional Regulator* in a determination or other instrument (including a legislative instrument) related to the old regulatory regime will be read as references to the *AER*.

11.14.5 Special requirements with regard to ring fencing

- (a) The requirements of the old regulatory regime with regard to ring fencing (rule 6.12 of former Chapter 6 and related guidelines) apply to a *Distribution Network Service Provider* until the *AER* assumes regulatory responsibility at the end of the transitional regulatory period or on the earlier transfer of regulatory responsibility to the *AER*.
- (b) On the *AER's* assumption of regulatory responsibility, a *Distribution Network Service Provider*:
 - (1) ceases to be subject to the requirements of the old regulatory regime with regard to ring fencing; and
 - (2) becomes subject to the ring fencing requirements of the new regulatory regime; but
 - (3) guidelines in force for a *participating jurisdiction* immediately before the *AER's* assumption of regulatory responsibility (**transitional guidelines**) continue in force for that jurisdiction subject to amendment, revocation or replacement by guidelines made under the new regulatory regime.
- (c) The transitional guidelines:
 - (1) are taken to be guidelines made by the *AER* under the new regulatory regime; and
 - (2) are to be construed as if references to a *Jurisdictional Regulator* were references to the *AER*.
- (d) A waiver granted, or additional ring fencing requirement imposed, by a *Jurisdictional Regulator* under the transitional guidelines continues in force under the transitional guidelines subject to variation or revocation by the *AER*.

11.14.6 Additional requirements with regard to cost allocation

- (a) Even though a *Distribution Network Service Provider* remains subject to the old regulatory regime, the provider is also subject, as from the date of the relevant amendment, to the requirements of Part F of the current Chapter 6 (Cost Allocation).

- (b) This clause applies only for the purposes of the next distribution determination for the *Distribution Network Service Provider*.

11.14.7 Construction of documents

To facilitate the transition from the old regulatory regime to the new regulatory regime, references in determinations and other documents to provisions of former Chapter 6 are to be read (where the context admits) to corresponding provisions of the current Chapter 6.

Part M Economic Regulation of Distribution Services (2007 amendments)

Division 1 General Provisions

11.14 General provisions

11.14.1 Application of this Division

This Division has no application in relation to Victoria.

11.14.2 Definitions

amending rules means the *National Electricity (Economic Regulation of Distribution Services) Amendment Rules 2007*.

current Chapter 6 means Chapter 6 of these *Rules* as currently in force.

former Chapter 6 means Chapter 6 of these *Rules* as in force before the substitution of the current Chapter 6 by the amending rules.

jurisdictional pricing determination for a *participating jurisdiction* means a determination regulating *distribution service* pricing made by the *Jurisdictional Regulator* for the *participating jurisdiction* and in force immediately before the date of the relevant amendment.

new regulatory provisions means the provisions of current Chapter 6 or (if applicable) of later Divisions of this Part providing for the economic regulation of *distribution services* after the transitional regulatory period comes to an end.

old regulatory regime for a *participating jurisdiction* includes:

- (a) the jurisdictional pricing determination for the *participating jurisdiction*; and
- (b) the laws (including the former Chapter 6) governing the making, monitoring, administration and enforcement of the jurisdictional pricing determination;

- (c) any other determination, guideline, code or document (whatever its description) of a kind contemplated by the former Chapter 6 that was made for the *participating jurisdiction* by the relevant *Jurisdictional Regulator* and was in force immediately before the date of the relevant amendment;
- (d) any other obligation imposed by or under the former Chapter 6;
- (e) any power or function of the *Jurisdictional Regulator* under the former Chapter 6.

new regulatory regime means the system for the economic regulation of *distribution services* contemplated by the new regulatory provisions.

relevant amendment means the substitution of the current Chapter 6 for the former Chapter 6 by the amending rules.

transitional regulatory period for a *participating jurisdiction* means the *regulatory control period* for which the jurisdictional pricing determination for the relevant *participating jurisdiction* was made.

11.14.3 Preservation of old regulatory regime

- (a) Subject to this Part, a *Distribution Network Service Provider* who was providing *distribution services* in a *participating jurisdiction* at the date of the relevant amendment
 - (1) remains subject to the old regulatory regime for the duration of the transitional regulatory period; and
 - (2) does not become subject to the new regulatory regime until the end of the transitional regulatory period.

Examples:

1. Reporting, monitoring and other compliance requirements continue under the old regulatory regime until the end of the transitional regulatory period and (subject to this Part) are unaffected by the new regulatory provisions.
2. Price regulation continues under the old regulatory regime until the end of the transitional regulatory period and is unaffected by the new regulatory provisions.
3. Prudential, billing and settlement issues are governed by rules 6.7 and 6.8 of former Chapter 6 and any applicable regulatory instruments (rather than Parts J and K of current Chapter 6).
4. Access disputes are dealt with under the old regulatory regime (and cannot be notified under Part L of current Chapter 6).

- (b) However:
 - (1) the new regulatory provisions govern the making of a distribution determination for the *Distribution Network Service Provider* at the end of the transitional regulatory period; and

- (2) in that respect the new regulatory provisions apply to a *Distribution Network Service Provider* who is still subject to the old regulatory regime as if the jurisdictional pricing determination were a distribution determination approaching the end of its *regulatory control period*.

11.14.4 Transfer of regulatory responsibility

- (a) The Minister for a *participating jurisdiction* may, during the course of the transitional regulatory period, transfer responsibility for the economic regulation of *distribution services* in the relevant jurisdiction from the *Jurisdictional Regulator* to the *AER*.
- (b) A Minister for a *participating jurisdiction* makes (or is taken to make) a transfer of regulatory responsibility under this clause:
 - (1) by giving notice of the transfer to the *Jurisdictional Regulator* and the *AER*; or
 - (2) if powers exist apart from this clause under the law of the *participating jurisdiction* to transfer regulatory responsibility from the *Jurisdictional Regulator* to the *AER* – by exercising those powers.
- (c) If the Minister makes a transfer of regulatory responsibility under this clause:
 - (1) the *AER* is subrogated to the position of the *Jurisdictional Regulator*; and
 - (2) the *AER* may therefore exercise powers and functions of the *Jurisdictional Regulator* (including legislative powers and functions) under the old regulatory regime; and

Note:

The *AER* may also use its powers (e.g. for information gathering) under the Law.

- (3) references to the *Jurisdictional Regulator* in a determination or other instrument (including a legislative instrument) related to the old regulatory regime will be read as references to the *AER*.

11.14.5 Special requirements with regard to ring fencing

- (a) The requirements of the old regulatory regime with regard to ring fencing (rule 6.12 of former Chapter 6 and related guidelines) apply to a *Distribution Network Service Provider* until the *AER* assumes regulatory responsibility at the end of the transitional regulatory period or on the earlier transfer of regulatory responsibility to the *AER*.
- (b) On the *AER's* assumption of regulatory responsibility, a *Distribution Network Service Provider*:

- (1) ceases to be subject to the requirements of the old regulatory regime with regard to ring fencing; and
 - (2) becomes subject to the ring fencing requirements of the new regulatory regime; but
 - (3) guidelines in force for a *participating jurisdiction* immediately before the *AER's* assumption of regulatory responsibility (**transitional guidelines**) continue in force for that jurisdiction subject to amendment, revocation or replacement by guidelines made under the new regulatory regime.
- (c) The transitional guidelines:
 - (1) are taken to be guidelines made by the *AER* under the new regulatory regime; and
 - (2) are to be construed as if references to a *Jurisdictional Regulator* were references to the *AER*.
- (d) A waiver granted, or additional ring fencing requirement imposed, by a *Jurisdictional Regulator* under the transitional guidelines continues in force under the transitional guidelines subject to variation or revocation by the *AER*.

11.14.6 Additional requirements with regard to cost allocation

- (a) Even though a *Distribution Network Service Provider* remains subject to the old regulatory regime, the provider is also subject, as from the date of the relevant amendment, to the requirements of Part F of the current Chapter 6 (Cost Allocation).
- (b) This clause applies only for the purposes of the next distribution determination for the *Distribution Network Service Provider*.

11.14.7 Construction of documents

To facilitate the transition from the old regulatory regime to the new regulatory regime, references in determinations and other documents to provisions of former Chapter 6 are to be read (where the context admits) to corresponding provisions of the current Chapter 6.

Division 2 **[Deleted]**

Division 3 **Transitional arrangements for first distribution
determination for Queensland Distribution
Network Service Providers**

11.16 **Transitional arrangements for first distribution determination
for Queensland Distribution Network Service Providers**

11.16.1 **Definitions**

In this Division 3:

2005 determination means the Final Determination: Regulation of Electricity Distribution of the Queensland Competition Authority dated April 2005.

EDSD Review means the review by the Independent Panel appointed by the Queensland Government into Electricity Distribution and Service Delivery for the 21st Century which was established in March 2004 and reported in July 2004.

ENERGEX means Energex Limited A.C.N 078 849 055 and any successor business.

Ergon Energy means Ergon Energy Corporation Limited A.C.N. 087 646 062 and any successor business.

Queensland Competition Authority means the authority established by section 7 of the *Queensland Competition Authority Act 1997* (Qld).

regulatory control period means the *regulatory control period* beginning 1 July 2010.

11.16.2 **Application of Part to Queensland 2010 distribution determinations**

The requirements of this Division 3 apply for the purposes of making a distribution determination for ENERGEX and Ergon Energy for the regulatory control period and modify the application of Chapter 6 of the Rules to the extent set out in this Division 3.

11.16.3 **Treatment of the regulatory asset base**

- (a) Nothing in Chapter 6 of the *Rules* requires ENERGEX or Ergon Energy to amend the approach allowed in the 2005 determination in relation to the treatment of *standard control services* and other services in the regulatory asset base for the regulatory control period.
- (b) The *AER* must accept the approach proposed by ENERGEX and Ergon Energy for the regulatory control period if it is consistent with the approach in the 2005 determination.

- (c) The *AER* must provide for any necessary adjustments or mechanisms in the *distribution determination* for the regulatory control period to prevent any cross-subsidies between *standard control services* and other *distribution services*.

Note:

The regulatory asset bases for Ergon Energy and ENERGEX are likely to include assets used to provide services which are not *standard control services* and accordingly the expected revenue for each year will need to be adjusted to avoid double recovery of those costs.

11.16.4 Efficiency Benefit Sharing Scheme

- (a) An *efficiency benefit sharing scheme* for ENERGEX and Ergon Energy for the regulatory control period must not cover efficiency gains and losses relating to capital expenditure.
- (b) For the purposes of clause 6.5.8(c) the *AER* must also have regard to the continuing obligations on ENERGEX and Ergon Energy throughout the regulatory control period to implement the recommendations from the EDSD Review adopted by the Queensland Government.

11.16.5 Service Target Performance Incentive Scheme

In formulating a *service target performance incentive scheme* to apply to ENERGEX and Ergon Energy for the regulatory control period, the *AER*, in addition to the requirements in clause 6.6.2(b), must also:

- (1) take into account the continuing obligations on ENERGEX and Ergon Energy throughout the regulatory control period to implement the recommendations from the EDSD Review adopted by the Queensland Government;
- (2) take into account the impact of severe weather events on service performance; and
- (3) consider whether the scheme should be applied by way of a paper trial or whether a lower powered incentive is appropriate.

11.16.6 Framework and approach

- (a) If either ENERGEX or Ergon Energy submits a proposal to the *AER* as to the classification of services and control mechanism for the regulatory control period on or before 31 March 2008, the *AER* must publish its *framework and approach paper* under clause 6.8.1 in relation to those issues within five months of receiving the proposal from ENERGEX or Ergon Energy (as the case may be).
- (b) This clause does not affect the timing or the processes of the *AER* in preparing and publishing its *framework and approach paper* on the

remaining issues in clause 6.8.1 for ENERGEX or Ergon Energy if they submit a proposal under paragraph (a).

11.16.7 Regulatory Proposal

- (a) For the purposes of submitting a *regulatory proposal* under clause 6.8.2 for the regulatory control period, ENERGEX and Ergon Energy may, for the purposes of calculating indicative prices referred to in clause 6.8.2(c)(4) and including X factors for the purposes of clause 6.5.9, treat the proposed statement of regulatory intent published under clause 6.16(b)(1) as if it were the applicable statement of regulatory intent.
- (b) If the statement of regulatory intent differs materially from the proposed statement of regulatory intent, ENERGEX or Ergon Energy may revise its calculation of indicative prices and proposed X factors in its *regulatory proposal* on or before 1 July 2009.
- (c) The *AER* must *publish* any revised information submitted by ENERGEX or Ergon Energy under this clause.

11.16.8 Side constraints

For the regulatory control period, nothing in clause 6.18.6 should preclude the implementation of any price paths approved by the Queensland Competition Authority (including any necessary adjustment of those price paths in light of the expected revenue for the first *regulatory year* of the regulatory control period).

11.16.9 Cost pass throughs

- (a) If an event or circumstance occurs before 1 July 2010 which would constitute a pass through under the 2005 determination and no application for a pass through has been made in relation to that event or circumstance, ENERGEX or Ergon Energy may apply to the *AER* within a year of the event or circumstance occurring to accommodate the impact of the event in the regulatory control period.
- (b) The *AER* must allow a pass through of such amounts if the event or circumstance would have constituted a pass through under the 2005 determination as if the amounts were *approved pass through amounts* under clause 6.6.1.

11.16.10 Capital Contributions Policy

- (a) ENERGEX and Ergon Energy must comply with a capital contributions policy published under this clause 11.16.10 for the regulatory control period.
- (b) By 1 July 2009, ENERGEX and Ergon Energy must publish on their website a capital contributions policy based upon the requirements relating to capital contributions in their Network Pricing Principles Statements

approved by the Queensland Competition Authority immediately in force prior to 1 July 2009.

- (c) The *AER* may by written notice, before 1 January 2010, direct ENERGEX or Ergon Energy to revise and republish their capital contributions policy within 15 *business days* of the notice only if the published policy does not give effect to the requirements relating to capital contributions in their Network Pricing Principles Statement.
- (d) After 1 January 2010, ENERGEX or Ergon Energy may apply to the *AER* to amend their published capital contributions policy and the *AER* may, after such consultation as it considers appropriate, approve or not approve that amendment.

Division 4 Transitional provisions of specific application to Victoria

11.17 Transitional provisions of specific application to Victoria

11.17.1 Definitions

In this Division:

AMI Order in Council means the Order in Council made by the Governor of Victoria under section 15A and section 46D of the *Electricity Industry Act 2000* (Vic) and published in the Victoria Government Gazette on 28 August 2007 (and includes that Order in Council as amended from time to time).

ESC cost allocation guidelines means *Electricity Industry Guideline No.3, Regulatory Information Requirements* made by the ESC and dated 14 December 2006 (and includes those guidelines as amended from time to time).

ESC distribution pricing determination means the Victorian distribution pricing determination as defined in section 3(1) of the *National Electricity (Victoria) Act 2005*.

Victorian Distribution Network Service Provider means a *Distribution Network Service Provider* for a *distribution network* situated wholly or partly in Victoria.

11.17.2 Calculation of estimated cost of corporate income tax

- (a) This clause applies to the calculation of the estimated cost of corporate income tax for the purposes of distribution determinations that are to take effect on 1 January 2011 for Victorian Distribution Network Service Providers.
- (b) For calculating the estimated cost of corporate income tax, the *AER* must adopt:

- (1) the taxation values of assets carried over from the ESC distribution pricing determination; and
 - (2) the classification of assets, and the method of classification, adopted for the ESC distribution pricing determination; and
 - (3) the same method of depreciation as was adopted by the ESC for the ESC distribution pricing determination.
- (c) The *AER* may, however, depart from methods of asset classification or depreciation mentioned in paragraph (b)(2) or (3) to the extent required by changes in the taxation laws or rulings given by the Australian Taxation office.
- (d) A *post-tax revenue model* must be consistent with this clause.

11.17.3 Decisions made in the absence of a statement of regulatory intent

- (a) This clause applies if a Victorian Distribution Network Service Provider submits a *building block proposal* before the *AER* issues a statement of regulatory intent.
- (b) In deciding questions to which the considerations stated in clause 6.5.4(e) are relevant, the *AER* must have regard to those considerations.

11.17.4 Cost allocation guidelines

- (a) In formulating the *Cost Allocation Guidelines* under clause 6.15.3, the *AER* must include guidelines specifically applicable to Victorian Distribution Network Service Providers (the **guidelines of specific application to Victoria**).
- (b) The guidelines of specific application to Victoria:
 - (1) must be formulated with regard to the ESC cost allocation guidelines; and
 - (2) must be designed to ensure, to the maximum practicable extent, consistency between cost allocation as required by the ESC distribution pricing determination and cost allocation in later *regulatory control periods*.

11.17.5 Modification of requirements related to cost allocation method

- (a) Clause 6.15.4(a) applies to a Victorian Distribution Network Service Provider as if, instead of requiring submission of the provider's proposed *Cost Allocation Method* within 12 months after the commencement of Chapter 6, it required submission of the proposed *Cost Allocation Method* together with the first *building block proposal* to be submitted by the provider after the commencement of Chapter 6.

- (b) The references in clauses 6.5.6(b)(2) and 6.5.7(b)(2) to the *Cost Allocation Method* are, if paragraph (a) is applicable, to be read as references to the proposed *Cost Allocation Method* submitted with the *building block proposal*.
- (c) The *AER* must include in its *framework and approach paper* prepared for a Victorian *Distribution Network Service Provider*, in relation to the first *building block proposal* to be submitted by the provider after the commencement of Chapter 6, a statement of its likely approach to cost allocation based on the guidelines then in force.
- (d) The *AER*:
 - (1) must, in deciding under clause 6.15.4(c) whether to approve a *Cost Allocation Method* submitted by a Victorian Distribution Network Service Provider, have regard to previous cost allocation in accordance with the ESC distribution pricing determination; and
 - (2) must not approve the *Cost Allocation Method* unless it allows effective comparison of historical and forecast cost allocation between the period to which the ESC distribution pricing determination applies and later *regulatory control periods*; and
 - (3) may, subject to the relevant *Cost Allocation Guidelines*, refuse to approve the *Cost Allocation Method* if it differs from the method previously used by the Victorian Distribution Network Service Provider.

11.17.6 AMI Order in Council

- (a) Metering services that are regulated under the AMI Order in Council are not, while so regulated, subject to regulation under a distribution determination but, on cessation of regulation under the AMI Order in Council, are liable to regulation under a distribution determination.
- (b) However, for a relevant *regulatory control period*, services to which exit fees under clause 7, or restoration fees under clause 8, of the AMI Order in Council applied are to be classified as alternative control services and are to be regulated by the *AER* on the same basis as applied under the AMI Order in Council.
- (c) For paragraph (b), a relevant *regulatory control period* is a *regulatory control period* commencing on or after 1 January 2016 and before 1 January 2021.
- (d) Until there is a transfer of regulatory responsibility from the ESC to the *AER* under a law of Victoria, clause 7.3.6(f) in its application to Victoria will be read as if it permitted the recovery of the costs to which it refers in accordance with a determination made either by the *AER* or by the ESC.
- (e) This clause expires on 1 January 2021.

Part N Registration of Foreign Based Persons and Corporations as Trader Class Participants (2007 amendments)

11.18 Rules consequential on the making of the National Electricity Amendment (Registration of Foreign Based Persons and Corporations as Trader Class Participants) Rule 2007

11.18.1 Definitions

For the purposes of this rule 11.18:

Amending Rule means the *National Electricity Amendment (Registration of Foreign Based Persons and Corporations as Trader Class Participants) Rule 2007*.

commencement date means the day on which the Amending Rule commences operation.

11.18.2 Auction rules

- (a) *NEMMCO* must amend the *auction rules* by 1 September 2008 in accordance with clause 3.18.3 to incorporate the amendments to the *Rules* made by the Amending Rule.
- (b) Any action taken by *NEMMCO* prior to the commencement date, in anticipation of the commencement date, to amend the *auction rules* for the purpose of the Amending Rule is taken to satisfy the equivalent action under clause 3.18.3.

Part O Process for Region Change (2007 amendments)

11.19 Rules consequent on making of the National Electricity Amendment (Process for Region Change) Rule 2007

11.19.1 Definitions

Amending Rule means the *National Electricity Amendment (Process for Region Change) Rule 2007*.

commencement date means the day on which the Amending Rule commences operation.

old clause 3.5.5 means clause 3.5.5 of the *Rules* as in force immediately before the commencement date.

11.19.2 Regions Publication

The Regions Publication published by *NEMMCO* immediately before the commencement date in accordance with old clause 3.5.5 and clause 11.13.10 is

taken to be the *Regions Publication* published by NEMMCO in accordance with clause 2A.1.3.

Part P Integration of NEM Metrology Requirements

11.20 Rules consequential on the making of the National Electricity Amendment (Integration of NEM Metrology Requirements) Rule 2008

11.20.1 Definitions

For the purposes of this rule 11.20:

Amending Rule means the *National Electricity Amendment (Integration of NEM Metrology Requirements) Rule 2008*.

commencement date means the day on which the Amending Rule commences operation.

first-tier jurisdictional requirements publication means the publication published by NEMMCO in accordance with clause 11.20.6.

Minimalist Transitioning Approach has the same meaning as in the Queensland Electricity Industry Code.

new clause 7.3.1 means clause 7.3.1 of the *Rules* immediately after the commencement date.

Victorian first-tier load means a load in Victoria where the electricity flowing through the *connection point* is equal to, or greater than, 160 MWh per annum.

11.20.2 Metering installations for non-market generating units immediately prior to 30 June 2008

- (a) A *metering installation* for a *non-market generating unit* that was installed immediately prior to 30 June 2008 and complied with the applicable jurisdictional requirements for that installation on 30 June 2008 is taken to satisfy the requirements for *metering installations* for *non-market generating units* in new clause 7.3.1.
- (b) Where a *metering installation* for a *non-market generating unit* did not comply with the requirements referred to in paragraph (a), that installation must be repaired or replaced in accordance with the requirements of new clause 7.3.1.
- (c) The applicable jurisdictional requirements for *metering installations* for *non-market generating units* referred to in paragraph (a) must be referred to in the first-tier jurisdictional requirements publication.

11.20.3 First-tier load metering installations

- (a) Subject to clause 11.20.5, a *first-tier load metering installation* as at 30 June 2008 that complied with the applicable jurisdictional requirements for that installation as at that date is taken to comply with the *Rules* provided the *metering installation* continues to comply with the applicable jurisdictional requirements as at 30 June 2008.
- (b) A *first-tier load metering installation* that does not satisfy the requirements of paragraph (a) must be repaired or replaced in accordance with the *Rules*.
- (c) The applicable jurisdictional requirements referred to in paragraph (a) for *first-tier load metering installations* must be referred to in the first-tier jurisdictional requirements publication.

11.20.4 First-tier load metering installations in Victoria

- (a) Subject to paragraph (b) and despite the *Rules*, a *Market Participant* who is responsible for a Victorian *first-tier load* with a type 5 or type 6 *metering installation* immediately before the commencement date is taken to be the *responsible person* for that *metering installation*.
- (b) A *Market Participant* who is taken to be the *responsible person* for the *metering installation* referred to in paragraph (a) must ensure the *metering installation* meets the applicable jurisdictional requirements for that installation as referred to in the first-tier jurisdictional requirements publication in accordance with clause 11.20.3(c).

11.20.5 Minimalist Transitioning Approach in Queensland

For the duration of the Minimalist Transitioning Approach, clauses 7.2.3(i)(2), 7.2.5(b)(2), 7.2.5(d)(6) and 7.3.1(f) of the *Rules* do not apply in respect of a *metering installation* which:

- (a) is the responsibility of a *Market Participant* or *responsible person* who is operating under the Minimalist Transitioning Approach in Queensland; and
- (b) in accordance with the *Market Settlement and Transfer Solution Procedures*:
 - (1) has a *NMI* classification of SMALL; and
 - (2) the *Local Network Service Provider* has not received a valid request from a *Market Customer* for the *NMI* to be registered with NEMMCO.

11.20.6 First-tier jurisdictional requirements publication

- (a) NEMMCO must, in consultation with the *participating jurisdictions*, publish a document ('first-tier jurisdictional requirements publication') that lists the documents that contain the applicable jurisdictional requirements referred to in clauses 11.20.2, 11.20.3 and 11.20.4.

- (b) *NEMMCO* must *publish* the first-tier jurisdictional requirements publication by 30 June 2008.

11.20.7 Metrology procedure

- (a) *NEMMCO* must make the required amendments to the *metrology procedure* as a result of the Amending Rule by 31 July 2008.
- (b) All actions taken by *NEMMCO* prior to the commencement date to amend the *metrology procedure* in accordance with paragraph (a) are deemed to be valid as at the commencement date to the extent that those actions were taken in accordance with the relevant requirements of rule 7.14 (as though the Amending Rule was in force at the time that the action was taken).
- (c) The *metrology procedure* published in accordance with rule 7.14 immediately before the commencement date continues to apply as if the Amending Rule had not been made and until *NEMMCO publishes* the amended the *metrology procedure* in accordance with paragraph (a).

Part PA Reliability Settings: Information Safety Net and Directions

11.21 Rules consequential on the making of the National Electricity Amendment (NEM Reliability Settings: Information Safety Net and Directions) Rule 2008

11.21.1 Definitions

In this rule 11.21:

Amending Rule means the *National Electricity Amendment (NEM Reliability Settings: Information Safety Net and Directions) Rule 2008* No. 6.

Commencement date means the date the Amending Rule commences operation.

11.21.2 EAAP guidelines

All actions taken by *NEMMCO* prior to the commencement date in anticipation of the commencement date for the purposes of preparing and publishing the first *EAAP guidelines* as required by clause 3.7C(p) are taken to satisfy the equivalent actions required for *EAAP guidelines* under rule 3.7C.

11.21.3 [Deleted]

11.21.4 [Deleted]

11.21.5 Timetable

- (a) *NEMMCO* must amend the *timetable* in accordance with clause 3.4.3(b) to take into account the Amending Rule and those amendments are to take effect from the commencement date.

- (b) All actions taken by *NEMMCO* prior to the commencement date in anticipation of the commencement date to amend the *timetable* as required by paragraph (a) are taken to satisfy the equivalent action required under clause 3.4.3(b).

11.21.6 Power system security and reliability standards

- (a) The *Reliability Panel* must amend the *power system security and reliability standards* in accordance with clause 8.8.3 to take into account the Amending Rule and those amendments are to take effect from the commencement date.
- (b) All actions taken by the *Reliability Panel* prior to the commencement date in anticipation of the commencement date to amend the *power system security and reliability standards* as required by paragraph (a) are taken to satisfy the equivalent action required under clause 8.8.3.

11.21.7 Report on statement of opportunities

All actions taken by *NEMMCO* prior to the commencement date in anticipation of the commencement date for the purposes of preparing and providing a report to the *Reliability Panel* as required by clause 3.13.3(u) are taken to satisfy the equivalent actions required for preparing and providing a report under clause 3.13.3(u).

11.21.8 Methodology for dispatch prices and ancillary services prices

Minor or administrative amendments made by *NEMMCO* to the methodology for determining *dispatch prices* and *ancillary service prices* developed in accordance with clause 3.9.3(e) prior to the commencement date are taken to have been made under clause 3.9.3(g).

Part Q Regulatory Test Thresholds and Information Disclosure on Network Replacements

11.22 Rules consequential on the making of the National Electricity Amendment (Regulatory Test Thresholds and Information Disclosure on Network Replacements) Rule 2008

11.22.1 Definitions

In this rule 11.22:

amended definitions means the definitions of "new large transmission network asset" and "new small transmission network asset" as amended by the Amending Rule.

Amending Rule means the *National Electricity Amendment (Regulatory Test Thresholds and Information Disclosure on Network Replacements) Rule 2008*.

commencement date means the date on which the Amending Rule commences operation.

old definitions means the definitions of "new large transmission network asset" and "new small transmission network asset" as in force immediately before the commencement date.

11.22.2 Amending Rule does not affect existing regulatory test

The old definitions continue to apply in place of the amended definitions following the commencement date in respect of:

- (a) a *new small transmission network asset* for which a *Transmission Network Service Provider* has set out the matters required under clauses 5.6.2A(b)(4) and (5) in an *Annual Planning Report published* prior to the commencement date;
- (b) a *new small transmission network asset* not identified in an *Annual Planning Report* for which a *Transmission Network Service Provider* has *published* a report required under clause 5.6.6A(c) prior to the commencement date; and
- (c) a *new large transmission network asset* for which a *Transmission Network Service Provider* has taken an action or commenced a process under the *Rules* which relies on or is referenced to the *Regulatory Test* (such as *publishing* an application notice under clause 5.6.6(c)) that has not completed prior to the commencement date.

Part R Performance Standard Compliance of Generators

11.23 Rules consequential on the making of the National Electricity Amendment (Performance Standards Compliance of Generators) Rule 2008

11.23.1 Definitions

For the purposes of this rule 11.23:

Amending Rule means the *National Electricity Amendment (Performance Standards Compliance of Generators) Rule 2008*.

Old Clause 5.7.3(b) means the clause 5.7.3(b) in the version of the *Rules* that was in force immediately prior to the commencement of the Amending Rule.

11.23.2 Application of rule 11.23 for compliance programs implemented immediately after the commencement of the Amending Rule

Registered Participants are not required to comply with the obligation set out in rule 4.15(b) until 3 months after the day on which the *Reliability Panel published* its initial *template for generator compliance programs* under clause 8.8.3 of the *Rules* or until a date determined by the *Reliability Panel*.

11.23.3 Application of rule 11.23 for compliance programs implemented immediately prior to the commencement of the Amending Rule

Registered Participants which implemented compliance programs under the Old Clause 5.7.3(b) must maintain compliance with those programs until 3 months after the day on which the *Reliability Panel* published its initial template for generator compliance programs under clause 8.8.3 of the *Rules* or until a date determined by the *Reliability Panel*.

11.23.4 Application of rule 11.23 for compliance programs not implemented immediately prior to the commencement of the Amending Rule

Registered Participants which have not implemented compliance programs under the Old Clause 5.7.3(b) must implement and maintain compliance programs under the Old Clause 5.7.3(b) until 3 months after the day on which the *Reliability Panel* published its initial template for generator compliance programs under clause 8.8.3 of the *Rules* or until a date determined by the *Reliability Panel*.

Part S [Deleted]

Part U Confidentiality Arrangements concerning Information required for Power System Studies

11.25 Rule consequential on the making of the National Electricity Amendment (Confidentiality Arrangements in Respect of Information Required for Power System Studies) Rule 2009

11.25.1 Definitions

For the purposes of rule 11.25:

Amending Rule means the *National Electricity Amendment (Confidentiality Arrangements in Respect of Information Required for Power System Studies) Rule 2009*.

Commencement date means the date on which the Amending Rule commences operation.

11.25.2 Transitional arrangements for the provision of information

- (a) A *Generator* must provide *NEMMCO* with a *releasable user guide* by 29 May 2009 or a date which *NEMMCO* considers to be reasonable in the circumstances but which must be no later than 27 November 2009, except in relation to the following information:
 - (1) information provided to *NEMMCO* before 15 March 2007 that *NEMMCO* holds at the commencement date only to the extent that such information is of a type required in a *releasable user guide* and was authorized by the *Rules* to be released for the same purpose as

- intended by clause 3.13.3(l) as at the date that information was provided to *NEMMCO*; and
- (2) information provided to *NEMMCO* after 15 March 2007 only if the relevant *Generator* has provided to *NEMMCO* model source code under clause S5.2.4(b)(6), being the provider identified in clause 3.13.3(l2), and provides its written consent to *NEMMCO* for *NEMMCO* to use information that *NEMMCO* holds at the commencement date of a type required in a *releasable user guide* for the purposes of clause 3.13.3(l).
- (b) A person required under the *Rules* to register as a *Generator* in respect of a *generating system* comprised of *generating units* with a combined *nameplate rating* of 30 MW or more, must provide *NEMMCO* with a *releasable user guide* by 29 May 2009 or a date which *NEMMCO* considers to be reasonable in the circumstances but which must be no later than 27 November 2009, except in relation to the following information:
- (1) information provided to *NEMMCO* before 15 March 2007 that *NEMMCO* holds at the commencement date only to the extent that such information is of a type required in a *releasable user guide* and was authorized by the *Rules* to be released for the same purpose as intended by clause 3.13.3(l) as at the date that information was provided to *NEMMCO*; and
 - (2) information provided to *NEMMCO* after 15 March 2007 only if the relevant person described in this paragraph as required under the *Rules* to register as a *Generator*, has provided to *NEMMCO* model source code under clause S5.2.4(b)(6), being the provider identified in clause 3.13.3(l2), and provides its written consent to *NEMMCO* for *NEMMCO* to use information that *NEMMCO* holds at the commencement date of a type required in a *releasable user guide* for the purposes of clause 3.13.3(l).
- (c) If a *Generator* provided to *NEMMCO* model source code under clause S5.2.4(b)(6) between 15 March 2007 and the commencement date:
- (1) it may provide to *NEMMCO* a substitute model source code in respect of its *generating system* in conjunction with a *releasable user guide* provided under rule 11.25.2(a); and
 - (2) that substitute model source code will be taken to be the model source code provided under clause S5.2.4(b)(6) only if it complies with clause S5.2.4(c).
- (d) If a person required under the *Rules* to register as a *Generator* in respect of a *generating system* comprised of *generating units* with a combined *nameplate rating* of 30 MW or more, provided to *NEMMCO* model source code under clause S5.2.4(b)(6) between 15 March 2007 and the commencement date:

- (1) it may provide to *NEMMCO* a substitute model source code in respect of its *generating system* in conjunction with a *releasable user guide* provided under rule 11.25.2(b); and
- (2) that substitute model source code will be taken to be the model source code provided under clause S5.2.4(b)(6) only if it complies with clause S5.2.4(c).
- (e) *Releasable user guide* information provided to *NEMMCO* under clauses 11.25.2(a) and 11.25.2(b) is deemed to be *releasable user guide* information provided under clause S5.2.4(b)(8) and for the purposes of clause 3.13.3(l).
- (f) *NEMMCO* must implement any changes to its systems needed to comply with its obligations under the Amending Rule within 12 months of the commencement date.

Part V WACC Reviews: Extension of Time

11.26 Rule consequential on the making of the National Electricity Amendment (WACC Reviews: Extension of Time) Rule 2009

11.26.1 Definitions

In this rule 11.26:

regulatory control period 2010-2015 means the *regulatory control period* commencing on 1 July 2010 in relation to *Distribution Network Service Providers* in South Australia and Queensland.

11.26.2 Extension of time to submit a regulatory proposal for the regulatory control period 2010-2015

- (a) This rule 11.26 applies to *Distribution Network Service Providers* in South Australia and Queensland.
- (b) Despite clause 6.8.2(b)(1), where a relevant *Distribution Network Service Provider* is required to submit a *regulatory proposal* for the *regulatory control period* 2010-2015 to the *AER* under clause 6.8.2(a), that *regulatory proposal* must be submitted by 1 July 2009.

Part W National Transmission Statement

11.27 Rules consequent on the making of the National Electricity Amendment (National Transmission Statement) Rule 2009

11.27.1 Definitions

For the purposes of this rule 11.27:

Amending Rule 2009 means the *National Electricity Amendment (National Transmission Statement) Rule 2009*.

commencement date means the date on which the Amending Rule 2009 commences operation.

jurisdictional planning body means an entity nominated from time to time by the relevant *Minister* of a *participating jurisdiction* as having *transmission system* planning responsibility in that *participating jurisdiction*.

National Transmission Network Development Plan means the document that is to replace the *Annual National Transmission Statement*, the first of which is to be *published* by AEMO after 2009.

National Transmission Statement means the statement *published* by AEMO in accordance with clause 11.27.4.

National Transmission Statement review or **NTS review** means the review conducted by AEMO in accordance with clause 11.27.4.

11.27.2 Purpose

The purpose of this rule 11.27 is to require AEMO to publish a National Transmission Statement by 31 December 2009 in the place of an *Annual National Transmission Statement* for 2009. This will facilitate the efficient transition from the *Annual National Transmission Statement* in 2008 to the first National Transmission Network Development Plan to be *published* after 2009.

11.27.3 Application of rule 11.27

From the commencement date, rule 11.27 applies despite any other provision of the *Rules* (including any guideline or procedure made under the *Rules*) applicable to the *ANTS review* and *publication* of an *Annual National Transmission Statement* for 2009.

11.27.4 National Transmission Statement

(a) AEMO must conduct a review of the following matters:

- (1) *national transmission flow paths*;
- (2) historical and forecast utilisation of *national transmission flow paths*;
- (3) historical and forecast *constraints* in respect of *national transmission flow paths*, including those identified in the *Annual Planning Reports*;
- (4) *augmentations* proposed by each *Transmission Network Service Provider* in their most recent *Annual Planning Reports* and the manner in which the proposed *augmentations* relate to the *national transmission flow paths*;

- (5) other *network* and *non-network* options identified during the consultation described in paragraph (b) and the manner in which the options relate to the *national transmission flow paths*,
- (the **NTS review**) and prepare and *publish* the National Transmission Statement by 31 December 2009 setting out the results of the NTS review.
- (b) *AEMO* must, in carrying out the NTS review, consult with *Registered Participants* and *interested parties* in relation to:
 - (1) the data and assumptions to be used as part of the review;
 - (2) the potential options for addressing identified *constraints* impacting *national transmission flow paths*; and
 - (3) the content of the National Transmission Statement.
- (c) In carrying out the NTS review, *AEMO* must consider the following matters:
 - (1) the location of the current *national transmission flow paths* and the current capacities, *constraints* and congestion points on those flow paths;
 - (2) the location of the potential *national transmission flow paths* over the next 20 years, and the likely capabilities, *constraints* and congestion points on those flow paths;
 - (3) the quantity of electricity which flowed, the periods in which the electricity flowed, and *constraints*, on the *national transmission flow paths* over the previous *financial year* or such other period as determined by *AEMO* having regard to data which is available to *AEMO*;
 - (4) the forecast quantity of electricity which is expected to flow, and the periods in which the electricity is expected to flow, the magnitude and significance of future *network losses* and *constraints* on the current and potential *national transmission flow paths* over the current *financial year* or such other period as determined by *AEMO* having regard to data which is available to *AEMO*;
 - (5) the projected capabilities of the existing *transmission network* and the *network control ancillary services* required to support existing and future *transmission network* capabilities;
 - (6) demand forecasts for the next 20 *financial years*;
 - (7) possible scenarios for additional *generation* and demand side options to meet demand forecasts;

- (8) relevant intra-jurisdictional developments and any incremental works which may be needed to coordinate *national transmission flow path* planning with intra-jurisdictional planning;
 - (9) the options for relieving forecast *constraints* on the *national transmission flow paths* identified in the *Annual Planning Reports* or through the consultation required under paragraph (b); and
 - (10) such other matters as *AEMO*, in consultation with the *participating jurisdictions*, considers are appropriate.
- (d) In considering the matters described in paragraph (c), *AEMO* must have regard to:
- (1) the *Annual Planning Reports* published in 2009; and
 - (2) information obtained for the purposes of preparing the *statement of opportunities* to be published in 2009;
- and may include information from the *Annual Planning Reports* and the *statement of opportunities* in the National Transmission Statement.
- (e) In carrying out the NTS review, *AEMO* may seek the assistance of each jurisdictional planning body.
 - (f) *AEMO* may by written notice request a jurisdictional planning body to provide *AEMO* with any additional information or documents reasonably available to it that *AEMO* reasonably requires for the purpose of the NTS review.
 - (g) A jurisdictional planning body must comply with a written notice from *AEMO* issued under paragraph (f).
 - (h) *AEMO* may only use information or documents provided in accordance with paragraphs (f) and (g) for the purpose of preparing the National Transmission Statement or, where relevant, the *statement of opportunities* to be published in 2009.

11.27.5 Scope and Content of National Transmission Network Development Plan

The National Transmission Statement must also identify the expected scope and content of the first National Transmission Network Development Plan.

11.27.6 Energy Adequacy Assessment Projection

Despite anything to the contrary in rule 3.7C, until the first *National Transmission Network Development Plan* is published, clause 3.7C(b)(6)(B) is to be taken as requiring the *EAAP* to take into account, where relevant, the matters *AEMO* is required to consider for the purposes of clause 11.27.4(c) in carrying out the *NTS* review.

11.27.7 Amendment to Last Resort Power

The National Transmission Statement is deemed to be an *Annual National Transmission Statement* for 2009 for the purposes of clause 5.6.4(g)(2).

11.27.8 Actions taken prior to commencement of Rule

Any relevant action taken by *NEMMCO* prior to the commencement date is taken to have been made or done in accordance with the *Rules* for the purpose of the Amending Rule 2009.

Part X National Transmission Planning

11.28 Rules consequential on the making of the *National Electricity (Australian Energy Market Operator) Amendment Rules 2009*

11.28.1 Definitions

In this rule:

amending rules means the *National Electricity (Australian Energy Market Operator) Amendment Rules 2009*.

commencement date means the date Schedule 2 of the amending rules comes into operation.

new National Electricity Rules means the National Electricity Rules as in force after the commencement date.

old National Electricity Rules means the National Electricity Rules as in force before the commencement date.

11.28.2 Jurisdictional planning bodies and representatives

- (a) The former responsible planning entity for a *participating jurisdiction* is taken to be the *jurisdictional planning body* for the *participating jurisdiction* until the relevant *Minister* nominates a different entity under the new National Electricity Rules.
- (b) The *representative* from the former responsible planning entity for a *participating jurisdiction* who was a member of the *Inter-regional Planning Committee* immediately before the commencement date is taken to be the *jurisdictional planning representative* for that *participating jurisdiction* under the new National Electricity Rules until another person is nominated under the new National Electricity Rules.
- (c) This clause does not apply to a jurisdiction for which *AEMO* is the *jurisdictional planning body*.
- (d) In this clause:

former responsible planning entity for a *participating jurisdiction* means the entity that was treated, for the purposes of clause 5.6.3(b)(2) of the old National Electricity Rules, as having *transmission system* planning responsibility in the *participating jurisdiction*.

11.28.3 Criteria and guidelines published by Inter-regional Planning Committee

- (a) The old *transmission network augmentation* criteria continue in force, subject to revocation or variation by *AEMO*, as if they had been *published* by *AEMO* under clause 5.6.3(b) of the new National Electricity Rules.
- (b) The old inter-network test guidelines continue in force, subject to revocation or variation by *AEMO*, as if they had been *published* by *AEMO* under clause 5.7.7(k) of the new National Electricity Rules.
- (c) In this clause:

old inter-network test guidelines means guidelines for assisting *Registered Participants* to determine when an *inter-network test* may be required that were *published* by the *Inter-regional Planning Committee* under clause 5.7.7(k) of the old National Electricity Rules and were applicable immediately before the commencement date.

old transmission network augmentation criteria means criteria for assessing whether a proposed *transmission network augmentation* is reasonably likely to have a *material inter-network impact* that were *published* by the *Inter-regional Planning Committee* under clause 5.6.3(i) of the old National Electricity Rules and were applicable immediately before the commencement date.

11.28.4 Augmentation technical reports

If a request for an *augmentation technical report* was made under clause 5.6.3 of the old National Electricity Rules, but proceedings based on, or related to, the request had not been completed by the commencement date, the proceedings are to be continued and completed by *AEMO* as if anything done under the old National Electricity Rules had been done under the corresponding provisions of the new National Electricity Rules.

11.28.5 Last Resort Planning Power

For the purposes of clause 5.6.4(g)(2) of the new National Electricity Rules, a reference to an *NTNDP* extends to:

- (1) the *National Transmission Statement* published under clause 11.27.4;
- (2) an *Annual National Transmission Statement* published under clause 5.6.5 of the old National Electricity Rules .

11.28.6 Inter-network power system tests

- (a) Proceedings commenced before the commencement date under clause 5.7.7 of the old National Electricity Rules may be continued and completed under clause 5.7.7 of the new National Electricity Rules.
- (b) Anything validly done before the commencement date under clause 5.7.7 of the old National Electricity Rules is taken to have been validly done under the corresponding provision of clause 5.7.7 of the new National Electricity Rules.

11.28.7 Control and protection settings for equipment

- (a) A matter referred to the *Inter-regional Planning Committee* under clause 5.8.3(d) of the old National Electricity Rules that remained undecided at the commencement date must be decided by AEMO within 20 *business days* after the commencement date.
- (b) AEMO's decision is final.

11.28.8 Revenue Proposals

Clauses 6A.6.6(e)(11) and 6A.6.7(e)(11) of the new National Electricity Rules only apply in respect of a *Revenue Proposal* submitted to the AER under clause 6A.10.1 of the new National Electricity Rules more than 20 *business days* after the commencement date.

Part Y Regulatory Investment Test for Transmission

11.29 Rules consequent on making of the National Electricity Amendment (Regulatory Investment Test for Transmission) Rule 2009

11.29.1 Definitions

For the purposes of this rule 11.29:

Amending Rule means the *National Electricity Amendment (Regulatory Investment Test for Transmission) Rule 2009*.

commencement date means the date on which the Amending Rule commences operation.

current application means any action taken or process initiated under the *Rules* which relies on or is referenced to the *regulatory test* and is not completed as at 1 August 2010.

initiated means:

- (a) in respect of a *new large transmission network asset* (as defined under the *Rules* immediately prior to the commencement date), that an application

notice has been made available in respect of that asset in accordance with the old clause 5.6.6(c);

- (b) in respect of a *new small transmission network asset* (as defined under the *Rules* immediately prior to the commencement date), that consultation has already commenced in respect of that asset in accordance with the old clause 5.6.6A(a).

new clauses 5.6.5B-E means clauses 5.6.5B-E of the *Rules* after the commencement date.

old clause 5.6.2A(b)(5) means clause 5.6.2A(b)(5) of the *Rules* (and all definitions in, and relevant provisions of, the *Rules* amended by the Amending Rule) as in force immediately before the commencement date.

old clause 5.6.5A means clause 5.6.5A of the *Rules* (and all definitions in, and relevant provisions of, the *Rules* amended by the Amending Rule) as in force immediately before the commencement date.

old clause 5.6.6 means clause 5.6.6 of the *Rules* (and all definitions in, and relevant provisions of, the *Rules* amended by the Amending Rule) as in force immediately before the commencement date.

old clause 5.6.6A means clause 5.6.6A of the *Rules* (and all definitions in, and relevant provisions of, the *Rules* amended by the Amending Rule) as in force immediately before the commencement date.

11.29.2 Period when Amending Rule applies to transmission investment

- (a) For the period from the commencement date to 1 August 2010:
 - (1) new clauses 5.6.5B-E have no effect in respect of *transmission investment*; and
 - (2) old clause 5.6.2A(b)(5), old clause 5.6.5A, old clause 5.6.6, old clause 5.6.6A and the *regulatory test* and *regulatory test application guidelines* promulgated from time to time under clause 5.6.5A, continue to apply in respect of *transmission investment*.
- (b) From 1 August 2010:
 - (1) new clauses 5.6.5B-E will have effect in respect of *transmission investment*;
 - (2) old clause 5.6.5A, old clause 5.6.6, old clause 5.6.6A, and the *regulatory test* and *regulatory test application guidelines* promulgated from time to time under clause 5.6.5A, continue to apply in respect of any current application; and
 - (3) for the purposes of an *Annual Planning Report* published before 1 August 2010, old clause 5.6.2A(b)(5) applies to any current application in relation to a *new small transmission network asset* (as

defined under the *Rules* immediately prior to the commencement date).

Part Z Congestion Information Resource

11.30 Rules consequent on the making of the National Electricity Amendment (Congestion Information Resource) Rule 2009

11.30.1 Definitions

In this rule 11.30:

Amending Rule means the National Electricity Amendment (Congestion Information Resource) Rule 2009.

commencement date means the day on which the Amending Rule commences operation.

interim congestion information resource means the information resource developed and *published* in accordance with clause 11.30.2.

network outage schedule means a schedule developed by *AEMO* based on information received from *Transmission Network Service Providers* in accordance with rule 3.7A that lists the planned *network outages* on each *transmission system* for a period of up to two years in advance and that identifies the likelihood of each planned *network outages* proceeding following an assessment of forecast demand for the period of the planned *network outages*.

11.30.2 Interim congestion Information resource

- (a) Pending the development and *publication* of the *congestion information resource* under rule 3.7A, *AEMO* must develop an interim congestion information resource to implement the *congestion information resource objective* in accordance with this rule 11.30. For the avoidance of doubt, *AEMO* is not required to follow the *Rules consultation procedures* in developing the interim congestion information resource.
- (b) The interim congestion information resource must include:
 - (1) the *network outages* schedule;
 - (2) historical data on *mis-pricing* at *transmission network* nodes in the *national electricity market*;
 - (3) the following information on *network outages* planned for the subsequent thirteen months that, in the reasonable opinion of the relevant *Transmission Network Service Provider*, will have or are likely to have a material effect on transfer capabilities:

- (i) details of the forecast timing and the factors affecting the timing of planned *network outages* and the likelihood that the planned timing will vary; and
 - (ii) details of the reasons for the planned *network outages*, including the nature, and a description, of the works being carried out during the planned *network outages*, if any;
 - (4) the following information on planned *network outages* referred to in subparagraph (3):
 - (i) an assessment of the projected impact on *intra-regional settlements residue*, the accuracy of which must be appropriate to implement the *congestion information resource objective*; and
 - (i) an assessment of the projected impact on *inter-regional settlements residue*, the accuracy of which must be appropriate to implement the *congestion information resource objective*;
 - (5) any other information with respect to planned *network outages* referred in subparagraph (3) that *AEMO* considers relevant to implement the *congestion information resource objective*; and
 - (6) any other information that *AEMO*, in its reasonable opinion, considers relevant to implement the *congestion information resource objective*.
- (c) Each month, in accordance with the *timetable* for the provision of information to *medium term PASA*, each *Transmission Network Service Provider* must provide to *AEMO*:
 - (1) the information referred to in paragraphs (b)(3) and (b)(4); and
 - (2) for the purposes of paragraph (b)(5), any other information with respect to the planned *network outages* referred to in paragraph (b)(3) that *AEMO* considers relevant to implement the *congestion information resource objective*.
- (d) By 1 March 2010, *AEMO* must *publish* the interim congestion information resource and amend the *timetable* taking into account the Amending Rule.
- (e) *AEMO* must determine the frequency of updating (whether in whole or in part) and *publishing* the information contained in the interim congestion information resource.
- (f) At intervals determined by *AEMO* under paragraph (e), *AEMO* must, in accordance with the *timetable*, update and *publish* the interim congestion information resource.
- (g) *Transmission Network Service Providers* must provide *AEMO* with such information as is requested by *AEMO* for inclusion in the interim congestion

information resource in accordance with paragraph (b) and such information is to be provided to *AEMO* in a form which clearly identifies *confidential information*.

- (h) If there has been a material change to the information provided by a *Transmission Network Service Provider* under paragraph (g), the *Transmission Network Service Provider* must provide *AEMO* with the revised information as soon as practicable.
- (i) Information contained in the interim congestion information resource which has been provided by, or has been derived from information provided by, a *Transmission Network Service Provider*:
 - (1) must represent the *Transmission Network Service Provider*'s current intentions and best estimates regarding planned *network outages* at the time the information is made available;
 - (2) does not bind the *Transmission Network Service Provider* to comply with an advised *outage* program; and
 - (3) may be subject to change due to unforeseen circumstances outside the control of the *Transmission Network Service Provider*.
- (j) *AEMO* must not *publish confidential information* as part of, or in connection with, the interim congestion information resource.

Part ZA Reliability and emergency reserve trader (2009 amendments)

11.31 Rules consequent on the making of the National Electricity Amendment (Improved RERT Flexibility and Short-notice Reserve Contracts) Rule 2009

11.31.1 Definitions

For the purposes of this rule 11.31:

Amending Rule means the National Electricity Amendment (Improved RERT Flexibility and Short-notice Reserve Contracts) Rule 2009.

commencement date means the day on which the Amending Rule commences operation.

11.31.2 Purpose

The purpose of this rule 11.31 is to provide transitional arrangements to facilitate *AEMO* contracting for *reserves* in relation to long, medium and short notice situations to ensure reliability of *supply* and, where practicable, to maintain *power system security*.

11.31.3 Amendments to Reliability Panel's RERT Guidelines

- (a) Within two weeks of the commencement date, the *Reliability Panel* must, in respect of its *RERT guidelines* referred to in clause 3.20.8(c), develop and *publish* interim amendments with respect to matters relevant to *AEMO* contracting for *reserves* in relation to long, medium and short notice situations to ensure reliability of *supply* and, where practicable, to maintain *power system security*.
- (b) All relevant actions taken by the *Reliability Panel* up to two weeks after the commencement date for the purposes of developing and *publishing* the interim amendments to the *RERT guidelines* as required by paragraph (a) are taken to satisfy the equivalent actions required for the *RERT guidelines* under clause 3.20.8(b). For the avoidance of doubt, the *Reliability Panel* is not required to develop and *publish* the interim amendments to the *RERT guidelines* in accordance with clauses 8.8.3(d)-(l).
- (c) The interim amendments published under paragraph (a) will cease to apply when the *Reliability Panel* publishes amendments to its *RERT guidelines* in accordance with paragraph (d) of this clause but, for so long as they apply, references in rule 3.20 to the *RERT guidelines* are taken to include references to those interim amendments.
- (d) The *Reliability Panel* must, in respect of the *RERT guidelines* referred to in clause 3.20.8 and in accordance with that clause, develop and *publish* amendments by 30 June 2010 with respect to matters relevant to *AEMO* contracting for *reserves* in relation to long, medium and short notice situations as described in the *RERT guidelines* to ensure reliability of *supply* and, where practicable, to maintain *power system security*.

11.31.4 Amendments to AEMO's RERT procedures for exercising the RERT

- (a) Within four weeks of the commencement date, *AEMO* must, in respect of its procedures referred to in clause 3.20.7(e), develop and *publish* interim amendments with respect to measures to contract for *reserves* in relation to long, medium and short notice situations as described in interim amendments to the *RERT guidelines published* in accordance with clause 11.31.3(a), to ensure reliability of *supply* and, where practicable, to maintain *power system security*.
- (b) For the purposes of clause 11.31.4(a):
 - (1) *AEMO* is not required to develop, *publish* or amend the interim amendments to its relevant procedures in accordance with the *Rules consultation procedures*;
 - (2) the interim amendments to *AEMO's* relevant procedures must take into account the *RERT principles* and interim amendments to the *RERT guidelines* referred to in paragraph (a);

- (3) the interim amendments to the relevant procedures will cease to apply when *AEMO publishes* amendments to its procedures for the exercise of the *RERT* as required by paragraph (c); and
 - (4) for so long as those interim amendments to the relevant procedures apply, references in rule 3.20 to the procedures referred to in clause 3.20.7(e) are taken to include references to those interim amendments.
- (c) *AEMO* must, in respect of its procedures referred to in clause 3.20.7(e) and in accordance with that clause, develop and *publish* amendments by 30 November 2010, with respect to measures to contract for *reserves* in relation to long, medium and short notice situations, as described in amendments to the *RERT guidelines published* in accordance with clause 11.31.3(d), to ensure reliability of *supply* and, where practicable, to maintain *power system security*.

Part ZB Early Application of Market Impact Parameters

11.32 Rules consequent on the making of the National Electricity Amendment (Early Implementation of Market Impact Parameters) Rule 2010

11.32.1 Definitions

For the purposes of this rule 11.32:

Amending Rule means the National Electricity (Early Implementation Market Impact Parameters) Rule 2010.

cap has the meaning given in the *service target performance incentive scheme* dated March 2008.

commencement date means the day on which the Amending Rule commences operation.

market impact component of the service target performance incentive scheme means the market impact component described in the *service target performance incentive scheme* dated March 2008.

financial incentive has the meaning given in the *service target performance incentive scheme* dated March 2008.

performance target has the meaning given in the *service target performance incentive scheme* dated March 2008.

Powerlink means the Queensland Electricity Transmission Corporation Limited (ACN 078 849 233), trading as Powerlink Queensland.

proposal means the proposal described in clause 11.32.3(d).

proposed start date means a commencement date for the early application of the market impact component of the *service target performance incentive scheme* proposed by a *Transmission Network Service Provider* under clause 11.32.3(d).

start date means the commencement date for the early application of the market impact component of the *service target performance incentive scheme* as decided by the *AER* under clause 11.32.3(l).

transitional regulatory control period means, in respect of Powerlink, the *regulatory control period* commencing on 1 July 2007 and ending on 30 June 2012.

11.32.2 Purpose

The purpose of this rule 11.32 is to allow certain *Transmission Network Service Providers* to seek the earlier application of the market impact component of the *service target performance incentive scheme* from the *AER* than permitted under clause 6A.7.4(f).

11.32.3 Early application of the market impact component of the service target performance incentive scheme

- (a) The Amending Rule applies to a *Transmission Network Service Provider* which will be subject to the market impact component of the *service target performance incentive scheme* during its next *regulatory control period*:
 - (1) for the *regulatory control period* which commenced before the commencement date and as at the commencement date, has not ended; or
 - (2) in respect of Powerlink, for the transitional regulatory control period.
- (b) If the *AER* publishes a *service target performance incentive scheme* after the commencement date which is different to the *service target performance incentive scheme* dated March 2008, a *Transmission Network Service Provider* may not apply for the early application of the market impact component of the *service target performance incentive scheme* under the Amending Rule.
- (c) If Powerlink applies for the early application of the market impact component of the *service target performance incentive scheme* under the Amending Rule, the financial incentive under the market impact component of the *service target performance incentive scheme* must be calculated by the *AER* using the maximum allowed revenue set out in the *AER's* decision on Powerlink's transmission network revenue cap dated 14 June 2007, as amended by the *AER* in accordance with the *Rules*.

Submission of proposal

- (d) If a *Transmission Network Service Provider* seeks the earlier application of the market impact component of the *service target performance incentive*

scheme than permitted under old clause 6A.7.4(f), the *Transmission Network Service Provider* must submit a proposal to the *AER* setting out:

- (1) its proposed start date;
 - (2) if relevant, information on whether the *Transmission Network Service Provider* can apply the market impact component of the *service target performance incentive scheme* earlier than the proposed start date; and
 - (3) the proposed values for a performance target and a cap in accordance with the relevant requirements of the market impact component of the *service target performance incentive scheme*.
- (e) A *Transmission Network Service Provider's* proposal under paragraph (d) must be submitted at least 80 *business days* prior to the proposed start date.

Preliminary examination and determinatino on compliance with relevant information requirements

- (f) If the *AER* receives a proposal under paragraph (d), it must:
- (1) make a determination on whether the proposal complies with the relevant information requirements of the submission guidelines in respect of the *service target performance incentive scheme*; and
 - (2) notify the *Transmission Network Service Provider* of its determination within 10 *business days* after receiving the proposal.
- (g) A determination referred to in paragraph (f) must be accompanied by written reasons that set out, where applicable:
- (1) the respects in which the proposal does not comply with the relevant information requirements of the submission guidelines; and
 - (2) the requirements that have not been complied with.

Revision of proposal

- (h) If the *AER* notifies a *Transmission Network Service Provider* that its proposal does not comply with the relevant information requirements of the submission guidelines in a determination under paragraph (f), the *Transmission Network Service Provider*:
- (1) must, within 10 *business days* after receiving that notice, submit a revised proposal in a form that complies with the relevant information requirements identified in that determination; and
 - (2) may only make changes to its proposal under paragraph (d) to address the matters raised in the determination made under paragraph (f).
- (i) The *AER* must, as soon as practicable, publish on the *AER's* website and make available for public inspection at the *AER's* public offices:

- (1) the proposal, or any revised proposal, submitted under paragraphs (d) or (h), except to the extent that the submission guidelines provide that it will not be publicly disclosed, and, in that case, the relevant *Transmission Network Service Provider* has not otherwise consented; and
- (2) an invitation for written submissions from any person on the proposal or any revised proposal (as the case may be) within a period specified by the *AER*, being a period not less than 10 business days from the date of publication of the invitation for submissions.
- (j) Any person may make a written submission to the *AER* on the proposal, or any revised proposal, within the period specified in the invitation referred to in paragraph (i).
- (k) The *AER* may *publish* an issues paper examining the issues raised in connection with the proposal, or any revised proposal, at the same time as, or subsequent to, publication of the invitation to make submissions referred to in paragraph (i).

Making of final decision

- (l) Subject to rule 6A.16(a), the *AER* must consider the proposal, or any revised proposal, submitted under paragraphs (d) or (h), and any written submissions made on the proposal, or any revised proposal, in its final decision and must make a final decision in relation to the proposal, or any revised proposal.
- (m) The *AER's* final decision must be made in accordance with, and must comply with, the relevant requirements set out in paragraphs (n) - (s).

Requirements relating to final decision

- (n) A final decision under paragraph (l) is a decision by the *AER* on:
 - (1) the start date; and
 - (2) whether it approves or refuses to approve the proposed values for a performance target or a cap for the market impact component of the *service target performance incentive scheme*,

setting out reasons for the decision.
- (o) The *AER* may make a decision on a start date which is different to the proposed start date, provided the start date is not later than the proposed start date.
- (p) In making a decision on a start date, the *AER* must take into consideration any information provided by the *Transmission Network Service Provider* in its proposal, or revised proposal, on whether the *Transmission Network Service Provider* can apply the market impact component of the *service target performance* earlier than the proposed start date.

- (q) The *AER* must approve the proposed values for a performance target or a cap for the market impact component of the *service target performance incentive scheme* if it is satisfied that those values comply with the relevant requirements of the market impact component of the *service target performance incentive scheme*.
- (r) If the *AER*'s final decision is to refuse to approve the proposed values for a performance target or a cap for the market impact component of the *service target performance incentive scheme*, the *AER* must include in its final decision a substitute value which it reasonably considers will comply with the relevant requirements of the market impact component of the *service target performance incentive scheme*.
- (s) The market impact component of the *service target performance incentive scheme* will apply to the *Transmission Network Service Provider* who submitted a proposal under paragraph (d) from the start date.

Notice of final decision

- (t) The *AER* must, at least 1 *business day* before the start date, but not later than 20 *business days* before the proposed start date, *publish*:
 - (1) notice of the making of the final decision; and
 - (2) the final decision, including its reasons.

Part ZC Transparency of operating data

11.33 Rules consequential on the making of National Electricity Amendment (Transparency of Operating Data) Rule 2010

11.33.1 Definitions

For the purposes of this rule 11.33:

Amending Rule means the National Electricity Amendment (Transparency of Operating Data) Rule 2010.

commencement date means the date the Amending rule commences operation.

11.33.2 Spot market operations timetable

- (a) Clause 3.4.3(b) does not apply to an amendment of the *timetable* made by *AEMO* in accordance with paragraph (b).
- (b) By no later than 9 months after the commencement date, *AEMO* must amend the then current *timetable* as follows:
 - (1) in the row of the *timetable* that relates to the information publication requirements under clause 3.13.4(n), omit the bullet point item “Inter-regional flows;” from the column headed “EVENT”;

- (2) below the row in the *timetable* that relates to the information publication requirements under clause 3.13.4(n), insert the row in table 1;
 - (3) in the row of the *timetable* that relates to the information publication requirements under clause 3.13.4(q), omit all the text from the column headed "EVENT" and substitute "Publish dispatched generation, dispatched network service, dispatched load for each scheduled generating unit, semi-scheduled generating unit, scheduled network service and scheduled load respectively. Publish application of semi-dispatch cap to each semi-scheduled generating unit"; and
 - (4) omit the row of the *timetable* that relates to the information publication requirements under clause 3.13.4(r) and substitute the row in table 2.
- (c) Clause 3.4.3(c) applies to an amendment of the *timetable* made by AEMO in accordance with paragraph (b) as if the words "in accordance with paragraph (b)" in clause 3.4.3(c) were omitted and substituted with the words "in accordance with clause 11.32.2(b)".

Table 1:

Day + 1	ASAP after start of trading day	Publish for Day 0, inter-regional flows	AEMO	Participants	Day 0	Daily	Half hourly resolution	3.13.4(n1)

Table 2:

Day 0	ASAP after start of dispatch interval	Publish actual generation of scheduled generating unit, semi-scheduled generating unit and non-scheduled generating unit or non-scheduled generating	AEMO	Public	Current dispatch interval	Every 5 minutes	The actual generation is measured at the beginning of each dispatch interval.	3.13.4(r)

		system. Publish actual network service for scheduled network service. Publish actual load for scheduled load.						

Part ZD Cost Recovery for Other Services Directions

11.34 Rules consequent on making of the National Electricity Amendment (Cost Recovery for Other Services Directions) Rule 2010

11.34.1 Definitions

For the purposes of this rule 11.34:

Amending Rule means the National Electricity Amendment (Cost Recovery for Other Services Directions) Rule 2010.

commencement date means the date on which the Amending Rule commences operation.

current funding of compensation means any process initiated under the *Rules* or action taken which relies on or is referenced to old clause 3.15.7(d) or old clause 3.15.8(g) and is not completed by the commencement date.

new clause 3.15.7(d) means clause 3.15.7(d) of the *Rules* after the commencement date.

new clauses 3.15.7A(a1) and (a2) means clauses 3.15.7A(a1) and (a2) of the *Rules* after the commencement date.

new clause 3.15.8(g) and (h) means clauses 3.15.8(g) and (h) of the *Rules* after the commencement date.

old clause 3.15.7(d) means clause 3.15.7(d) of the *Rules* and all definitions in, and relevant provisions of, the *Rules* as in force immediately before the commencement date.

old clause 3.15.8(g) means clause 3.15.8(g) of the *Rules* and all definitions in, and relevant provisions of, the *Rules* as in force immediately before the commencement date.

11.34.2 Period when Amending Rules applies to funding of compensation

- (a) From the commencement date, in respect of any current funding of compensation:
- (1) new clause 3.15.7(d), new clauses 3.15.7A(a1) and (a2) and new clauses 3.15.8(g) and (h) have no effect; and
 - (2) old clause 3.15.7(d) and old clause 3.15.8(g) continue to apply.

Part ZE Payments under Feed-in Schemes and Climate Change Funds

11.35 Rules consequential on the making of the National Electricity Amendment (Payments under Feed-in Schemes and Climate Change Funds) Rule 2010

11.35.1 Definitions

For the purposes of this rule 11.35:

Amending Rule means the National Electricity Amendment (Payments under Feed-in Schemes and Climate Change Funds) Rule 2010.

commencement date means 1 July 2010.

current regulatory control period for a *Distribution Network Service Provider* means the *regulatory control period* that commenced before the commencement date and, as at the commencement date, has not ended.

new clause 6.6.1A(d)(3) means clause 6.6.1A of the *Rules* as in force immediately after the commencement date.

new clauses 6.18.2(b)(6A) and (6B) means clauses 6.18.2(b)(6A) and (6B) of the *Rules* as in force immediately after the commencement date.

new clause 6.18.6(d)(3) means clause 6.18.6(d)(3) of the *Rules* as in force immediately after the commencement date.

new clause 6.18.7A means clause 6.18.7A of the *Rules* as in force immediately after the commencement date.

next regulatory control period for a *Distribution Network Service Provider* means the *regulatory control period* that commences after the end of the current regulatory control period.

11.35.2 Application of recovery of jurisdictional scheme Rules

- (a) Subject to paragraph (h), a *Distribution Network Service Provider* is not required to comply with:
 - (1) new clause 6.18.2(b)(6A) and (6B); and
 - (2) new clause 6.18.7A(a) to (c),until the date that the *Distribution Network Service Provider* is required to submit a *pricing proposal* for the first *regulatory year* of the next regulatory control period.
- (b) Subject to paragraph (h), the first *pricing proposal* of a *Distribution Network Service Provider* that the new clause 6.18.6(d)(3) applies to is the *pricing proposal* for the second or subsequent *regulatory year* of the next regulatory control period.
- (c) A *Distribution Network Service Provider* may by written notice to the AER at least 20 *business days* before the date that a *pricing proposal* is required to be submitted under clause 6.18.2(a)(2) in respect of a *regulatory year* in its current regulatory control period, elect to submit a *pricing proposal* for that *regulatory year* that complies with new clauses 6.18.2(b)(6A) and (6B) and new clause 6.18.7A(a) to (c).
- (d) An election under paragraph (c) is valid if:
 - (1) the election is made in relation to the second or subsequent *regulatory year* of its current regulatory control period;
 - (2) the *Distribution Network Service Provider* has complied with clause 11.35.3 and the AER has made a decision or is taken to have made a decision under new clause 6.6.1A(e) or (f) (whichever is applicable) in respect of each *jurisdictional scheme* under which the *Distribution Network Service Provider* has *jurisdictional scheme obligations*; and
 - (3) if and to the extent that any forecast or estimate of amounts payable under *jurisdictional schemes* has been included as forecast operating expenditure in the *Distribution Network Service Provider's* distribution determination for the current regulatory control period, the AER has agreed to a revocation and substitution of the distribution determination under clause 11.35.4.
- (e) Not later than 10 *business days* after receiving a notice under paragraph (c), the AER must notify the *Distribution Network Service Provider*:
 - (1) whether it accepts the election made under paragraph (c); and
 - (2) if it does not accept the election under paragraph (c), the reasons for that decision.

- (f) If the *AER* has not notified the *Distribution Network Service Provider* under paragraph (e) within 10 *business days* of receiving a notice under paragraph (c), the *AER* is taken to have accepted the election.
- (g) The *AER* must accept an election under paragraph (e) if it is valid under paragraph (d).
- (h) If the *AER* accepts a *Distribution Network Service Provider*'s election under paragraph (e) or is taken to have accepted the election under paragraph (f) (whichever is applicable), the *Distribution Network Service Provider* must comply with:
 - (1) new clauses 6.18.2(b)(6A) and (6B) and new clause 6.18.7A(a) to (c) in respect of the *pricing proposal* for each *regulatory year* of the current regulatory control period that commences after the acceptance of an election under paragraph (e) or (f) (whichever is applicable); and
 - (2) new clause 6.18.6(d)(3) in respect of each *regulatory year* of the current regulatory control period in relation to which an election has been accepted under paragraph (e) or (f) (whichever is applicable).

11.35.3 Reporting on jurisdictional schemes

- (a) If during the current regulatory control period a *Distribution Network Service Provider* is or becomes subject to *jurisdictional scheme obligations* under a *jurisdictional scheme*, the *Distribution Network Service Provider* may request the *AER* to determine how it is to report to the *AER* on its recovery of *jurisdictional scheme amounts* under that scheme for each *regulatory year* of the *regulatory control period* and on the adjustments to be made to subsequent *pricing proposals* to account for over or under recovery of those amounts.
- (b) To make a request under paragraph (a), a *Distribution Network Service Provider* must submit to the *AER* a written statement which specifies:
 - (1) the name of the relevant *jurisdictional scheme*;
 - (2) the date the *Distribution Network Service Provider* became subject to *jurisdictional scheme obligations*; and
 - (3) details of how the *Distribution Network Service Provider* proposes to:
 - (i) estimate the *jurisdictional scheme amounts* for the relevant *jurisdictional scheme* for the purposes of new clause 6.18.7A(b);
 - (ii) carry out any adjustments to *jurisdictional scheme amounts* for the relevant *jurisdictional scheme* for the purposes of new clause 6.18.7A(b); and
 - (iii) report to the *AER* on the recovery process under new clause 6.18.7A(a) and (b).

- (c) If a *Distribution Network Service Provider* makes a request under paragraph (a) and provides a statement under paragraph (b):
 - (1) clauses 6.6.1A(c) to (f) apply to the *AER* and *Distribution Network Service Provider* as if references to “a statement under paragraph (b)” in those clauses was a reference to “a statement under clause 11.35.3(b)”; and
 - (2) the *AER* and *Distribution Network Service Provider* are bound to comply with clauses 6.6.1A(c) to (f) in respect of the determination requested under paragraph (a) as if it had been requested under new clause 6.6.1A(a) and a statement had been provided in accordance with new clause 6.6.1A(b).

11.35.4 Revocation and substitution of distribution determination for jurisdictional scheme recovery

- (a) The *AER* may revoke a distribution determination for a *Distribution Network Service Provider* during the current regulatory control period if:
 - (1) a forecast or estimate of amounts to be paid, credited or reimbursed under one or more *jurisdictional schemes* has been included in the *Distribution Network Service Provider’s* forecast operating expenditure in its distribution determination (as adjusted under clause 6.6.1, if applicable) for the current regulatory control period; and
 - (2) the *Distribution Network Service Provider* gives the *AER* written notice that it intends to make an election under clause 11.35.2(c).
- (b) If the *AER* revokes a distribution determination under paragraph (a), the *AER* must make a new distribution determination in substitution for the revoked determination to apply for the remainder of the *regulatory control period* for which the revoked determination was to apply.
- (c) If the *AER* revokes a distribution determination under paragraph (a), the substituted determination must only vary from the revoked determination to the extent necessary to correct for the amounts referred to in subparagraph (a)(1).
- (d) The *AER* may only revoke and substitute a distribution determination under this clause 11.35.4, if it has first consulted with the relevant *Distribution Network Service Provider* and such other persons as it considers appropriate.

Part ZF Transitional Arrangements for Ministerial Smart Meter Roll Out Determinations

11.36 Ministerial Smart Meter Roll Out Determinations

11.36.1 Definitions

In this rule:

relevant commencement date, for a relevant *metering installation*, means the day on which the Ministerial smart meter roll out determination that applies to the relevant *metering installation* takes effect.

relevant metering installation has the meaning given by rule 11.36.2.

specified amount means the amount assigned to variable "y" in accordance with S7.2.3 in relation to a participating jurisdiction.

supply point means a supply point:

- (1) that is a *connection point* connected to the distribution system of a regulated distribution system operator; and
- (2) through which the regulated distribution system operator is required to provide smart metering services in accordance with a Ministerial smart meter roll out determination.

volume consumption means the volume of *energy* consumed by a customer through the relevant supply point calculated in accordance with S7.2.3.

11.36.2 Meaning of relevant metering installation

- (a) For the purpose of this rule, a **relevant metering installation** is a *metering installation* for a supply point in respect of which the volume consumption of the customer is less than the specified amount.
- (b) For the purpose of this rule, a **relevant metering installation** does not include:
 - (1) a *metering installation* installed for a supply point before the relevant commencement date in respect of which a *Market Participant* is the *responsible person*; or
 - (2) a *metering installation* referred in paragraph (a) that is installed for the supply point referred to in that paragraph on and after the relevant commencement date in accordance with the ordinary replacement cycle of that *Market Participant*; or
 - (3) a *metering installation* located at a *high voltage connection point*.

11.36.3 Period of application of rule to relevant metering installation

This rule:

- (a) applies to a relevant *metering installation* on the day the Ministerial smart meter roll out determination that applies to the relevant *metering installation* takes effect; and
- (b) ceases to apply to a relevant *metering installation* on the day the Ministerial smart meter roll out determination that applies to the relevant *metering installation* ceases to have effect.

11.36.4 Designation of responsible person

Despite clauses 7.2.2 and 7.2.3, the *responsible person* for a relevant *metering installation* is the regulated distribution system operator to whom the Ministerial smart meter roll out determination (that applies to that relevant *metering installation*) applies.

11.36.5 [Deleted]

11.36.6 [Deleted]

Part ZG Provision of Metering Data Services and Clarification of Existing Metrology Requirements

11.37 Rules consequential on the making of the National Electricity Amendment (Provision of Metering Data Services and Clarification of Existing Metrology Requirements) Rule 2010

11.37.1 Definitions

For the purposes of this rule 11.37:

Amending Rule means the National Electricity Amendment (Provision of Metering Data Services and Clarification of Existing Metrology Requirements) Rule 2010.

commencement date means 16 December 2010.

11.37.2 Commencement of special site or technology related conditions

- (a) AEMO is not required to comply with the obligation set out in clause 7.2.4A(c) until 6 months after the commencement date (but may comply with that obligation any time earlier than 6 months).
- (b) Prior to the publication of the document referred to in clause 7.2.4A(c)(1), AEMO may notify a *responsible person* or a *financially responsible Market Participant*, as appropriate, of the existence of a special site or technology

related condition and that notification will operate to fulfil the requirement of clauses 7.2.4A(c)(1) and 7.2.4A(c)(2).

11.37.3 Initial service level procedures

- (a) *AEMO* is not required to comply with the obligation set out in clause 7.14.1A(b) until 9 months after the commencement date (but may comply with that obligation any time earlier than 9 months).
- (b) *AEMO* must establish and *publish* the *initial service level procedures* in accordance with clauses 7.1.3 and 7.14.1A within 9 months after the commencement date.
- (c) Prior to the publication of the *initial service level procedures*, *AEMO* may use service level requirements that are *published* and in common use by the *responsible person*, the *Metering Provider*, and the *Metering Data Provider*.
- (d) If, during the period between the commencement date and the *publication* of the *initial service level procedures*, *AEMO*:
 - (1) receives a request from a *responsible person*, a *Metering Provider* or a *Metering Data Provider*; and
 - (2) if that request relates to:
 - (i) an inconsistency between the *published* service level requirements and the requirements in clause 7.14.1A(c); or
 - (ii) an inadequacy in the *published* service level requirements when compared to the requirements in clause 7.14.1A(c),

AEMO must:

- (3) make a determination in regard to that request in accordance with clause 7.1.4(e) if, in *AEMO*'s reasonable opinion, the request referred to in paragraph (d) relates to matters that warrant resolution prior to *publication* of the *initial service level procedures*.
- (e) For the purpose of this clause 11.37.2, the reference to procedure in clause 7.1.3(e) is a reference to any document that carries the determination specified in paragraph (d) (but not to the *service level procedures* referred to in clause 7.14.1A(b)).

Part ZH Spot Market Operations Timetable

11.38 Rules consequential on the making of National Electricity Amendment (Amendments to PASA-related Rules) Rule 2010

11.38.1 Definitions

For the purposes of this rule 11.38:

Amending rule means the National Electricity Amendment (Amendments to PASA-related Rules) Rule 2010.

commencement date means the date the Amending Rule commences operation.

11.38.2 Spot market operations timetable

- (a) Clause 3.4.3(b) does not apply to an amendment of the *timetable* made by AEMO in accordance with paragraph (b).
- (b) By no later than 9 months after the commencement date, AEMO must amend the then current *timetable* as follows:
 - (1) in Table 4.2 PASA and Table 4.4 Market Information of the *timetable*, omit "day 8 days" and substitute "Sunday" wherever occurring; and
 - (2) in Table 4.2 PASA and Table 4.4 Market Information of the *timetable*, omit "Current system targets to cover additional days starting from next Sunday." wherever occurring.
- (c) Clause 3.4.3(c) applies to an amendment of the *timetable* made by AEMO in accordance with paragraph (b) as if the words "in accordance with paragraph (b)" in clause 3.4.3(c) were omitted and substituted with the words "in accordance with clause 11.38.2(b)".

Part ZI DNSP Recovery of Transmission-related Charges

11.39 Rules consequential on the making of the National Electricity Amendment (DNSP Recovery of Transmission-related Charges) Rule 2011

11.39.1 Definitions

For the purposes of this rule 11.39:

Amending Rule means the DNSP Recovery of Transmission-related Charges Rule 2011.

Bairnsdale network support payments means payments made by SP AusNet to the owners of the Bairnsdale Power Station under the *network support agreement* of 2001, but only to the extent those payments have been approved by the Essential Services Commission of Victoria established by the *Essential Services Commission Act 2001* (Vic), or its succeeding body assuming its powers and functions.

commencement date means the date that the Amending Rule commences operation.

current regulatory control period for a *Distribution Network Service Provider* means the *regulatory control period* that commenced before the commencement date and, as at the commencement date, has not ended.

Energex means Energex Limited (ACN 078 849 055).

Energex transitional charges means charges levied by Powerlink on Energex in respect of *entry services* and *exit services* for the *connection* of Energex's 110kV *network* at Archerfield.

Ergon Energy means Ergon Energy Corporation Limited (ACN 087 646 062).

Ergon Energy connection points means the *connection* at Oakey Power Station to supply Oakey town, the *connection* at Queensland Nickel, the *connection* at Stoney Creek for the Sunwater pump sites and the *connection* at King Creek for the Sunwater pump sites.

Ergon Energy transitional charges means charges levied on Ergon Energy for use of the 220kV *network* which supplies the Cloncurry township as approved by the AER in its distribution determination for the current regulatory control period, and charges levied by Powerlink on Ergon Energy for *entry services* and *exit services* at the Ergon Energy connection points.

Powerlink means Queensland Electricity Transmission Corporation Limited (ACN 078 849 233).

SP AusNet means SPI Electricity Pty Ltd (ABN 91 064 651 118).

Victorian Distribution Network Service Provider means a *Distribution Network Service Provider* for a *distribution network* situated wholly or partly within Victoria for whom a distribution determination took effect on 1 January 2011.

11.39.2 Recovery by Victorian distribution network service providers during current regulatory control period

- (a) Subject to the remainder of this clause, a Victorian Distribution Network Service Provider may, in any of its *pricing proposals* for the remainder of the current regulatory control period, provide for the recovery of any additional *designated pricing proposal charges* which it could have passed on to customers in the first *regulatory year* of the current regulatory control period as if the Amending Rule were operative during that first *regulatory year*.
- (b) A Victorian Distribution Network Service Provider may recover the total amount of charges described in paragraph (a) during a single *regulatory year* or over the course of several *regulatory years* during the current regulatory control period.
- (c) A Victorian Distribution Network Service Provider must not recover in total under this clause any more than the additional *designated pricing proposal charges* referred to in paragraph (a).
- (d) The additional charges recovered under paragraph (a) must be adjusted for an appropriate cost of capital that is consistent with the rate of return used in

the distribution determination for the *Distribution Network Service Provider* for the current regulatory control period.

11.39.3 Recovery by Victorian distribution network service providers for shared network augmentations

The definition of *designated pricing proposal charges* as it applies to a Victorian Distribution Network Service Provider during the current regulatory control period includes charges in respect of *negotiated transmission services* levied by AEMO on the Victorian Distribution Network Service Provider to recover costs incurred by AEMO in *augmenting* the relevant *declared shared network* to facilitate a *connection* between the *declared shared network* and a *distribution network*.

11.39.4 Bairnsdale network support agreement

The definition of *designated pricing proposal charges* as it applies to SP AusNet includes Bairnsdale network support payments.

11.39.5 Approval of pricing proposal

For the purposes of determining whether to approve a *pricing proposal* under clause 6.18.8, the AER must exclude from its consideration any part of a distribution determination for a current regulatory control period which does not permit a *Distribution Network Service Provider* to recover charges which are recoverable under clause 6.18.7.

11.39.6 Ergon Energy transitional charges

The definition of *designated pricing proposal charges* as it applies to Ergon Energy includes Ergon Energy transitional charges, but only for the current regulatory control period.

11.39.7 Energex transitional charges

The definition of *designated pricing proposal charges* as it applies to Energex includes Energex transitional charges, but only for the current regulatory control period.

Part ZJ Network Support and Control Ancillary Services

11.40 Rules consequential on the making of the National Electricity Amendment (Network Support and Control Ancillary Services) Rule 2011

11.40.1 Definitions

For the purposes of this rule 11.40:

Amending Rule means the *National Electricity Amendment (Network Support and Control Ancillary Services) Rule 2011*.

Existing NCAS contract means an *ancillary services agreement* entered into between AEMO and a *Registered Participant* prior to the NSCAS commencement date whereby AEMO acquires NCAS from that *Registered Participant*.

NCAS means *network control ancillary services*, as that term was defined in the Rules immediately prior to the NSCAS commencement date.

NMAS tender guidelines has the meaning given in clause 3.11.5(a).

NSCAS commencement date means the date of the commencement of the Amending Rule.

NSCAS description has the meaning given in clause 3.11.4(a1).

NSCAS quantity procedure has the meaning given in clause 3.11.4(a1).

AEMO NSCAS Acquisition Process commencement date is 5 April 2012.

Regional benefit ancillary services procedures has the meaning given in clause 3.15.6A(c1).

11.40.2 Purpose

The purpose of this rule 11.40 is to provide transitional arrangements to facilitate AEMO's transition from the framework for the acquisition of NCAS prior to the NSCAS commencement date to the framework for the acquisition of NSCAS initiated under clause 3.11.3.

11.40.3 Existing NCAS contracts to continue

- (a) AEMO may continue to acquire NCAS under existing NCAS contracts and may extend the term of any existing NCAS contract for such period as is agreed between AEMO and each counterparty to the relevant existing NCAS contract.
- (b) After the NSCAS commencement date, an existing NCAS contract is to be regarded as an *ancillary services agreement* for the provision of NSCAS that does not benefit a specific *region* for the purposes of clauses 3.15.6A (c1) – (c9) (including during any period that the existing NCAS contract is extended under paragraph (a)).

11.40.4 Amendments to existing guidelines

- (a) AEMO must amend the NMAS tender guidelines and the guidelines for the *dispatch* of *network support and control ancillary services* under clause 3.11.6(d) to take into account the Amending Rule with those amendments to take effect from AEMO NSCAS Acquisition Process commencement date.

- (b) Any action taken by *AEMO* prior to the AEMO NSCAS Acquisition Process commencement date for the purpose of amending the NMAS tender guidelines and the guidelines for the *dispatch of network support and control ancillary services* as a result of the Amending Rule is taken to satisfy any equivalent actions required under the *Rules*.

11.40.5 New procedures

- (a) *AEMO* must develop and *publish* the NSCAS description and the NSCAS quantity procedure to take into account the Amending Rule and to take effect from the NSCAS commencement date.
- (b) *AEMO* must develop and *publish* the regional benefit ancillary services procedures to take into account the Amending Rule and to take effect from the AEMO NSCAS Acquisition Process commencement date.
- (c) Any action taken by *AEMO* prior to the NSCAS commencement date for the purpose of developing the NSCAS description, NSCAS quantity procedure and the regional benefit ancillary services procedures as a result of the Amending Rule is taken to satisfy any equivalent actions required under the *Rules*.

11.40.6 Decisions and actions taken prior to Amending Rule

All decisions and actions taken by *AEMO* prior to the NSCAS commencement date in anticipation of the commencement of the Amending Rule are taken to satisfy the equivalent actions required after the NSCAS commencement date and continue to have effect for that purpose.

Part ZK Application of Dual Marginal Loss Factors

11.41 Rules consequential on the making of the National Electricity Amendment (Application of Dual Marginal Loss Factors) Rule 2011

11.41.1 Definitions

For the purposes of this rule 11.41:

Amending Rule means the National Electricity Amendment (Application of Dual Marginal Loss Factors) Rule 2011.

commencement date means the date that the Amending Rule commences operation.

relevant financial year means the *financial year* that commences on 1 July 2011.

11.41.2 Amendments to loss factor methodology

If *AEMO*, prior to the commencement date and for the purpose of amending the methodology referred to in clause 3.6.2(d) as a result of the Amending Rule, has taken steps equivalent to those required by the *Rules consultation procedures*, then it will be taken to have complied with those steps for the purposes of clause 3.6.2(d).

11.41.3 Procedure applying dual intra-regional loss factors in central dispatch and spot market transactions

- (a) Despite clause 3.6.2(d1), *AEMO* may determine a procedure for the purpose of that clause without consulting with *Registered Participants*.
- (b) By no later than 30 June 2012, *AEMO* must determine and publish a procedure for the purpose of clause 3.6.2(d1) following consultation with *Registered Participants*.

11.41.4 Publication of intra-regional loss factors

- (a) Clause 3.6.2(f1) does not apply in respect of the *intra-regional loss factors* for the relevant financial year and any *intra-regional loss factors published* by *AEMO* on 1 April 2011 in compliance with clause 3.6.2(f1) will not apply for the relevant financial year unless they are *published* again by *AEMO* in accordance with paragraph (b).
- (b) *AEMO* must *publish* on or before 30 June 2011 the *intra-regional loss factors* revised under clause 3.6.2(f) and to apply for the relevant financial year.
- (c) For the avoidance of doubt, paragraph (b) does not require *AEMO* to recalculate any *intra-regional loss factors* that were previously *published* except where this is necessary as a result of a change to the methodology referred to in clause 3.6.2(d).

Part ZL Tasmania Tranche 5a Procedure Changes

11.42 Rules consequential on the making of the National Electricity Amendment (Tasmania Tranche 5a Procedure Changes) Rule 2011

11.42.1 Definitions

For the purposes of this rule 11.42:

Relevant Procedure means each of:

- (a) the *Metrology Procedure*;
- (b) the *Market Settlement and Transfer Solution Procedures*; and

- (c) the *B2B Procedures*.

11.42.2 AEMO may amend Relevant Procedures

- (a) Subject to paragraphs (b) and (c), *AEMO* may amend any Relevant Procedure without complying with any provisions of these *Rules* that specifies a process for amendment of that Relevant Procedure.
- (b) *AEMO* may only amend a Relevant Procedure under paragraph (a):
- (1) prior to 31 July 2011; and
 - (2) if the amendment:
 - (i) is required for the purpose of introducing contestability for *connection points* located in the Tasmanian *region* with annual consumption between 50 and 150 MWh; and
 - (ii) does not affect the manner in which the Relevant Procedure applies in any *participating jurisdiction* other than Tasmania.
- (c) If *AEMO* amends a Relevant Procedure under this clause 11.42.2, it must *publish* the amended Relevant Procedure as soon as practicable but in any event no later than the date that the amendments to the Relevant Procedure takes effect.

Part ZM Application and Operation of Administered Price Periods

11.43 Rules consequential on the making of National Electricity Amendment (Application and Operation of Administered Price Periods) Rule 2011

11.43.1 Definitions

For the purposes of this rule 11.43:

Amending Rule means the National Electricity Amendment (Application and Operation of Administered Price Periods) Rule 2011.

APC Schedule means the schedule the *AEMC* is required to publish under clause 3.14.1(a).

commencement date means the date Schedules 1 and 3 of the Amending Rule commence operation.

First APC Schedule means the Administered Price Cap Schedule dated 20 May 2008 published by the *AEMC* under clause 3.14.1(a).

11.43.2 Administered Price Cap Schedule

- (a) As soon as practicable, but in any event within 20 *business days* of the commencement date, the *AEMC* must amend the First APC Schedule in accordance with paragraph (b) and publish the amended APC Schedule on its website.
- (b) The *AEMC* must amend the First APC Schedule by:
 - (1) omitting "20 May 2008" and substituting the date on which the amended APC Schedule is published by the *AEMC*;
 - (2) omitting "and market ancillary service prices" and substituting ", *dispatch prices* and *ancillary service prices*";
 - (3) omitting "This schedule will become effective" and substituting "The *administered price cap* specified in this schedule became effective"; and
 - (4) including at the end of the Schedule notes to the effect that:
 - (i) the First APC Schedule developed and published by the *AEMC* under clause 3.14.1(a) was dated 20 May 2008; and
 - (ii) the First APC Schedule was varied by the *AEMC* pursuant to the Amending Rule.
- (c) The requirement in clause 3.14.1(a) that the *AEMC* comply with the *Rules consultation procedures* when developing, authorising and *publishing* an APC Schedule does not apply to amendments made to the APC Schedule in accordance with this clause 11.43.2.

Part ZO Negative Intra-regional Settlements Residue

11.45 Rules consequential on the making of National Electricity Amendment (Negative Intra-regional Settlements Residue) Rule 2012

11.45.1 Definitions

For the purposes of this rule 11.45:

amended clause 3.6.5(a) means clause 3.6.5(a) as amended by the Amending Rule.

Amending Rule means the National Electricity Amendment (Negative Intra-regional Settlements Residue) Rule 2012.

commencement date means 5 April 2012.

negative settlements residue procedure means the payment time, interval and payment method for settlement of negative *settlements residue* amounts and interest cost amounts for unrecovered negative *settlements residue* amounts.

old clause 3.6.5(a) means clause 3.6.5(a) as in force immediately before the commencement date.

11.45.2 Recovery of negative settlements residue prior to consultation under the Amending Rule

Until such time as *AEMO* has determined a negative settlements residue procedure under amended clause 3.6.5(a) that relates to both negative *inter-regional* and *intra-regional settlements residue* amounts, *AEMO* must recover:

- (a) negative *intra-regional settlements residue* amounts in accordance with old clause 3.6.5(a) and clause 3.15.16; and
- (b) negative *inter-regional settlements residue* amounts in accordance with old clause 3.6.5(a).

11.45.3 First consultation on negative intra-regional settlements residue procedure

- (a) Prior to commencing its consultation with *Transmission Network Service Providers* under amended clause 3.6.5(a) on the first negative settlements residue procedure that relates to both negative *inter-regional* and *intra-regional settlements residue* amounts, *AEMO* must notify each *Transmission Network Service Provider*:
 - (1) that it intends to commence the consultation;
 - (2) how it plans to conduct the consultation; and
 - (3) that if a *Transmission Network Service Provider* wishes the consultation to be conducted in accordance with the *Rules consultation procedures*, it must notify *AEMO* within one week of the notice under this paragraph (a).
- (b) If within one week of the notice under paragraph (a) *AEMO* receives a notice from a *Transmission Network Service Provider* under paragraph (a)(3), then *AEMO* must consult with *Transmission Network Service Providers* on the negative settlements residue procedure in accordance with the *Rules consultation procedures*.
- (c) If within one week of the notice under paragraph (a) *AEMO* has not received a notice from a *Transmission Network Service Provider* under paragraph (a)(3), then *AEMO* may consult on the negative settlements residue procedure as indicated in its notice under paragraph (a).

Part ZP Interim Connection Charging Rules

11.46 Rules consequential to the insertion of Chapter 5A by the National Electricity (National Energy Retail Law) Amendment Rule 2012

Division 1 Preliminary

11.46.1 Definitions

In this Part:

ACT distributor means *ActewAGL Distribution*, a partnership of *ACTEW Distribution Ltd* (ACN 073 025 224) and *Jemena Networks (ACT) Pty Ltd* (ACN 008 552 663).

established distributor means any of the following *Distribution Network Service Providers*:

- (a) an ACT distributor; or
- (b) a NSW distributor; or
- (c) a QLD distributor; or
- (d) a SA distributor; or
- (e) a Tasmanian distributor; or
- (f) a Victorian distributor.

NSW distributor means any of the following:

- (a) *Essential Energy* (established under the *Energy Services Corporation Act 1995* (NSW));
- (b) *Endeavour Energy* (established under the *Energy Services Corporation Act 1995* (NSW));
- (c) *Ausgrid* (established under the *Energy Services Corporation Act 1995* (NSW));

interim connection charging rules (ICCR) means the *rules* prescribed in this Part.

QLD distributor means either of the following:

- (a) *Ergon Energy Corporation Limited* (ACN 087 646 062);
- (b) *Energex Ltd* (ACN 078 849 055).

relevant provisions means Chapter 5A and Part DA of Chapter 6.

SA distributor means ETSA Utilities (ABN 13 332 330 749) a partnership of Spark Infrastructure (No. 1) Pty Ltd (ACN 091 142 380), Spark Infrastructure (No.2) Pty Ltd (ACN 091 143 038), Spark Infrastructure (No. 3) Pty Ltd (ACN 091 142 362), CKI Utilities Development Ltd (ARBN 090 718 880) and Pai Utilities Development Ltd (ARBN 090 718 951)

start date means the date when these interim *connection charging rules* come into operation.

Tasmanian distributor means Aurora Energy Pty Ltd (ACN 082 464 622).

transition date means for each established distributor the date on which the transition period for that established distributor ends.

transition period means:

- (a) for the ACT distributor – the period from the start date to the actual commencement date of the *regulatory control period* due to commence on 1 July 2014; and
- (b) for a NSW distributor – the period from the start date to the actual commencement date of the *regulatory control period* due to commence on 1 July 2014; and
- (c) for a QLD distributor – the period from the start date to the actual commencement date of the *regulatory control period* due to commence on 1 July 2015; and
- (d) for the SA distributor – the period from the start date to the actual commencement date of the *regulatory control period* due to commence on 1 July 2015; and
- (e) for the Tasmanian distributor – the period from the start date to the actual commencement date of the *regulatory control period* due to commence on 1 July 2017; and
- (f) for a Victorian distributor – the period from the start date to the actual commencement date of the *regulatory control period* due to commence on 1 January 2016.

Victorian distributor means any of the following:

- (a) United Energy Distribution Pty Ltd (ACN 064 651 029);
- (b) Jemena Electricity Networks (Vic) Ltd (ACN 064 651 083);
- (c) Citipower Pty (ACN 064 651 056);
- (d) Powercor Australia Ltd (ACN 064 651 109);
- (e) SPI Electricity Pty Ltd (ACN 064 651 118)

11.46.2 Extended meaning of some terms

During the transition period:

- (a) a *basic connection service* includes not only a *connection service* for which a *model standing offer* has been approved by the *AER* (see paragraph (c) of the definition in clause 5A.A.1) but also one for which the *AER*'s approval of a *model standing offer* is not required; and
- (b) a *standard connection service* includes not only a *connection service* for which a *model standing offer* has been approved by the *AER* (see definition in clause 5A.A.1) but also one for which the *AER*'s approval of a *model standing offer* is not required; and
- (c) a *model standing offer* includes a document prepared and *published* by an established distributor, without the *AER*'s approval, as a *model standing offer* to have effect during the transition period (but not beyond the end of that period).

11.46.3 Transitional operation of relevant provisions

- (a) During the transition period, the relevant provisions operate subject to the exclusions, qualifications and modifications prescribed by this Part.
- (b) However, the relevant provisions operate without the exclusions, qualifications and modifications prescribed by this Part insofar as they relate to:
 - (1) a period beyond the transition period; or
 - (2) a person (such as a new entrant to the industry) that is not an established distributor.

Example

An established distributor who submits a *regulatory proposal* for the *regulatory control period* that follows on the distributor's transition period is bound by the relevant provisions (without exclusion, qualification or modification) in relation to the *regulatory proposal* even though the proposal is submitted during the transition period.

- (c) A *transaction* commenced by or with an established distributor during the transition period may be continued and completed after the transition period without regard to *changes* to the *rules* governing the *transaction* that take effect at the end of the transition period.

Division 2 Jurisdictional differences

11.46.4 Exclusions, qualifications and modifications for ACT

During the transition period, the relevant provisions apply to, and in relation to, the ACT distributor subject to the following exclusions, qualifications and modifications:

Connection Policy

- (a) A document, prepared by the ACT distributor and *published* on the ACT distributor's website, will (although not approved by the *AER*) be taken to be the ACT distributor's *connection policy* for the purposes of the relevant provisions if:
 - (1) it sets out the circumstances in which *connection charges* are payable and the basis for determining the amount of such charges; and
 - (2) it applies and is consistent with:
 - (i) the Electricity *Network* Capital Contributions Code approved in 2007 by the ACT Independent Competition and Regulatory Commission under section 58 of the Utilities Act 2000 (ACT); and
 - (ii) the *AER*'s final decision on the distribution determination for the Australian Capital Territory for the *regulatory years* 2009-10 to 2013-14 dated 28 April 2009.

Model standing offers (basic connection services)

- (b) A document, prepared by the ACT distributor and *published* on the ACT distributor's website, will (although not approved by the *AER*) be regarded as a *model standing offer* to provide *basic connection services* during the transition period if it complies with the requirements of clause 5A.B.2(b) as to its terms and conditions.
- (c) If, during the transition period, the *AER* approves a *model standing offer* for the same *basic connection services*, the approved *model standing offer* supersedes the former *model standing offer* under this clause.
- (d) The ACT distributor's obligation to have a *model standing offer* to provide *basic connection services* (clause 5A.B.1) operates during the transition period but the *AER*'s approval of the *model standing offer* is not required until the transition date.
- (e) The ACT distributor's obligation to submit for the *AER*'s approval a proposed *model standing offer* to provide *basic connection services* (Clause 5A.B.2(a)) does not arise until the ACT distributor is obliged to submit a *regulatory proposal* for the *regulatory control period* first commencing after the transition date.

Model standing offer (standard connection services)

- (f) A document, prepared by the ACT distributor and *published* on the ACT distributor's website, will (although not approved by the *AER*) be regarded as a *model standing offer* to provide *standard connection services* during the transition period if it complies with the requirements of clause 5A.B.4(c) as to its terms and conditions.

- (g) If, during the transition period, the *AER* approves a *model standing offer* for the same *standard connection services*, and the approved *model standing offer* is to take effect before the end of the transition period, the approved *model standing offer* supersedes the former *model standing offer*.
- (h) The ACT distributor may submit for the *AER*'s approval a *model standing offer* to provide *standard connection services* (clause 5A.B.4) during the transition period but the *AER*'s approval of the *standing offer* is not required until the transition date.

Amendment of standing offers

- (i) During the transition period, the ACT distributor may amend a standing offer to provide *basic connection services* or *standard connection services* during the transition period by *publishing* the amendments and the amended text on its website. (This paragraph applies during the transition period to the exclusion of clause 5A.B.6.)

11.46.5 Exclusions, qualifications and modifications for NSW

During the transition period, the relevant provisions apply to, and in relation to, NSW distributors subject to the following exclusions, qualifications and modifications:

Connection Policy

- (a) A document, prepared by a NSW distributor and *published* on the NSW distributor's website, will (although not approved by the *AER*) be taken to be the NSW distributor's *connection policy* for the purposes of the relevant provisions if:
 - (1) it sets out the circumstances in which *connection charges* are payable and the basis for determining the amount of such charges;
 - (2) it applies and is consistent with Determination No 1 of 2002 "Capital Contributions and Repayments for *Connections* to Electricity *Distribution Networks* in New South Wales" made by IPART under section 11(3) of the Independent Pricing and Regulatory Tribunal Act 1992 (NSW).

Model standing offers (basic connection services)

- (b) A document, prepared by a NSW distributor and *published* on the NSW distributor's website, will (although not approved by the *AER*) be regarded as a *model standing offer* to provide *basic connection services* during the transition period if it complies with the requirements of clause 5A.B.2(b) as to its terms and conditions.
- (c) If, during the transition period, the *AER* approves a *model standing offer* for the same *basic connection services*, the approved *model standing offer* supersedes the former *model standing offer*.

- (d) A NSW distributor's obligation to have a *model standing offer* to provide *basic connection services* (clause 5A.B.1) operates during the transition period but the *AER's* approval of the *standing offer* is not required until the transition date.
- (e) A NSW distributor's obligation to submit for the *AER's* approval a proposed *model standing offer* to provide *basic connection services* (Clause 5A.B.2(a)) does not arise until the NSW distributor is obliged to submit a *regulatory proposal* for the *regulatory control period* first commencing after the transition date.

Model standing offer (standard connection services)

- (f) A document, prepared by a NSW distributor and *published* on the NSW distributor's website, will (although not approved by the *AER*) be regarded as a *model standing offer* to provide *standard connection services* during the transition period if it complies with the requirements of clause 5A.B.4(c) as to its terms and conditions.
- (g) If, during the transition period, the *AER* approves a *model standing offer* for the same *standard connection services*, the approved *model standing offer* supersedes the former *model standing offer*.
- (h) A NSW distributor may submit for the *AER's* approval a *model standing offer* to provide *standard connection services* (clause 5A.B.4) during the transition period but the *AER's* approval of the *standing offer* is not required until the transition date.

Amendment of standing offers

- (i) During the transition period, a NSW distributor may amend a standing offer to provide *basic connection services* or *standard connection services* during the transition period by *publishing* the amendments and the amended text on its website. (This paragraph applies during the transition period to the exclusion of clause 5A.B.6.)

11.46.6 Exclusions, qualifications and modifications for Queensland

During the transition period, the relevant provisions apply to, and in relation to, a QLD distributor subject to the following exclusions, qualifications and modifications:

Connection Policy

- (a) If a QLD distributor has a capital contributions policy *published* under clause 11.16.10, that policy is, during the transition period, taken to be the QLD distributor's *connection policy* (although not approved as a *connection policy* by the *AER*).

Model standing offer (basic connection services)

- (b) A document, prepared by a Queensland distributor and *published* on a Queensland distributor's website, will (although not approved by the *AER*) be regarded as a *model standing offer* to provide *basic connection services* during the transition period if it complies with the requirements of clause 5A.B.2(b) as to its terms and conditions.
- (c) The QLD distributor's obligation to submit for the *AER*'s approval a proposed *model standing offer* to provide *basic connection services* (Clause 5A.B.2(a)) does not arise until the QLD distributor is obliged to submit a *regulatory proposal* for the *regulatory control period* first commencing after the transition date.

Model standing offer (standard connection services)

- (d) A document, prepared by a QLD distributor and *published* on the QLD distributor's website, will (although not approved by the *AER*) be regarded as a *model standing offer* to provide *standard connection services* during the transition period if it complies with the requirements of clause 5A.B.4(c) as to its terms and conditions.
- (e) If, during the transition period, the *AER* approves a *model standing offer* for the same *standard connection services*, the approved *model standing offer* supersedes the former *model standing offer*.
- (f) A QLD distributor may submit for the *AER*'s approval a *model standing offer* to provide *standard connection services* (clause 5A.B.4) during the transition period but the *AER*'s approval of the *standing offer* is not required until the transition date.

Amendment of standing offers

- (g) During the transition period, a QLD distributor may amend a standing offer to provide *basic connection services* or *standard connection services* by *publishing* the amendments and the amended text on its website. (This paragraph applies during the transition period to the exclusion of clause 5A.B.6.)

11.46.7 Exclusions, qualifications and modifications for SA

During the transition period, the relevant provisions apply to, and in relation to, the SA distributor subject to the following exclusions, qualifications and modifications:

Connection Policy

- (a) A document, prepared by the SA distributor and *published* on the SA distributor's website, will (although not approved by the *AER*) be taken to be the SA distributor's *connection policy* for the purposes of the relevant provisions if:

- (1) it sets out the circumstances in which *connection charges* are payable, the basis for determining the amount of those charges, the *time* at which those charges may be required by the SA distributor and any rebate from the SA distributor to the *customer*; and
- (2) it applies and is consistent with the distribution determination 2010-11 to 2014-15, made for the SA distributor by the *AER*.

Model standing offers (basic connection services)

- (b) The SA distributor's obligation to have a *model standing offer* to provide *basic connection services* (clause 5A.B.1) operates from the commencement of the transition period.
- (c) The SA distributor must therefore comply with its obligation to submit for the *AER*'s approval a proposed *model standing offer* to provide *basic connection services* (Clause 5A.B.2(a)).
- (d) The requirements as to the content of the *model standing offer* (clause 5A.B.2(b)) apply during (as well as after) the transition period.

Model standing offers (standard connection services)

- (e) The relevant provisions regarding *model standing offers* to provide *standard connection services* operate without modification during the transition period.

Amendment of standing offers

- (f) During the transition period, clause 5A.B.6 applies to the amendment of a standing offer to provide *basic connection services* or *standard connection services*.

11.46.8 Exclusions, qualifications and modifications for Tasmania

During the transition period, the relevant provisions apply to, and in relation to, the Tasmanian distributor subject to the following exclusions, qualifications and modifications:

Connection Policy

- (a) The document "Policy: *Customer Capital Contributions*" submitted by the Tasmanian distributor as part of its *regulatory proposal* for the *regulatory years* 1 July 2012 to 30 June 2017 is taken, during the transition period to be a *connection policy* approved by the *AER*.

Model standing offers (basic connection services)

- (b) A document, prepared by the Tasmanian distributor and *published* on the Tasmanian distributor's website, will (although not approved by the *AER*) be regarded as a *model standing offer* to provide *basic connection services* during the transition period if it complies with the requirements of clause 5A.B.2(b) as to its terms and conditions.

- (c) If, during the transition period, the *AER* approves a *model standing offer* for the same *basic connection services*, the approved *model standing offer* supersedes the former *model standing offer*.
- (d) The Tasmanian distributor's obligation to have a *model standing offer* to provide *basic connection services* (clause 5A.B.1) operates during the transition period but the *AER*'s approval of the *standing offer* is not required until the transition date.
- (e) The Tasmanian distributor's obligation to submit for the *AER*'s approval a proposed *model standing offer* to provide *basic connection services* (Clause 5A.B.2(a)) does not arise until the Tasmanian distributor is obliged to submit a *regulatory proposal* for the *regulatory control period* first commencing after the transition date.

Model standing offer (standard connection services)

- (f) A document, prepared by the Tasmanian distributor and *published* on the Tasmanian distributor's website, will (although not approved by the *AER*) be regarded as a *model standing offer* to provide *standard connection services* during the transition period if it complies with the requirements of clause 5A.B.4(c) as to its terms and conditions.
- (g) If, during the transition period, the *AER* approves a *model standing offer* for the same *standard connection services*, the approved *model standing offer* supersedes the former *model standing offer*.
- (h) The Tasmanian distributor may submit for the *AER*'s approval a proposed *model standing offer* to provide *standard connection services* (clause 5A.B.4) during the transition period but the *AER*'s approval of the *model standing offer* is not required until the transition date.

Amendment of standing offers

- (i) During the transition period, the Tasmanian distributor may amend a standing offer to provide *basic connection services* or *standard connection services* by *publishing* the amendments and the amended text on its website. (This paragraph applies during the transition period to the exclusion of clause 5A.B.6.)

11.46.9 Exclusions, qualifications and modifications for Victoria

During the transition period, the relevant provisions apply to, and in relation to, Victorian distributors subject to the following exclusions, qualifications and modifications:

Connection Policy

- (a) A document, prepared by a Victorian distributor and *published* on the Victorian distributor's website, will (although not approved by the *AER*) be taken to be the Victorian distributor's *connection policy* if:

- (1) it sets out the circumstances in which *connection charges* are payable and the basis for determining the amount of such charges; and
- (2) it is consistent with:
 - (i) *connection policies* prepared and *published* by Victorian distributors in accordance with the relevant industry guideline (if applicable); and
 - (ii) the Electricity Determination (if applicable).
- (b) In this clause:

Electricity determination means the 2011-2015 *distribution* pricing determination (as amended or substituted from *time to time*).

relevant industry guideline means the Electricity Industry Guideline No. 14 (Provision of Services by Electricity Distributors):

- (a) as in force immediately before the start date; and
- (b) *published* by the Victorian Essential Services Commission and dated April 2004.

Model standing offer (basic connection services)

- (c) A document, prepared by a Victorian distributor and *published* on the Victorian distributor's website, will (although not approved by the *AER*) be regarded as a *model standing offer* to provide *basic connection services* until 1 July 2013 if it complies with the requirements of clause 5A.B.2(b) as to its terms and conditions.
- (d) If, before 1 July 2013, the *AER* approves a *model standing offer* for the same *basic connection services*, the approved *model standing offer* supersedes the former *model standing offer*.
- (e) A Victorian distributor's obligation to have a *model standing offer* to provide *basic connection services* (clause 5A.B.1) operates during the transition period but the *AER*'s approval of the *standing offer* is not required until 1 July 2013.

Model standing offer (standard connection services)

- (f) A document, prepared by a Victorian distributor and *published* on the Victorian distributor's website, will (although not approved by the *AER*) be regarded as a *model standing offer* to provide *standard connection services* until 1 July 2013 if it complies with the requirements of clause 5A.B.4(c) as to its terms and conditions.
- (g) If, before 1 July 2013, the *AER* approves a *model standing offer* for the same *standard connection services*, the approved *model standing offer* supersedes the former *model standing offer*.

- (h) A Victorian distributor may submit for the AER's approval a proposed *model standing offer* to provide *standard connection services* (clause 5A.B.4) before 1 July 2013 but the AER's approval of the *model standing offer* is not required until 1 July 2013.

Amendment of standing offers

- (i) Until 1 July 2013, a Victorian distributor may amend a *standing offer* to provide *basic connection services* or *standard connection services* by *publishing* the amendments and the amended text on its website. (This paragraph applies until 1 July 2013 to the exclusion of clause 5A.B.6.)

Division 3 General provisions

11.46.10 Connection charges

- (a) A *Distribution Network Service* Provider must comply with its *connection policy* and any other *applicable regulatory* obligation or requirement when calculating or imposing a *connection charge* for the transition period.
- (b) This clause operates to the exclusion of clauses 5A.E.1 and 5A.E.2 until the transition date.

11.46.11 References

A reference to any of the relevant provisions in a legislative or other instrument will be construed, during the transition period, as a reference to the provision as modified by this Part.

Part ZQ NSW transitional retail support and credit support rules

11.47 Rules consequential on the insertion of Chapter 6B by the National Electricity (National Energy Retail Law) Amendment Rule 2012

Division 1 Preliminary

11.47.1 Definitions

In this Part:

applicable dispute resolution procedures means the dispute resolution regime contained in rule 8.2 unless the NSW DNSP and NSW Retailer have agreed under clause 11.47.2 that alternative dispute resolution procedures are to apply.

Bank bill rate in respect of any *day* means:

- (a) the Bank Bill Swap Reference Rate for 30 *days* on that *day* (or if not a *business day*, on the previous *business day*) published in the Australian Financial Review; or

- (b) if the rate in paragraph (a) is not available, the rate percent per annum agreed by the parties in good faith to be the appropriate rate having regard to comparable indices then available in the then current bill market.

bill receipt date means the date on which the bill is given (or taken to be given) to a NSW Retailer by a NSW DNSP in the same manner as the notices under rule 1.8 of these *Rules*.

default rate means the *Bank bill rate* plus 2% per annum.

disputed amount means an amount that satisfies all of the following:

- (a) the amount is specified in a bill issued by a NSW DNSP to a NSW Retailer in respect of network charges payable by the NSW Retailer; and
- (b) the NSW Retailer has provided a Notice of disputed amount in respect of that amount.

due date for payment means:

- (a) in the case of an amount specified in a bill in respect of network charges:
 - (i) where a bill is given before 1 July 2002, the date specified in the bill (being a date not less than 20 *business days* from the giving of the bill to the NSW Retailer); or
 - (ii) where a bill is given on or after 1 July 2002, the date specified in the bill (being a date not less than 16 *business days* from the giving of the bill to the NSW Retailer),or
- (b) in the case of a disputed amount that is determined to be payable by a NSW Retailer in accordance with applicable dispute resolution procedures, 5 *business days* after the determination.

Notice of disputed amount means a notice given by a NSW Retailer to a NSW DNSP stating that:

- (a) that the NSW Retailer disputes payment of an amount specified in the bill; and
- (b) the grounds for dispute in respect of the amount disputed; and
- (c) that the NSW Retailer undertakes to the NSW DNSP that the dispute in respect of the particular disputed amount is a bona fide dispute.

Notice of intention to draw on credit support means a notice given to a NSW Retailer by a NSW DNSP stating:

- (a) the date of the notice;
- (b) that the NSW DNSP intends to draw on the credit support;

- (c) the date (not less than 5 *business days* from the date of the notice) on which the NSW DNSP will draw on the credit support.

Notice of request for credit support means a notice requesting credit support stating:

- (a) the required credit support amount;
- (b) the basis for calculation of the required credit support amount, and includes a notice where a required credit support is reviewed.

network charges has the same meaning as in the *NERL*.

NSW DNSP means any of the following:

- (a) Essential Energy (established under the *Energy Services Corporation Act 1995* (NSW);
- (b) Endeavour Energy (established under the *Energy Services Corporation Act 1995* (NSW); and
- (c) Ausgrid (established under the *Energy Services Corporation Act 1995* (NSW);

NSW Retailer means the *financially responsible Market Participant* for a *market connection point* located in NSW and for any *market connection point* on Essential Energy's *distribution network*.

outstanding amount means any amount specified in a bill for network charges (excluding any disputed amount) that is unpaid by the due date for payment

required credit support amount means an amount of credit support equal to 90 *days* of network charges reasonably estimated by the NSW DNSP to be incurred by the NSW Retailer during the period of 90 *days* following the request by the NSW DNSP for credit support.

shared customer has the same meaning as in the *NERL*.

small customer has the same meaning as in the *NERL*.

start date means the date when this rule 11.47 comes into operation.

transition period means the period from the start date to the actual commencement date of the *regulatory control period* due to commence on 1 July 2014.

11.47.2 Application

- (a) During the transition period, Chapter 6B of the *Rules* does not apply to a NSW DNSP and NSW Retailer in relation to *market connection points* located in NSW and any *market connection point* on Essential Energy's *distribution network*.

- (b) Nothing in this rule 11.47 prevents a NSW DNSP and a NSW Retailer from reaching agreement on any matters under this rule 11.47 or the *Rules*, provided that any such agreement:
 - (i) is expressed to incorporate the rights and obligations of the respective parties set out in clause 11.47.4, and to be subject to clause 11.47.4; and
 - (ii) is consistent with the rights and obligations of the parties as *Registered participants*.

11.47.3 Obligation to pay

- (a) A NSW retailer must pay to a NSW DNSP the network charges payable in respect of each *shared customer* in accordance with this rule 11.47 by the due date for payment.
- (b) A NSW DNSP must not specify a due date for payment which is less than 16 *business days* from the date on which the bill is given to the NSW Retailer.
- (c) Where a NSW Retailer disputes payment of all or any part of the bill, the NSW Retailer must give a Notice of disputed amount not less than 3 *business days* before the due date for payment.
- (d) A Notice of disputed amount given in accordance with paragraph (c) entitles the NSW Retailer to withhold payment on the due date for payment of the disputed amount but does not entitle non-payment of any other amounts contained in the bill.
- (e) A dispute between a NSW Retailer and a NSW DNSP in relation to this rule 11.47 must be resolved in accordance with the applicable dispute resolution procedures.

11.47.4 Charging and billing

- (a) For small *customers*, a NSW DNSP may only require payment of, and issue bills for, network charges from the small *customer's retailer*.
- (b) Where a *customer* (who is not a small *customer* or Registered *Customer*) and a NSW Retailer agree, the NSW DNSP may require payment of, and issue bills for, network charges in respect of that *customer's connection point*.

11.47.5 Interest on unpaid amounts

- (a) Where a NSW Retailer does not pay a NSW DNSP all network charges specified in the bill by the due date for payment, the NSW Retailer is liable to pay interest on any *outstanding* amount.

- (b) If a part of a disputed amount is determined to be payable by a NSW Retailer in accordance with the applicable dispute resolution procedures, the NSW Retailer is liable to pay interest on any unpaid amount from the due date for payment until the amount is paid.
- (c) Interest is to be calculated:
 - (i) at the *default rate* applicable on the first *business day* of the *month*;
 - (ii) on actual *days* elapsed;
 - (iii) on a 365 *day* year,and is to be capitalised on the first *business day* of each *month*.
- (d) Any interest accrued is to be included in the next bill issued by the NSW DNSP as a proper charge payable by the NSW Retailer.

11.47.6 Circumstances where NSW DNSP may request credit support

- (a) A NSW DNSP may require a NSW Retailer to provide credit support for payment of network charges in favour of the NSW DNSP, but only in accordance with this rule 11.47.
- (b) Credit support for payment of network charges may only be required if, at any *time*, a NSW Retailer does not have an unqualified credit rating of at least:
 - (i) BBB from Standard and Poor's (Australia) Pty Ltd;
 - (ii) Baa from Moody's Investor Service Pty Ltd; or
 - (iii) an equivalent credit rating as determined by the NSW DNSP.

11.47.7 Credit support

Credit support is an undertaking in writing from a person (the ***Credit Support Provider***) which:

- (a) is a guarantee or bank letter of credit in a form acceptable to the NSW DNSP;
- (b) is duly executed by the *Credit Support Provider* and delivered unconditionally to the NSW DNSP;
- (c) constitutes valid and binding unsubordinated obligations of the *Credit Support Provider* to pay the DNSP amounts in accordance with the terms of the undertaking that relate to obligations of the NSW Retailer under this rule 11.47; and
- (d) permits drawings or claims by the NSW DNSP to the required credit support amount under this rule 11.47.

11.47.8 Credit support providers

- (a) The *Credit Support Provider* must meet the requirements set out in clause 3.3.3 of the *Rules*.
- (b) For the purposes of this rule 11.47, an *acceptable credit rating* for a *Credit Support Provider* is:
 - (i) AA from Standard and Poor's (Australia) Pty Ltd;
 - (ii) Aa from Moody's Investor Service Pty Ltd; or
 - (iii) an equivalent credit rating as determined by the NSW DNSP.

11.47.9 NSW DNSP to determine required credit support amount

- (a) In determining the required credit support amount in respect of a NSW Retailer, the NSW DNSP must consider the basis for calculation of network charges for the *market connection points* for which the NSW Retailer is the *financially responsible market participant* in the *distribution network* of the NSW DNSP.
- (b) The NSW DNSP must inform the NSW Retailer of the basis for calculation of the required credit support amount when giving a Notice of request for credit support.
- (c) A NSW DNSP may review a required credit support amount not less than 10 *business days* after the date of any previous Notice of request for credit support.
- (d) A NSW Retailer may request a NSW DNSP to review a required credit support amount not less than 10 *business days* after the date of any previous Notice of request for credit support.

11.47.10 NSW Retailer to ensure credit support available

- (a) A NSW Retailer must provide credit support in accordance with a Notice of request for credit support within 5 *business days* of the giving of the notice.
- (b) Without limiting paragraphs (c) and (d), the NSW Retailer must ensure that at all *times* the aggregate and undrawn amounts of the then current and valid credit support held by the NSW DNSP in respect of the NSW Retailer for network charges are not less than the current required credit support amount for that NSW Retailer.
- (c) A NSW Retailer must ensure in the case where any current credit support is due to expire or terminate that:
 - (i) the NSW DNSP is notified at least 10 *business days* prior to such expiry or termination; and

- (ii) replacement credit support that complies with this rule 11.47 is in place and effective from the date of expiry or termination.
- (d) Where as a result of the NSW DNSP exercising its rights under a *credit support provided* by the NSW Retailer, the total remaining credit support is less than the required credit support amount, the NSW Retailer must, within 24 hours of receiving a request for replacement credit support from the NSW DNSP, procure the replacement amount to restore the required credit support amount.

11.47.11 Drawing on credit support

- (a) A NSW DNSP may only draw on credit support in respect of an *outstanding* amount where all of the following circumstances apply:
 - (i) the NSW DNSP is entitled to require credit support and has given Notice of request for credit support in accordance with this rule 11.47;
 - (ii) 5 *business days* have elapsed since the NSW DNSP gave Notice of intention to draw on credit support; and
 - (iii) the *outstanding* amount remains unpaid on the date on which the NSW DNSP draws on the credit support
- (b) Where a disputed amount is determined to be payable by a NSW Retailer in accordance with applicable dispute resolution procedures, a DNSP may draw on credit support in respect of amounts payable in accordance with this clause.

11.47.12 Specific transitional arrangements

Any action taken under *Market Operation Rule (Network Use of System Agreements) No. 2 of 2001* (made under section 63C of the *Electricity Supply Act 1995* (NSW)) as in force immediately before the start date is taken to be the equivalent action under this rule 11.47.

Part ZR Miscellaneous transitional rules—NERL

11.48 Rules consequential on the making of the National Electricity (National Energy Retail Law) Amendment Rule 2012

11.48.1 Extension of time period for AER to consider certain pass through applications

- (a) This clause applies to an application from a *Distribution Network Service Provider* for pass through of costs under clause 6.6.1 or clause 6.6.1 of Appendix 1, arising from the commencement of the *National Energy Retail Law*, the *National Energy Retail Rules*, the *National Energy Retail Regulations* and associated amendments to the *energy laws* as they apply in the State or Territory in which that *Distribution Network Service Provider* operates.

- (b) The *time* limit for the making of a determination by the *AER* in subclause 6.6.1(e) and subclause 6.6.1(e) of Appendix 1, is 100 *business days*.

Part ZS Cost pass through arrangements for Network Service Providers

11.49 Rules consequential on the making of National Electricity Amendment (Cost pass through arrangements for Network Service Providers) Rule 2012

11.49.1 Definitions

In this rule 11.49:

Amending Rule means the National Electricity Amendment (Cost pass through arrangements for Network Service Providers) Rule 2012.

commencement date means the date the Amending Rule commences operation.

current regulatory control period for a *Network Service Provider* means the *regulatory control period* that commenced before the commencement date and, as at the commencement date, has not ended.

next regulatory control period for a *Network Service Provider* means the *regulatory control period* that commences after the end of the current regulatory control period.

Powerlink means Queensland Electricity Transmission Corporation Ltd (ACN 078 849 233).

ElectraNet means ElectraNet Pty Ltd (ACN 094 482 416).

Murraylink means Murraylink Transmission Company Pty Ltd (ACN 089 875 605).

terrorism event means *terrorism event* as defined in Chapter 10 of the *Rules* as in force immediately before the commencement date.

11.49.2 Terrorism event is a cost pass through event in the current regulatory control period

Despite the Amending Rule, a terrorism event is a *pass through event* for a *Network Service Provider* during its current regulatory control period.

11.49.3 Transitional arrangement for Powerlink

- (a) Powerlink may, by written notice to the *AER* not later than 90 days after the commencement date, apply to amend its *transmission determination* for the current regulatory control period to include one or more nominated *pass through events*.

- (b) Within 90 business days of receiving a notice under paragraph(a), the *AER* must determine the additional *pass through events* that are to apply to Powerlink for the current regulatory control period.
- (c) In making a determination under paragraph (b), the *AER* must take into account the *nominated pass through event considerations*.
- (d) If the *AER* determines under paragraph(b) that additional *pass through events* should apply to Powerlink for the current regulatory control period, the *AER* must as soon as practicable:
 - (1) notify Powerlink of that determination in writing; and
 - (2) amend Powerlink's *transmission determination* in accordance with paragraph(e).
- (e) Amendments to a *transmission determination* referred to in paragraph (d)(2) must only vary the determination to the extent necessary to include the additional *pass through events* that the *AER* has determined will apply to Powerlink in the *transmission determination*.
- (f) If the *AER* determines under paragraph (b) that Powerlink's *transmission determination* should not include a *pass through event* nominated by Powerlink under paragraph (a), it must notify Powerlink as soon as practicable.

11.49.4 Transitional arrangements for ElectraNet and Murraylink

- (a) Each of ElectraNet and Murraylink may, not later than 30 days after the commencement date, submit to the *AER* a proposal as to the events that should be defined as *pass through events* under clause 6A.7.3(a1)(5) for the purposes of its *Revenue Proposal* for the next *regulatory control period*, having regard to the *nominated pass through event considerations*.
- (b) If within 30 days after the commencement date the *AER* receives a proposal under paragraph (a) from ElectraNet or MurrayLink, then the *AER* must treat the proposal as if it had been included in the relevant *Transmission Network Service Provider's Revenue Proposal* for the next *regulatory control period* and make a decision under clause 6A.14.1(9) in respect of that proposal.

Part ZT Distribution Network Planning and Expansion

11.50 Rules consequential on the making of the National Electricity Amendment (Distribution Network Planning and Expansion) Rule 2012

11.50.1 Interpretation

Unless otherwise specified, terms defined in clause 5.10.2 have the same meaning when used in this rule 11.50.

11.50.2 Definitions

For the purposes of this rule 11.50:

Amending Rule means the National Electricity Amendment (Distribution Network Planning and Expansion) Rule 2012.

commencement date means the date of commencement of Schedules 1 to 4 and Schedule 6 of the Amending Rule.

DAPR date has the meaning given to it in clause 5.13.2(a).

new rules 5.15 and 5.17 means rules 5.15 and 5.17 of the *Rules* as in force immediately after the commencement date.

new network investment means has the meaning given to it in the *Rules* as in force immediately before the commencement date.

old clause 5.6.2(e1) to (k) means clauses 5.6.2(e1) to (k) of the *Rules* as in force immediately before the commencement date.

old clause 5.6.5A means clause 5.6.5A of the *Rules* (including the regulatory test and the regulatory test application guidelines made under by the *AER* under that clause and all definitions used in that clause) as in force immediately before the commencement date.

regulatory test has the meaning given to it in the *Rules* as in force immediately before the commencement date.

regulatory test project for a *Distribution Network Service Provider* means each project specified in the list provided by the *Distribution Network Service Provider* to the *AER* under clause 11.50.5(c), except any project the subject of a determination under clause 11.50.5(e).

RIT-D commencement date means the date that is one year from the commencement date.

11.50.3 Timing for first Distribution Annual Planning Report

If the first DAPR date for a *Distribution Network Service Provider* is less than 6 months after the commencement date then, despite clause 5.13.2(b), the *Distribution Network Service Provider* is not required to *publish* its first *Distribution Annual Planning Report* under clause 5.13.2 until the second DAPR date for that *Distribution Network Service Provider* after the commencement date.

11.50.4 Contents of Distribution Annual Planning Report

- (a) A *Distribution Network Service Provider* is not required to include in its first *Distribution Annual Planning Report published* under clause 5.13.2 the information specified in clause S5.8(a)(5) if information on energy and demand forecasts was not required to be reported by the *Distribution*

Network Service Provider under *jurisdictional electricity legislation* applicable at the time the previous report was prepared.

- (b) Notwithstanding clause S5.8(e) , if a *Distribution Annual Planning Report* is *published*:
 - (1) in the period from the commencement date to the RIT-D commencement date, then the *Distribution Network Service Provider*:
 - (i) is not required to include the information specified in clauses S5.8(e) and (f) in its *Distribution Annual Planning Report*; and
 - (ii) must include in its *Distribution Annual Planning Report* the information specified in paragraph (c); and
 - (2) in the period from the RIT-D commencement date until the DAPR date after the completion of its last assessment of a project under the *regulatory test*, then the *Distribution Network Service Provider*:
 - (i) is not required to include the information specified in clauses S5.8(e) and (f) in its *Distribution Annual Planning Report*; and
 - (ii) must include in its *Distribution Annual Planning Report* the information specified in paragraph (d).
- (c) For the purposes of paragraph (b)(1)(ii), the *Distribution Network Service Provider* must include in its *Distribution Annual Planning Report* the information specified in clauses S5.8(e) and (f) as if those clauses were modified as follows:
 - (1) by omitting "RIT-D project" and substituting "*new network investment*";
 - (2) by omitting "regulatory investment test for distribution" and substituting "regulatory test";
 - (3) by omitting "credible option" and substituting "investment option"; and
 - (4) by omitted "preferred option" and substituting "preferred proposal".
- (d) For the purposes of paragraph (b)(2)(ii), the *Distribution Network Service Provider* must include in its *Distribution Annual Planning Report* the information specified in clauses S5.8(e) and (f) as if those clauses were modified as follows:
 - (1) by omitting "RIT-D projects" and substituting "*new network investment* or RIT-D projects (as the case may be)";
 - (2) by omitting "regulatory investment test for distribution" and substituting "regulatory test or the regulatory investment test for distribution (as the case may be)";

- (3) by omitting "credible option" and substituting "investment option or credible option (as the case may be)"; and
- (4) by omitted "preferred option" and substituting "preferred proposal or preferred option (as the case may be)".

11.50.5 Transition from the regulatory test to the regulatory investment test for distribution

- (a) From the commencement date until the RIT-D commencement date:
 - (1) new rules 5.15 and 5.17 have no effect in relation to RIT-D projects or joint planning projects;
 - (2) old clause 5.6.5A continues to apply to new network investment; and
 - (3) *Registered Participants* must comply with old clauses 5.6.2(e1) to (k) to the extent those provisions are relevant to the application of the regulatory test.
- (b) After the RIT-D commencement date:
 - (1) new rules 5.15 and 5.17 have no effect in relation to RIT-D projects that are regulatory test projects;
 - (2) old clause 5.6.5A continues to apply to regulatory test projects; and
 - (3) *Registered Participants* must comply with old clauses 5.6.2(e1) to (k) to the extent those provisions are relevant to the application of the regulatory test.
- (c) By 31 December 2013, each *Network Service Provider* that has commenced assessing a project under the regulatory test must submit to the *AER* a list of those projects.
- (d) In the first regulatory investment test for distribution application guidelines it *publishes* under clause 5.17.2(d), the *AER* must, in addition to meeting the requirements of clause 5.17.2, provide guidance as to when a regulatory test assessment will be considered to have commenced for the purposes of paragraph (c).
- (e) The *AER* may, having regard to any guidelines made under clause 5.17.2(d), determine that a project or projects in the list submitted by a *Network Service Provider* under paragraph (c) have not commenced assessment under the *regulatory test*.

Part ZU New Prudential Standard and Framework in the NEM

11.51 Rules consequential on the making of the National Electricity Amendment (New Prudential Standard and Framework in the NEM) Rule 2012

11.51.1 Definitions

For the purposes of this rule 11.51:

Amending Rule means the National Electricity Amendment (New Prudential Standard and Framework in the NEM) Rule 2012.

commencement date means the date the Amending Rule commences operation.

credit limit procedures has the meaning given to it in clause 3.1.1A of the *Rules* after the commencement date.

maximum credit limit has the meaning given to it in Chapter 10 of the *Rules* immediately prior to the commencement date.

new clause 3.3.8 means clause 3.3.8 of the *Rules* after the commencement date.

old clause 3.3.8 means clause 3.3.8 of the *Rules* (and all definitions in, and relevant provisions of, the *Rules* amended by the Amending Rule) as in force immediately prior to the commencement date.

prudential margin has the meaning given to it in Chapter 10 of the *Rules* immediately prior to the commencement date.

prudential settings has the meaning given to it in clause 3.1.1A of the *Rules* after the commencement date.

11.51.2 AEMO's responsibility to develop and publish the credit limit procedures

As soon as it is practicable after the commencement date, and in accordance with the *Rules consultation procedures*, AEMO must develop and *publish* the credit limit procedures in accordance with the Amending Rule.

11.51.3 Transition to the framework for determining prudential settings

- (a) AEMO must continue to calculate the maximum credit limit and the prudential margin to apply to *Market Participants* under old clause 3.3.8 until it determines the prudential settings to apply to *Market Participants* under new clause 3.3.8.
- (b) By 1 December 2013:
 - (1) AEMO must determine the prudential settings to apply to each *Market Participant* under new clause 3.3.8; and

- (2) *AEMO* must notify each *Market Participant*, in writing, of the prudential settings that apply to it under new clause 3.3.8.

11.51.4 Prior consultation, step, decision or action taken by AEMO

- (a) If, prior to the commencement date and for the purposes of developing the credit limit procedures in anticipation of the Amending Rule, *AEMO* undertook a consultation or step equivalent to that as required in the *Rules consultation procedures*, then that consultation or step is taken to satisfy the equivalent consultation or step under the *Rules consultation procedures*.
- (b) If, prior to the commencement date and in anticipation of the Amending Rule, *AEMO* made a decision or took an action, that decision or action is taken to satisfy the equivalent decision or action under the *Rules*.

Part ZV Small Generation Aggregator Framework

11.52 Rules consequential on the making of the National Electricity Amendment (Small Generation Aggregator Framework) Rule 2012

11.52.1 Definitions

In this rule 11.52:

Amending Rule means the National Electricity Amendment (Small Generation Aggregator Framework) Rule 2012.

Amending Rule commencement date means the date of commencement of the Amending Rule.

customer energy has the same meaning in clause 3.15.6A(o)(3) of new clause 3.15.6A.

small generator energy has the same meaning in clause 3.15.6A(o)(5) of new clause 3.15.6A.

MSGA participant fees and Chapter 3 commencement date has the meaning given to it in clause 11.52.2.

new clause 3.15.6A means clause 3.15.6A of the *Rules* after the Amending Rule commencement date.

new clause 3.15.8 means clause 3.15.8 of the *Rules* after the Amending Rule commencement date.

new clause 3.15.10C means clause 3.15.10C of the *Rules* after the Amending Rule commencement date.

old clause 3.15.6A means clause 3.15.6A of the *Rules* (and all definitions in, and relevant provisions of, the *Rules*) in force immediately prior to the Amending Rule commencement date.

old clause 3.15.8 means clause 3.15.8 of the *Rules* (and all definitions in, and relevant provisions of, the *Rules*) in force immediately prior to the Amending Rule commencement date.

old clause 3.15.10C means clause 3.15.10C of the *Rules* (and all definitions in, and relevant provisions of, the *Rules*) in force immediately prior to the Amending Rule commencement date.

11.52.2 Commencement of participant fees as well as transactions, funding and settlements under Chapter 3 for Market Small Generation Aggregators

- (a) Subject to paragraph (b), the MSGA participant fees and Chapter 3 commencement date is 31 December 2013.
- (b) *AEMO* may determine a MSGA participant fees and Chapter 3 commencement date that is earlier than 31 December 2013 provided that:
 - (1) *AEMO* is able to do all of the following:
 - (i) charge *Participant fees* under this Part; and
 - (ii) determine ancillary services transactions under new clause 3.15.6A; and
 - (iii) include (if required) in a relevant *final statement* amounts calculated under new clause 3.15.10C; and
 - (2) *AEMO publishes* a notice that specifies the earlier MSGA participant fees and Chapter 3 commencement date, which must not be less than 10 *business days* before the specified date.

11.52.3 Participant fees for Market Small Generation Aggregators

- (a) For the period from the MSGA participant fees and Chapter 3 commencement date until the date that *AEMO publishes* a revised structure of *Participant fees* under rule 2.11, for the purposes of charging a *Market Small Generator Aggregator* a *Participant fee*, in the document titled "Structure of Participant Fees under rule 2.11 of the National Electricity Rules" dated 21 March 2011, references to *Market Customer* will be taken to include *Market Small Generator Aggregator*.
- (b) In *publishing* a revised structure of *Participant fees* under rule 2.11, *AEMO* must take into account the Amending Rule.

11.52.4 Ancillary service transactions, funding of compensation for directions and intervention settlements for directions for Market Small Generation Aggregators

- (a) As soon as practicable after the Amending Rule commencement date:
 - (1) *AEMO* must implement a plan to update its process, software or algorithm in regards to the determination by *AEMO* of ancillary service transactions referred to in clause 3.15.6A to take into account the Amending Rule; and
 - (2) *AEMO* must amend the procedure for determining contribution factors as referred to in clause 3.15.6A(j) to take into account the Amending Rule.
- (b) From the Amending Rule commencement date to the MSGA participant fees and Chapter 3 commencement date:
 - (1) *AEMO* must determine ancillary service transactions under old clause 3.15.6A, where:
 - (i) *Market Customer* will be taken to include *Market Small Generation Aggregator*; and
 - (ii) customer energy will be taken to include small generator energy;
 - (2) *AEMO* must calculate funding of compensation for *directions* under old clause 3.15.8; and
 - (3) *AEMO* must include in a relevant *final statement* amounts calculated under old clause 3.15.10C.
- (c) *AEMO* may amend the procedure for determining contribution factors as referred to in clause 3.15.6A(j) to take into account the Amending Rule without complying with the *Rules consultation procedures* provided that it:
 - (1) *publishes* a notice that the procedure for determining contribution factors as referred to in clause 3.15.6A(j) has been amended to take into account the Amending Rule; and
 - (2) makes available on its website the amended procedure for determining contribution factors as referred to in clause 3.15.6A(j).

11.52.5 Amendments to the carbon dioxide equivalent intensity index procedures

- (a) As soon as practicable after the Amending Rule commencement date, *AEMO* must amend and publish the *carbon dioxide equivalent intensity index procedures* so that a reference to a *market generating unit* is not taken to include a *small generating unit*.

- (b) *AEMO* may amend the *carbon dioxide equivalent intensity index procedures* so that a reference to a *market generating unit* is not taken to include a *small generating unit*, without complying with the *Rules consultation procedures* provided that it:
 - (1) *publishes* a notice that a reference to a *market generating unit* in the *carbon dioxide equivalent intensity index procedures* is not taken to include a *small generating unit*; and
 - (2) makes available on its website the amended *carbon dioxide equivalent intensity index procedures*.

11.52.6 Amendments of the metrology procedures

- (a) As soon as practicable after the Amending Rule commencement date, *AEMO* must amend the *metrology procedures* to take into account the Amending Rule.
- (b) Only to the extent of amending the *metrology procedures* to take into account the Amending Rule, *AEMO*:
 - (1) is not subject to, or required to comply with, clause 7.1.4(a) and (b);
 - (2) is not required to comply with the *Rules consultation procedures*;
 - (3) must *publish* a notice that the *metrology procedures* has been amended to take into account the Amending Rule; and
 - (4) must make available on its website the amended *metrology procedures*.

11.52.7 Amendments to the Market Settlement and Transfer Solution Procedures

- (a) As soon as practicable after the Amending Rule commencement date, *AEMO* must amend and *publish* the *Market Settlement and Transfer Solution Procedures* to take into account the Amending Rule.
- (b) If, prior to the Amending Rule commencement date, and for the purposes of developing the *Market Settlement and Transfer Solution Procedures* in anticipation of the Amending Rule, *AEMO* undertook a consultation, step, decision or action equivalent to that as required in the *Rules consultation procedures*, then that consultation, step, decision or action is taken to satisfy the equivalent consultation, step, decision or action under the *Rules consultation procedures*.

Part ZW Economic Regulation of Network Service Providers (2012 amendments)

Division 1 Miscellaneous transitional provisions

11.53 Publication of Chapter 6 Guidelines

11.53.1 Shared Asset Guidelines

- (a) The *AER* must *publish* the first *Shared Asset Guidelines* under clause 6.4.4 by 29 November 2013.
- (b) By no later than 21 December 2012, the *AER* must *publish* a paper that sets out:
 - (1) a schedule setting out the key dates and milestones for the making of the first *Shared Asset Guidelines* by the date specified in paragraph (a); and
 - (2) the specific consultation procedure that the *AER* will follow in making the first *Shared Asset Guidelines*, which must be consistent with the *distribution consultation procedures*.

11.53.2 Capital Expenditure Incentive Guidelines

- (a) The *AER* must *publish* the first *Capital Expenditure Incentive Guidelines* under rule 6.4A by 29 November 2013
- (b) By no later than 21 December 2012, the *AER* must *publish* a paper that sets out:
 - (1) a schedule setting out the key dates and milestones for the making of the first *Capital Expenditure Incentive Guidelines* by the date specified in paragraph (a); and
 - (2) the specific consultation procedure that the *AER* will follow in making the first *Capital Expenditure Incentive Guidelines*, which must be consistent with the *distribution consultation procedures*.

11.53.3 Rate of Return Guidelines

- (a) The *AER* must *publish* the first *Rate of Return Guidelines* under clause 6.5.2 by 29 November 2013.
- (b) By no later than 21 December 2012, the *AER* must *publish* a paper that sets out:
 - (1) a schedule setting out the key dates and milestones for the making of the first *Rate of Return Guidelines* by the date specified in paragraph (a); and

- (2) the specific consultation procedure that the *AER* will follow in making the first *Rate of Return Guidelines*, which must be consistent with the *distribution consultation procedures*.

11.53.4 Expenditure Forecast Assessment Guidelines

- (a) The *AER* must *publish* the first *Expenditure Forecast Assessment Guidelines* under clause 6.4.5 by 29 November 2013.
- (b) By no later than 21 December 2012, the *AER* must *publish* a paper that sets out:
 - (1) a schedule setting out the key dates and milestones for the making of the first *Expenditure Forecast Assessment Guidelines* by the date specified in paragraph (a); and
 - (2) the specific consultation procedure that the *AER* will follow in making the first *Expenditure Forecast Assessment Guidelines*, which must be consistent with the *distribution consultation procedures*.

11.53.5 Distribution Confidentiality Guidelines

- (a) The *AER* must *publish* the first *Distribution Confidentiality Guidelines* under rule 6.14A by 29 November 2013.
- (b) By no later than 21 December 2012, the *AER* must *publish* a paper that sets out:
 - (1) a schedule setting out the key dates and milestones for the making of the first *Distribution Confidentiality Guidelines* by the date specified in paragraph (a); and
 - (2) the specific consultation procedure that the *AER* will follow in making the first *Distribution Confidentiality Guidelines*, which must be consistent with the *distribution consultation procedures*.

11.53.6 Consultation procedure paper

For the avoidance of doubt, nothing prevents the *AER* from publishing one or more of the papers referred to in clauses 11.53.1(b), 11.53.2(b), 11.53.3(b), 11.53.4(b) and 11.53.5(b) or in rule 11.54 in the same document.

11.54 Publication of Chapter 6A Guidelines

11.54.1 Shared Asset Guidelines

- (a) The *AER* must *publish* the first *Shared Asset Guidelines* under clause 6A.5.5 by 29 November 2013.
- (b) By no later than 21 December 2012, the *AER* must *publish* a paper that sets out:

- (1) a schedule setting out the key dates and milestones for the making of the first *Shared Asset Guidelines* by the date specified in paragraph (a); and
- (2) the specific consultation procedure that the AER will follow in making the first *Shared Asset Guidelines*, which must be consistent with the *transmission consultation procedures*.

11.54.2 Capital Expenditure Incentive Guidelines

- (a) The AER must *publish* the first *Capital Expenditure Incentive Guidelines* under rule 6A.5A by 29 November 2013.
- (b) By no later than 21 December 2012, the AER must *publish* a paper that sets out:
 - (1) a schedule setting out the key dates and milestones for the making of the first *Capital Expenditure Incentive Guidelines* by the date specified in paragraph (a); and
 - (2) the specific consultation procedure that the AER will follow in making the first *Capital Expenditure Incentive Guidelines*, which must be consistent with the *transmission consultation procedures*.

11.54.3 Rate of Return Guidelines

- (a) The AER must *publish* the first *Rate of Return Guidelines* under clause 6A.6.2 by 29 November 2013.
- (b) By no later than 21 December 2012, the AER must *publish* a paper that sets out:
 - (1) a schedule setting out the key dates and milestones for the making of the first *Rate of Return Guidelines* by the date specified in paragraph (a); and
 - (2) the specific consultation procedure that the AER will follow in making the first *Rate of Return Guidelines*, which must be consistent with the *transmission consultation procedures*.

11.54.4 Expenditure Forecast Assessment Guidelines

- (a) The AER must *publish* the first *Expenditure Forecast Assessment Guidelines* under clause 6A.5.6 by 29 November 2013.
- (b) By no later than 21 December 2012, the AER must *publish* a paper that sets out:
 - (1) a schedule setting out the key dates and milestones for the making of the first *Expenditure Forecast Assessment Guidelines* by the date specified in paragraph (a); and

- (2) the specific consultation procedure that the *AER* will follow in making the first *Expenditure Forecast Assessment Guidelines*, which must be consistent with the *transmission consultation procedures*.

11.54.5 Transmission Confidentiality Guidelines

- (a) The *AER* must *publish* the first *Transmission Confidentiality Guidelines* under rule 6A.16A by 29 November 2013.
- (b) By no later than 21 December 2012, the *AER* must *publish* a paper that sets out:
 - (1) a schedule setting out the key dates and milestones for the making of the first *Transmission Confidentiality Guidelines* by the date specified in paragraph (a); and
 - (2) the specific consultation procedure that the *AER* will follow in making the first *Transmission Confidentiality Guidelines*, which must be consistent with the *transmission consultation procedures*.

11.54.6 Consultation paper procedure

For the avoidance of doubt, nothing prevents the *AER* from publishing one or more of the papers referred to in clauses 11.54.1(b), 11.54.2(b), 11.54.3(b), 11.54.4(b) and 11.54.5(b) or in rule 11.53 in the same document.

Division 2 Transitional provisions for NSW/ACT Distribution Network Service Providers

11.55 General provisions

11.55.1 Definitions

In this Division 2:

affected DNSP means a NSW/ACT DNSP.

Amending Rules means Schedules 1 and 3 of the *National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2012*.

current Chapter 6 means Chapter 6 of the *Rules* as in force immediately after the Amending Rules come into force.

current regulatory control period, of an affected DNSP, means the *regulatory control period* for the affected DNSP that immediately precedes the transitional regulatory control period.

former Chapter 6 means Chapter 6 of the *Rules* as in force immediately before the Amending Rules come into force.

NSW/ACT DNSP means each of the following *Distribution Network Service Providers*:

- (a) ActewAGL, the joint venture between ACTEW Distribution Limited ACN 073 025 224 and Jemena Networks (ACT) Pty Ltd ACN 008 552 663 providing *distribution services* in the Australian Capital Territory, or any successor to its business;
- (b) Ausgrid, the energy services corporation of that name (formerly known as EnergyAustralia), which is constituted under section 7 of the *Energy Services Corporations Act 1995* (NSW) and specified in Part 2 of Schedule 1 to that Act, or any successor to its business;
- (c) Endeavour Energy, the energy services corporation of that name (formerly known as Integral Energy), which is constituted under section 7 of the *Energy Services Corporations Act 1995* (NSW) and specified in Part 2 of Schedule 1 to that Act, or any successor to its business; and
- (d) Essential Energy, the energy services corporation of that name (formerly known as Country Energy), which is constituted under section 7 of the *Energy Services Corporations Act 1995* (NSW) and specified in Part 2 of Schedule 1 to that Act, or any successor to its business.

subsequent regulatory control period, of an affected DNSP, means the *regulatory control period* for the affected DNSP that immediately follows the transitional regulatory control period.

Note:

The definition of *regulatory control period* for the purposes of this definition is affected by clause 11.56.4(k).

transitional Chapter 6 has the meaning given to it in clause 11.55.2.

transitional regulatory control period means a period of one year that commences on 1 July 2014 and ends on 30 June 2015.

transitional regulatory proposal, for an affected DNSP, means a *regulatory proposal* for *distribution services* provided by means of, or in connection with, a *distribution system* that is owned, controlled or operated by the affected DNSP, being a *regulatory proposal* that is for the transitional regulatory control period.

Note:

The definition of *regulatory proposal* for the purposes of this definition is affected by clause 11.55.2(b).

11.55.2 Transitional Chapter 6

For the purposes of this Division 2, **transitional Chapter 6** means current Chapter 6 except that:

- (a) the following clauses are omitted: clauses 6.3, 6.4.3, 6.4.4(a), (b), 6.5.2(a)-(l), 6.5.3, 6.5.5, 6.5.6, 6.5.7, 6.5.9, 6.5.10, 6.6.1(j)(7), 6.6.5, 6.6A, 6.8.1, 6.8.1A, 6.9.1, 6.9.2, 6.9.2A, 6.9.3(b), (b1), (b2), 6.10, 6.11.1A, 6.12.1(2)-(8), 6.12.2(b), 6.12.3(b)-(j), Schedule 6.1, S6.2.1, S6.2.2A, S6.2.2B and S6.2.3;
- (b) clauses 6.8.2(a)-(c2) are deleted and replaced with the following:
 - "(a) An affected DNSP must submit a transitional regulatory proposal to the *AER* at least 5 months before the expiry of the current regulatory control period of that affected DNSP.
 - (b) A transitional regulatory proposal must include (but need not be limited to) the following elements:
 - (1) an amount that the affected DNSP proposes will be the *annual revenue requirement* for the transitional regulatory control period, it being acknowledged that such amount will not be calculated in accordance with the provisions of the *Rules* that would otherwise apply to the calculation of the *annual revenue requirement*; and
 - (2) the elements referred to in clauses 6.8.2(c)(4), (5A) and (6) of current Chapter 6.";
- (c) in clause 6.6.1(j)(4), all the words after "the time cost of money" are deleted;
- (d) clause 6.9.3(c) of former Chapter 6 applies instead of clause 6.9.3(c) of current Chapter 6 but as if the reference to 30 *business days* were a reference to 20 *business days*;
- (e) all references in a rule (other than rule 6.10) to a draft distribution determination under rule 6.10 are deleted;

Note:

Rule 6.10 is excluded from transitional Chapter 6 under paragraph (a) above.

- (f) clause 6.12.1 includes as an additional constituent decision "a decision on the commencement and length of the *regulatory control period*";
- (g) the reference to "*building block proposal*" in clause 6.12.2(a)(2)(i) is replaced with a reference to "*regulatory proposal*";
- (h) in each of clauses 6.18.7(c)(3) and 6.18.7A(c)(3), all the words after "adjusts for an appropriate cost of capital" are deleted;
- (i) any provisions of transitional Chapter 6 that pertain to:
 - (1) the resubmission or *publication* of a *regulatory proposal* (or the accompanying information) under rule 6.9;

- (2) the *publication* of the *AER's* proposed *Negotiated Distribution Service Criteria*; or
- (3) the assessment by the *AER* of, or consultation on, the documents and matters referred to in subparagraphs (1) and (2),

do not apply to that extent for the purposes of the *AER* making a distribution determination for the transitional regulatory control period; and

- (j) in clause 6.6.1(l) of transitional Chapter 6, omit “retailer insolvency costs” and substitute “retailer insolvency costs”.

11.55.3 Application of rule 11.56

Rule 11.56 prevails to the extent of any inconsistency over any other clause of the *Rules*.

11.56 Special provisions applying to affected DNSPs

11.56.1 Requirement to make distribution determination

- (a) The *AER* must, in accordance with transitional Chapter 6 and this Division 2, make for the transitional regulatory control period a distribution determination for each *distribution system* that is owned, controlled or operated by the affected DNSP and in respect of which the *AER* made a distribution determination for the current regulatory control period of that affected DNSP.
- (b) A distribution determination referred to in paragraph (a) must, among other things, set out the amount that the *AER* approves as the affected DNSP's *annual revenue requirement* for the transitional regulatory control period in accordance with clause 11.56.3.

11.56.2 Transitional regulatory proposal

Requirement for transitional regulatory proposal

- (a) A transitional regulatory proposal must comply with the requirements of transitional Chapter 6 and this Division 2.

Additional information to accompany transitional regulatory proposal

- (b) At the same time as an affected DNSP submits its transitional regulatory proposal to the *AER*, it must also submit the following accompanying information to the *AER*:
 - (1) an indicative estimate of the value of the regulatory asset base for the relevant *distribution system* as at the beginning of the transitional regulatory control period;
 - (2) an indicative range for the rate of return that should be applied to the regulatory asset base referred to in subparagraph (1), which takes into

- account available market information and expected market trends, and has regard to the *Rate of Return Guidelines published by the AER*;
- (3) an indicative estimate of forecast operating expenditure and capital expenditure for the transitional regulatory control period;
 - (4) an indicative estimate of the cost of corporate tax and depreciation for the transitional regulatory control period;
 - (5) an indicative range of the affected DNSP's revenue requirements, for the provision of *standard control services*, for the transitional regulatory control period and for each of the subsequent four *regulatory years*, which is based on the information and inputs referred to in subparagraphs (1) to (4) and such other information or inputs as the affected DNSP considers to be relevant and as it includes in the information that accompanies the transitional regulatory proposal;
 - (6) a summary of the affected DNSP's plan for expenditure for the transitional regulatory control period and the subsequent four *regulatory years*, together with an explanation of how this proposed expenditure is consistent with the proposed *annual revenue requirement* that is set out in the transitional regulatory proposal;
 - (7) where the control mechanism that is to apply for a *direct control service* under clause 11.56.3(a)(5) or (6) is or includes a price cap or a price control, an indicative estimate of demand (including customer numbers, energy demand and maximum demand) for that type of *direct control service* for the transitional regulatory control period and each of the subsequent four *regulatory years*;
 - (8) the revenue that the affected DNSP estimates it will earn from the provision of *standard control services* during the last *regulatory year* of its current regulatory control period; and
 - (9) such other information or inputs as the affected DNSP considers to be relevant to the approval by the *AER*, under clause 11.56.3, of its *annual revenue requirement* for the transitional regulatory control period.

11.56.3 Distribution determination for a transitional regulatory control period

Content of distribution determination - general

- (a) Without otherwise limiting the operation of clause 6.12.1 of transitional Chapter 6, a distribution determination made by the *AER* for an affected DNSP for the transitional regulatory control period must:
 - (1) specify the same classification of *distribution services* as that which was decided for the distribution determination for the current regulatory control period of the affected DNSP, except to the extent the *framework and approach paper* that is *published* in respect of the

subsequent regulatory control period of the affected DNSP provides otherwise, in which case the classification must (to that extent) be as supplemented or modified in accordance with the *framework and approach paper*;

- (2) specify the commencement and length of the *regulatory control period* consistently with the commencement and length of the transitional regulatory control period;
- (3) specify that no *capital expenditure sharing scheme* or *small-scale incentive scheme* applies to the affected DNSP for the transitional regulatory control period;
- (4) specify that the D-factor scheme, *efficiency benefit sharing scheme*, *service target performance incentive scheme* and *demand management and embedded generation connection incentive scheme* that applied to the affected DNSP under the distribution determination for its current regulatory control period apply to the affected DNSP for the transitional regulatory control period subject to such modifications as are set out in the *framework and approach paper* that is *published* in respect of the subsequent regulatory control period of the affected DNSP (including as to the incentives under, and the non-application of, the relevant scheme);
- (5) specify the same control mechanisms for *standard control services* as those which were decided for the distribution determination for the current regulatory control period of the affected DNSP, except to the extent the *framework and approach paper* that is *published* in respect of the subsequent regulatory control period of the affected DNSP provides otherwise in accordance with paragraph (h)(2), in which case the relevant control mechanisms must be as set out in that *framework and approach paper*;
- (6) subject to paragraph (j), specify the same control mechanisms for *alternative control services* as those which were decided for the distribution determination for the current regulatory control period of the affected DNSP, except to the extent the *framework and approach paper* that is *published* in respect of the subsequent regulatory control period of the affected DNSP provides otherwise in accordance with paragraph (h)(2), in which case the relevant control mechanisms must be as set out in that *framework and approach paper*;
- (7) specify the manner of demonstration of compliance with a relevant control mechanism as being that which was decided for the distribution determination for the current regulatory control period of the affected DNSP, except to the extent the *framework and approach paper* that is *published* in respect of the subsequent regulatory control period of the affected DNSP in accordance with paragraph (h)(2) specifies a different control mechanism, in which case the manner of demonstration of compliance with that control mechanism must be as

- decided by the *AER* in the distribution determination for the transitional regulatory control period;
- (8) specify, as the additional *pass through events* that are to apply for the transitional regulatory control period:
- (i) the same additional *pass through events* that were decided in the distribution determination for the current regulatory control period of the affected DNSP; and
 - (ii) the "terrorism event" as defined in the Rules immediately prior to the date the *National Electricity Amendment (Cost pass through arrangements for Network Service Providers) Rule 2012* came into force;
- (9) specify, as the *negotiating framework* that is to apply to the affected DNSP for the transitional regulatory control period, the *negotiating framework* that was decided for the current regulatory control period of the affected DNSP;
- (10) specify, as the *Negotiated Distribution Service Criteria* for the affected DNSP, the *Negotiated Distribution Service Criteria* that were decided for the distribution determination for the current regulatory control period of the affected DNSP;
- (11) specify, as the procedures for assigning *retail customers to tariff classes* or reassigning *retail customers* from one *tariff class* to another, the same procedures as those which were decided for the distribution determination for the current regulatory control period of the affected DNSP;
- (12) approve, as the *pricing methodology* for any *transmission standard control services* the pricing in respect of which was regulated under Part J of Chapter 6A during the current regulatory control period of the affected DNSP, the *pricing methodology* (if any) which was approved for those services for the distribution determination for that current regulatory control period;
- (13) specify that the depreciation for establishing the regulatory asset base as at the commencement of the subsequent regulatory control period of the affected DNSP is to be based on actual capital expenditure (if that was decided for the distribution determination for the current regulatory control period of the affected DNSP) or forecast capital expenditure (if that was decided for the distribution determination for the current regulatory control period of the affected DNSP);
- (14) specify, as the manner in which the affected DNSP is to report to the *AER* on its recovery of *designated pricing proposal charges* and *jurisdictional scheme amounts*, the manner that was decided for the current regulatory control period of the affected DNSP, except to the extent the *designated pricing proposal charge* or *jurisdictional*

scheme was not subject to such a decision for that current regulatory control period, in which case the manner of reporting must (to that extent) be as decided by the *AER* in the distribution determination for the transitional regulatory control period; and

- (15) specify, as the adjustments to be made to subsequent *pricing proposals* to account for over or under recovery of any *designated pricing proposal charges* or *jurisdictional scheme amounts*, the adjustments that were decided for the current regulatory control period of the affected DNSP, except to the extent the *designated pricing proposal charge* or *jurisdictional scheme* was not subject to such a decision for that current regulatory control period, in which case the adjustments must (to that extent) be as decided by the *AER* in the distribution determination for the transitional regulatory control period.

Annual revenue requirement

- (b) The *AER* must only approve the amount that is proposed by an affected DNSP to be its *annual revenue requirement* for the transitional regulatory control period, as set out by the affected DNSP in its transitional regulatory proposal, if the *AER* is satisfied that the amount is such that the recovery of it by the affected DNSP is reasonably likely to minimise variations in prices between the affected DNSP's current regulatory control period, transitional regulatory control period and subsequent regulatory control period and between the *regulatory years* of the subsequent regulatory control period.

Note:

In deciding whether or not to approve such an amount the *AER* must also take into account the *national electricity objective* and the revenue and pricing principles: see *National Electricity Law*, s.16(1)(a) and (2)(a).

- (c) In deciding whether or not to approve an amount as referred to in paragraph (b), the *AER* must have regard to the following:
- (1) the fact that the *annual revenue requirement* for the transitional regulatory control period is an estimate that is based on indicative inputs and that the distribution determination for the subsequent regulatory control period will make an adjustment to the *total revenue requirement* for the subsequent regulatory control period in accordance with clause 11.56.4(h) and (i);
 - (2) the information included in or accompanying the transitional regulatory proposal;
 - (3) submissions received in the course of consulting on the transitional regulatory proposal; and
 - (4) analysis undertaken by or for the *AER* in connection with the transitional regulatory proposal.

- (d) If the *AER* does not approve the amount that is proposed by the affected DNSP as its *annual revenue requirement* for the transitional regulatory control period, then the *AER* must approve an amount as the *annual revenue requirement* of the affected DNSP for the transitional regulatory control period that it is satisfied is such that the recovery of it by the affected DNSP is reasonably likely to minimise variations in prices between the affected DNSP's current regulatory control period, transitional regulatory control period and subsequent regulatory control period and between the *regulatory years* of the subsequent regulatory control period.

Note:

In deciding on such an amount, the *AER* must also take into account the *national electricity objective* and the revenue and pricing principles: see *National Electricity Law*, s.16(1)(a) and (2)(a).

- (e) A decision of the *AER* under this clause 11.56.3 to approve an amount as the *annual revenue requirement* of an affected DNSP for the transitional regulatory control period is taken to be a constituent decision for the purposes of clause 6.12.1 of transitional Chapter 6.
- (f) An amount approved by the *AER* under this clause 11.56.3 as the *annual revenue requirement* of an affected DNSP for the transitional regulatory control period is to be taken, for the purpose of the *Rules*, to be the *annual revenue requirement* of the affected DNSP for the transitional regulatory control period.

Dual function assets

- (g) Where the *AER* has determined, for the current regulatory control period of an affected DNSP, that pricing in respect of *transmission standard control services* provided by any *dual function assets* that are owned, controlled or operated by the affected DNSP should be regulated under Part J of Chapter 6A through the application of former Chapter 6, the *AER* is taken to have made that same determination for the transitional regulatory control period.

Framework and approach paper

- (h) A *framework and approach paper* that is *published* in respect of the subsequent regulatory control period of an affected DNSP may specify the following matters in relation to the distribution determination for that affected DNSP for the transitional regulatory control period:
 - (1) the classification of *distribution services* for the transitional regulatory control period (which must be the same as the classification of *distribution services* that is specified for the subsequent regulatory control period by any *framework and approach paper*);
 - (2) where a *framework and approach paper* specifies a classification for *distribution services* for the transitional regulatory control period that is different from that decided for the distribution determination for the current regulatory control period, the form of, and formulae to give effect to, the control mechanism for those *distribution services* (which

must be the same as the form and formulae that are specified for the subsequent regulatory control period by any *framework and approach paper*);

- (3) the modifications to be made to an incentive scheme as referred to in paragraph (a)(4);
- (4) the manner in which the prices that may be charged for *alternative control services* during the subsequent regulatory control period are to be adjusted to account for any over or under recovery of revenue earned from the provision of those services during the transitional regulatory control period; and
- (5) the treatment of any other matters relating to the transitional regulatory control period, providing that the treatment of those matters is not inconsistent with this Division 2.

Allocation of costs

- (i) For the purposes of the application of clause 6.15.2(7) of transitional Chapter 6, the transitional regulatory control period must be treated as if it were the last *regulatory year* of the current regulatory control period of the affected DNSP, and not a separate *regulatory control period*.

Pricing of alternative control services

- (j) The prices for *alternative control services* that are provided by an affected DNSP during the transitional regulatory control period must be the prices that applied as at the end of the current regulatory control period of the affected DNSP escalated by the *CPI* as at that time.

11.56.4 Subsequent regulatory control period

General

- (a) Except as otherwise specified in this clause 11.56.4, current Chapter 6 governs the making of a distribution determination for the subsequent regulatory control period of an affected DNSP.

Calculation of annual revenue requirement and other matters

- (b) Except as provided in paragraph (d), an affected DNSP must prepare and submit its *regulatory proposal* for the subsequent regulatory control period of the affected DNSP, together with all the information that is required to accompany that *regulatory proposal*, in accordance with current Chapter 6 and as if:
 - (1) the subsequent regulatory control period comprised the transitional regulatory control period (as the first *regulatory year* of the subsequent regulatory control period) and all of the *regulatory years* of the subsequent regulatory control period (as the remaining *regulatory years* of the subsequent regulatory control period); and

- (2) the transitional regulatory control period were not a separate *regulatory control period*.
- (c) For the purposes of making a distribution determination for an affected DNSP for the subsequent regulatory control period of that affected DNSP, the *AER* must determine:
 - (1) the *annual revenue requirement* of the affected DNSP for each *regulatory year* of its subsequent regulatory control period;
 - (2) the *total revenue requirement* of the affected DNSP for that subsequent regulatory control period;
 - (3) the X factor for each control mechanism for each *regulatory year* of that subsequent regulatory control period; and
 - (4) the opening value of the regulatory asset base for the relevant *distribution system*,

in accordance with current Chapter 6 (except that clause 6.5.9(b)(2) of current Chapter 6 does not apply to the determination of any X factor) and as if:

- (5) the subsequent regulatory control period comprised the transitional regulatory control period (as the first *regulatory year* of the subsequent regulatory control period) and all of the *regulatory years* of the subsequent regulatory control period (as the remaining *regulatory years* of the subsequent regulatory control period); and
- (6) the transitional regulatory control period were not a separate *regulatory control period*.

For the avoidance of doubt, this paragraph (c) requires the *AER* to determine a notional *annual revenue requirement*, a notional X factor or X factors and a notional opening value of the regulatory asset base for the *regulatory year* that comprises the transitional regulatory control period.

- (d) The transitional regulatory control period of an affected DNSP must be treated as if it were the last *regulatory year* of the current regulatory control period of the affected DNSP, and not a separate *regulatory control period*, for the purposes of the application of the following clauses of current Chapter 6 in respect of a distribution determination for the subsequent regulatory control period of that affected DNSP: clauses 6.25(a), S6.1.1(6) and S6.1.2(7).
- (e) The transitional regulatory control period of an affected DNSP must be treated as if it were the first *regulatory year* of the subsequent regulatory control period of the affected DNSP, and not a separate *regulatory control period*, for the purposes of the application of the following clauses of current Chapter 6 in respect of a distribution determination for the affected DNSP for that subsequent regulatory control period: clauses 6.5.2(i), 6.6.5 and 6.6A.

- (f) The transitional regulatory control period of an affected DNSP must be treated as if it were the first *regulatory year* of the subsequent regulatory control period of that affected DNSP, and not a separate *regulatory control period*, for the purposes of the application of the following clauses of current Chapter 6 in respect of a distribution determination for the affected DNSP for the *regulatory control period* that follows that subsequent regulatory control period: clauses 6.5.1(e)(1), (3) and S6.2.1.
- (g) Nothing in this clause 11.56.4 has the effect of actually rendering the transitional regulatory control period as the first *regulatory year* of the subsequent regulatory control period and, except for the purposes of the application of paragraphs (b) to (f) in accordance with its terms, the transitional regulatory control period must be treated as a *regulatory control period* that is separate from the subsequent regulatory control period.

Adjustment to annual revenue requirement

- (h) An affected DNSP's *total revenue requirement* for its subsequent regulatory control period must be fully adjusted for the adjustment amount determined in accordance with paragraph (i). The adjustment must be made by increasing (where the adjustment amount is negative) or decreasing (where the adjustment amount is positive) the *annual revenue requirement* of one or more *regulatory years* of the subsequent regulatory control period as the AER considers appropriate, provided that the aggregate of all such increases or decreases for the relevant *regulatory years* is equivalent in net present value terms to the adjustment amount.
- (i) For the purposes of paragraph (h), the adjustment amount is calculated as:
 - (1) the amount of the *annual revenue requirement* that was approved for the transitional regulatory control period under clause 11.56.3(b) or (d); less
 - (2) the amount of the notional *annual revenue requirement* for the transitional regulatory control period that is determined under paragraph (c),subject to such modifications in relation to the calculation of that adjustment amount as are set out in a *framework and approach paper* that applies in respect of a distribution determination for the subsequent regulatory control period and as are necessary by virtue of the application of a price cap or price control, rather than a revenue cap or revenue control, in respect of any *standard control services* that are provided by the affected DNSP.
- (j) The determination by the AER of the amount of the notional *annual revenue requirement* for the transitional regulatory control period under paragraph (c), and of the adjustment amount under paragraph (i), are each taken to be constituent decisions for the purposes of clause 6.12.1 of current Chapter 6.

Length of subsequent regulatory control period

- (k) If:

- (1) an affected DNSP proposes in its *regulatory proposal* a period of 4 *regulatory years* as the period for the subsequent regulatory control period of the affected DNSP, then the *AER* must, in its distribution determination for that subsequent regulatory control period, approve that period as (and that period will be) the *regulatory control period* for the affected DNSP that immediately follows the transitional regulatory control period; or
- (2) an affected DNSP proposes in its *regulatory proposal*:
 - (i) a period of less than 4 *regulatory years* but not less than 3 *regulatory years*; or
 - (ii) a period of more than 4 *regulatory years*;

as the period for the subsequent regulatory control period of the affected DNSP, then the *AER* may, in its distribution determination for that subsequent regulatory control period, approve that period as (in which case that period will be) the *regulatory control period* for the affected DNSP that immediately follows the transitional regulatory control period,

and the provisions of the *Rules* must be applied consistently with these requirements.

Modifications to framework and approach paper

- (l) The *AER* must make the *framework and approach paper* or *papers* that apply in respect of a distribution determination for an affected DNSP for the subsequent regulatory control period of that affected DNSP in two stages, namely:
 - (1) a *framework and approach paper* or *papers* for the matters referred to in clause 6.8.1(b)(1), (2)(i) and (ii) of current Chapter 6 and in clause 11.56.3(h)(1) and (2), which are collectively referred to in this Division 2 as the "Stage 1 F&A paper"; and
 - (2) a *framework and approach paper* or *papers* for the matters referred to in clause 6.8.1(b)(2)(iii) to (ix) of current Chapter 6 and in clauses 11.56.3(h)(3), (4), (5) and 11.56.4(i), which are collectively referred to in this Division 2 as the "Stage 2 F&A paper".

Note:

The matters referred to in clause 11.56.3(h) are required to be included in the Stage 1 or Stage 2 F&A paper, as appropriate, even though they relate to the transitional regulatory control period rather than the subsequent regulatory control period.

- (m) Clause 6.8.1(a)(2) of current Chapter 6 applies in respect of the Stage 1 F&A paper and the Stage 2 F&A paper as if the words "the *AER* has published a notice under paragraph (c)(3) stating" were replaced with the words "the *AER* has decided".

- (n) The *AER* must decide to make a Stage 2 F&A paper, for the matters referred to in paragraph (1)(2), in accordance with current Chapter 6 (as modified by this clause 11.56.4).

Modifications to time periods and process under current Chapter 6

- (o) For the purposes of making a distribution determination for the subsequent regulatory control period of an affected DNSP, current Chapter 6 applies subject to the further modifications set out in the following table:

Description	Reference	Transitional treatment
Timing for a <i>Distribution Network Service Provider</i> to request the <i>AER</i> to make an amended or replacement <i>framework and approach paper</i> .	Clause 6.8.1(c)(1)	Clause 6.8.1(c)(1) does not apply in respect of the Stage 1 F&A paper or the Stage 2 F&A paper.
Timing for the <i>AER</i> to <i>publish</i> a notice inviting submissions on whether it is necessary or desirable to amend or replace a <i>framework and approach paper</i> .	Clause 6.8.1(c)(2)	Clause 6.8.1(c)(2) does not apply in respect of the Stage 1 F&A paper or the Stage 2 F&A paper.
Timing for the <i>AER</i> 's decision on the amendment or replacement of a <i>framework and approach paper</i> .	Clause 6.8.1(c)(3)	Clause 6.8.1(c)(3) and (d) do not apply in respect of the Stage 1 F&A paper or the Stage 2 F&A paper.
Timing for the <i>AER</i> to make, amend or replace a <i>framework and approach paper</i> .	Clause 6.8.1(e)	"23 months" is replaced with "27 months" for the Stage 1 F&A paper and with "17 months" for the Stage 2 F&A paper.
Timing for submission of information about forecasting methodology	Clause 6.8.1A(b)(1)	"24 months" is replaced with "19 months".
Timing for the <i>Distribution Network Service Provider</i> to submit a <i>regulatory proposal</i> .	Clause 6.8.2(b)(1)	"17 months" is replaced with "13 months".
Publication of an issues paper with respect to a <i>regulatory proposal</i> .	Clause 6.9.3(b), (b1) and (b2)	These rules do not apply.

Description	Reference	Transitional treatment
Written submissions on <i>regulatory proposal</i> .	Clause 6.9.3(c)	Clause 6.9.3(c) of former Chapter 6 applies instead of clause 6.9.3(c) of current Chapter 6.
Written submissions on draft distribution determination.	Clause 6.10.2(c)	Clause 6.10.2(c) of former Chapter 6 applies instead of clause 6.10.2(c) of current Chapter 6.
Period in which <i>Distribution Network Service Provider</i> may submit a revised <i>regulatory proposal</i> .	Clause 6.10.3(a)	Clause 6.10.3(a) of former Chapter 6 applies instead of clause 6.10.3(a) of current Chapter 6.
Submissions on specified matters	Clause 6.10.4	This rule does not apply.
Notification of value of dual function assets	Clause 6.25(a)	"32 months" is replaced with "20 months".

- (p) For the purposes of making a distribution determination for the subsequent regulatory control period of an affected DNSP, the AER must:
- (1) *publish* an invitation to attend a public forum on the *regulatory proposal* submitted or resubmitted under clause 6.8.2 or 6.9.2 (as the case may be) of current Chapter 6 (as modified under paragraph (o)) and on the proposed *Negotiated Distribution Service Criteria* published under clause 6.9.3(a)(1) of current Chapter 6; and
 - (2) hold a public forum on that *regulatory proposal* and those proposed *Negotiated Distribution Service Criteria* not more than 15 *business days* after the *publication* of the invitation under clause 6.9.3(a)(2) of current Chapter 6

Pricing proposals

- (q) A *pricing proposal* for a *regulatory year* of the subsequent regulatory control period of an affected DNSP must comply with the requirements set out in a *framework and approach paper* under clause 11.56.3(h)(4).

11.56.5 Review of past capital expenditure

For the purposes of the application of clause S6.2.2A of current Chapter 6 in respect of an affected DNSP:

- (a) the review period (as defined in clause S6.2.2A(a1) of current Chapter 6) does not include the transitional regulatory control period or any *regulatory year* that precedes the transitional regulatory control period;
- (b) capital expenditure incurred in the *regulatory year* in which the first *Capital Expenditure Incentive Guidelines* were *published* or any prior *regulatory year* is excluded from the capital expenditure referred to in clause S6.2.2A(d) for the purposes of determining whether the *margin requirement* has been satisfied and clause S6.2.2A(i) does not apply in respect of any margin that forms part of that excluded capital expenditure; and
- (c) capital expenditure incurred in the *regulatory year* in which the first *Capital Expenditure Incentive Guidelines* were *published* or any prior *regulatory year* is excluded from the capital expenditure referred to in clause S6.2.2A(e) for the purposes of determining whether the capitalisation requirement has been satisfied and clause S6.2.2A(j) does not apply in respect of any capitalised operating expenditure that forms part of that excluded capital expenditure.

Division 3 Transitional provisions for NSW and Tasmanian Transmission Network Service Providers and Directlink

11.57 General provisions

11.57.1 Definitions

In this Division 3:

affected TNSP means the NSW TNSP or the Tasmanian TNSP.

Amending Rules means Schedules 2 and 3 of the *National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2012*.

commencement date means the date the Amending Rules come into force.

current Chapter 6A means Chapter 6A of the *Rules* as in force immediately after the Amending Rules come into force.

current regulatory control period of an affected TNSP, means the *regulatory control period* for the affected TNSP that immediately precedes the transitional regulatory control period.

Directlink means the *Transmission Network Service Provider* that owns, controls or operates the electricity transmission link between New South Wales and Queensland known as Directlink.

former Chapter 6A means Chapter 6A of the *Rules* as in force immediately before the Amending Rules come into force.

NSW TNSP means the energy services corporation constituted under section 6A of the *Energy Services Corporations Act 1995* (NSW) and specified in Part 1A of Schedule 1 to that Act, or any successor to its business.

subsequent regulatory control period, of an affected TNSP, means the *regulatory control period* for the affected TNSP that immediately follows the transitional regulatory control period.

Note:

The definition of *regulatory control period* for the purposes of this definition is affected by clause 11.58.4(l).

Tasmanian TNSP means Transend Networks Pty Ltd ACN 082 586 892 or any successor to its business.

transitional Chapter 6A has the meaning given to it in clause 11.57.2.

transitional regulatory control period means a period of one year that commences on 1 July 2014 and ends on 30 June 2015.

transitional Revenue Proposal, for an affected TNSP, means a *Revenue Proposal* relating to *prescribed transmission services* provided by means of, or in connection with, a *transmission system* that is owned, controlled or operated by the affected TNSP, being a *Revenue Proposal* that is for the transitional regulatory control period.

Note:

The definition of *Revenue Proposal* for the purposes of this definition is affected by clause 11.57.2(b).

11.57.2 Transitional Chapter 6A

For the purposes of this Division 3, **transitional Chapter 6A** means current Chapter 6A except that:

- (a) the following clauses are omitted: clauses 6A.4.1(b), 6A.4.2, 6A.5.1, 6A.5.3, 6A.5.4, 6A.5.5(a), (b), 6A.6.2(a)-(l), 6A.6.3, 6A.6.4, 6A.6.6, 6A.6.7, 6A.6.8, 6A.6.9, 6A.7.1, 6A.7.3(j)(6A), 6A.8, 6A.10.1A, 6A.10.1B, 6A.11.1, 6A.11.2, 6A.11.2A, 6A.11.3(b), (b1), (b2), 6A.12, 6A.13.2, 6A.13.2A, 6A.14.1(1), (2), (3), (4), (5B), (5C), (5D), (5E), (5F), 6A.14.2(b), 6A.14.3(b)-(i), Schedule 6A.1, S6A.2.1, S6A.2.2A, S6A.2.2B, S6A.2.3 and S6A.2.4;
- (b) clause 6A.10.1(a)-(h) are deleted and replaced with the following:
 - "(a) An affected TNSP must submit a transitional Revenue Proposal to the AER at least 5 months before the expiry of the current regulatory control period of that affected TNSP.
 - (b) A transitional regulatory proposal must include (but need not be limited to) the following matters:

- (1) an amount that the affected TNSP proposes will be the *maximum allowed revenue* for the transitional regulatory control period, it being acknowledged that such amount will not be calculated in accordance with the provisions of the Rules that would otherwise apply to the calculation of the *maximum allowed revenue*; and
 - (2) the matters referred to in clause 6A.10.1(f)(2) of current Chapter 6A.
- (c) The *Revenue Proposal* must comply with the requirements of, and must contain or be accompanied by such information as is required by, any relevant *regulatory information instrument*.";
- (c) in clauses 6A.7.2(i)(4) and 6A.7.3(j)(4), all the words after "the time cost of money" are deleted;
- (d) clause 6A.11.3(c) of former Chapter 6A applies instead of clause 6A.11.3(c) of current Chapter 6A but as if the reference to 30 *business days* were a reference to 20 *business days*;
- (e) all references in a rule (other than rule 6A.12) to a draft decision under rule 6A.12 are deleted;

Note:

Rule 6A.12 is excluded from transitional Chapter 6A under paragraph (a) above.

- (f) in clause 6A.13.3, the words "3 months" are substituted for the words "2 months";
- (g) clause 6A.14.1 includes as additional decisions:
 - (1) "a decision on the commencement and length of the *regulatory control period*";
 - (2) "a decision on the values that are to be attributed to the *performance incentive scheme parameters* for any *service target performance incentive scheme* that is to apply to the *Transmission Network Service Provider* in respect of the *regulatory control period*"; and
 - (3) "a decision on the values that are to be attributed to the *efficiency benefit sharing scheme parameters* for any *efficiency benefit sharing scheme* that is to apply to the *Transmission Network Service Provider* in respect of the *regulatory control period*"; and
- (h) any provisions of transitional Chapter 6A that pertain to:
 - (1) the submission or *publication* of a proposed *pricing methodology* or a proposed *negotiating framework*;
 - (2) the resubmission or *publication* of documents under rule 6A.11;

- (3) the *publication* of the AER's proposed *Negotiated Transmission Service Criteria*; or
- (4) the *publication* or assessment by the AER of, or consultation on, the documents and matters referred to in subparagraphs (1) to (3),

do not apply to that extent for the purposes of the AER making a *transmission determination* for the transitional regulatory control period.

11.57.3 Application of rule 11.58

Rule 11.58 prevails to the extent of any inconsistency over any other clause of the *Rules*.

11.58 Special provisions applying to affected TNSPs

11.58.1 Requirement to make transmission determination

- (a) The AER must, in accordance with transitional Chapter 6A and this Division 3, make for the transitional regulatory control period a *transmission determination* for each *transmission system* that is owned, controlled or operated by the affected TNSP and in respect of which the AER made a *transmission determination* for the current regulatory control period of that affected TNSP.
- (b) A *transmission determination* referred to in paragraph (a) must, among other things, set out the amount that the AER approves as the affected TNSP's *maximum allowed revenue* for the transitional regulatory control period in accordance with clause 11.58.3.

11.58.2 Requirement to submit a transitional Revenue Proposal

- (a) A transitional Revenue Proposal must comply with the requirements of transitional Chapter 6A and this Division 3.

Additional information to accompany transitional Revenue Proposal

- (b) At the same time as an affected TNSP submits its transitional Revenue Proposal to the AER, it must also submit the following accompanying information to the AER:
 - (1) an indicative estimate of the value of the regulatory asset base for the relevant *transmission system* as at the beginning of the transitional regulatory control period;
 - (2) an indicative range for the rate of return that should be applied to the regulatory asset base referred to in subparagraph (1), which takes into account available market information and expected market trends, and has regard to the *Rate of Return Guidelines published by the AER*;

- (3) an indicative estimate of forecast operating expenditure and capital expenditure for the transitional regulatory control period;
- (4) an indicative estimate of the cost of corporate tax and depreciation for the transitional regulatory control period;
- (5) an indicative range of the affected TNSP's revenue requirements, for the provision of *prescribed transmission services*, for the transitional regulatory control period and for each of the subsequent four *regulatory years*, which is based on the information and inputs referred to in subparagraphs (1) to (4) and such other information or inputs as the affected TNSP considers to be relevant and as it includes in the information that accompanies the transitional Revenue Proposal;
- (6) a summary of the affected TNSP's plan for expenditure for the transitional regulatory control period and the subsequent four *regulatory years*, together with an explanation of how this proposed expenditure is consistent with the proposed *maximum allowed revenue* that is set out in the transitional Revenue Proposal;
- (7) the revenue that the affected TNSP estimates it will earn from the provision of *prescribed transmission services* during the last *regulatory year* of its current regulatory control period; and
- (8) such other information or inputs as the affected TNSP considers to be relevant to the approval by the *AER*, under clause 11.58.3, of its *maximum allowed revenue* for the transitional regulatory control period.

11.58.3 Transmission determination for a transitional regulatory control period

Content of transmission determination - general

- (a) Without otherwise limiting the operation of clause 6A.14.1 of transitional Chapter 6A, a *transmission determination* made by the *AER* for an affected TNSP for the transitional regulatory control period must:
 - (1) specify the commencement and length of the *regulatory control period* consistently with the commencement and length of the transitional regulatory control period;
 - (2) specify that no *capital expenditure sharing scheme* or *small-scale incentive scheme* applies to the affected TNSP for the transitional regulatory control period;
 - (3) specify that the *efficiency benefit sharing scheme* and *service target performance incentive scheme* that applied to the affected TNSP under the *transmission determination* for its current regulatory control period apply to the affected TNSP for the transitional regulatory control period subject to such modifications as are set out in the

framework and approach paper that is *published* in respect of the subsequent regulatory control period of the affected TNSP (including as to the incentives under, and the non-application of, the relevant scheme);

- (4) specify the "terrorism event" as defined in the *Rules* immediately prior to the date the *National Electricity Amendment (Cost pass through arrangements for Network Service Providers) Rule 2012* came into force as an additional *pass through event* that is to apply for the transitional regulatory control period;
- (5) approves, as the *negotiating framework* that is to apply to the affected TNSP for the transitional regulatory control period, the *negotiating framework* that was approved as part of the *transmission determination* for the current regulatory control period of the affected TNSP;
- (6) specify, as the *Negotiated Transmission Service Criteria* for the affected TNSP, the *Negotiated Transmission Service Criteria* that were specified as part of the *transmission determination* for the current regulatory control period of the affected TNSP; and
- (7) approve, as the *pricing methodology* for the affected TNSP, the *pricing methodology* which was approved as part of the *transmission determination* for the current regulatory control period of the affected TNSP.

Maximum allowed revenue

- (b) The *AER* must only approve the amount that is proposed by an affected TNSP to be its *maximum allowed revenue* for the transitional regulatory control period, as set out by the affected TNSP in its transitional Revenue Proposal, if the *AER* is satisfied that the amount is such that the recovery of it by the affected TNSP is reasonably likely to minimise variations in prices between the affected TNSP's current regulatory control period, transitional regulatory control period and subsequent regulatory control period and between the *regulatory years* of the subsequent regulatory control period.

Note:

In deciding whether or not to approve such an amount, the *AER* must also take into account the *national electricity objective* and the revenue and pricing principles: see *National Electricity Law*, s.16(1)(a) and (2)(a).

- (c) In deciding whether or not to approve an amount as referred to in paragraph (b), the *AER* must have regard to the following:
 - (1) the fact that the *maximum allowed revenue* for the transitional regulatory control period is an estimate that is based on indicative inputs and that the *transmission determination* for the subsequent regulatory control period will make an adjustment to the *total revenue cap* for the subsequent regulatory control period in accordance with clause 11.58.4(i) and (j);

- (2) the information included in or accompanying the transitional Revenue Proposal;
 - (3) submissions received in the course of consulting on the transitional Revenue Proposal; and
 - (4) analysis undertaken by or for the *AER* in connection with the transitional Revenue Proposal.
- (d) If the *AER* does not approve the amount that is proposed by the affected TNSP as its *maximum allowed revenue* for the transitional regulatory control period, then the *AER* must approve an amount as the *maximum allowed revenue* of the affected TNSP for the transitional regulatory control period that it is satisfied is such that the recovery of it by the affected TNSP is reasonably likely to minimise variations in prices between the affected TNSP's current regulatory control period, transitional regulatory control period and subsequent regulatory control period and between the *regulatory years* of the subsequent regulatory control period.

Note:

In deciding on such an amount, the *AER* must also take into account the *national electricity objective* and the revenue and pricing principles: see *National Electricity Law*, s.16(1)(a) and (2)(a).

- (e) A decision of the *AER* under this clause 11.58.3 to approve an amount as the *maximum allowed revenue* of an affected TNSP for the transitional regulatory control period is taken to be a decision for the purposes of clause 6A.14.1 of transitional Chapter 6A.
- (f) An amount approved by the *AER* under this clause 11.58.3 as the *maximum allowed revenue* of an affected TNSP for the transitional regulatory control period is to be taken, for the purpose of the *Rules*, to be the *maximum allowed revenue* of the affected TNSP for the transitional regulatory control period.

Framework and approach paper

- (g) A *framework and approach paper* that is *published* in respect of the subsequent regulatory control period of an affected TNSP may specify the following matters in relation to the *transmission determination* for that affected TNSP for the transitional regulatory control period:
- (1) the modifications to be made to an incentive scheme as referred to in paragraph (a)(3); and
 - (2) the treatment of any other matters relating to the transitional regulatory control period, providing that the treatment of those matters is not inconsistent with this Division 3.

Pricing methodology guidelines

- (h) An amendment or replacement of the *pricing methodology guidelines* that is made after the commencement date will have no effect in respect of the *pricing methodology* that applies for a transitional regulatory control period.

11.58.4 Subsequent regulatory control period

General

- (a) Except as otherwise specified in this clause 11.58.4, current Chapter 6A will govern the making of a *transmission determination* for the subsequent regulatory control period of an affected TNSP.

Calculation of maximum allowed revenue and other matters

- (b) Except as provided in paragraph (d), an affected TNSP must prepare and submit its *Revenue Proposal* for the subsequent regulatory control period of the affected TNSP, together with all the information that is required to accompany that *Revenue Proposal*, in accordance with current Chapter 6A and as if:
 - (1) the subsequent regulatory control period comprised the transitional regulatory control period (as the first *regulatory year* of the subsequent regulatory control period) and all of the *regulatory years* of the subsequent regulatory control period (as the remaining *regulatory years* of the subsequent regulatory control period); and
 - (2) the transitional regulatory control period were not a separate *regulatory control period*.
- (c) For the purposes of making a *transmission determination* for an affected TNSP for the subsequent regulatory control period of that affected TNSP, the *AER* must determine:
 - (1) the *maximum allowed revenue* of the affected TNSP for each *regulatory year* of its subsequent regulatory control period;
 - (2) the *total revenue cap* of the affected TNSP for the subsequent regulatory control period;
 - (3) the X factor for each *regulatory year* of that subsequent regulatory control period; and
 - (4) the opening value of the regulatory asset base for the relevant *transmission system*,in accordance with current Chapter 6A (except that clause 6A.6.8(c)(2) of current Chapter 6A does not apply to the determination of any X factor) and as if:
 - (5) the subsequent regulatory control period comprised the transitional regulatory control period (as the first *regulatory year* of the

subsequent regulatory control period) and all of the *regulatory years* of the subsequent regulatory control period (as the remaining *regulatory years* of the subsequent regulatory control period); and

- (6) the transitional regulatory control period were not a separate *regulatory control period*.

For the avoidance of doubt, this paragraph (c) requires the AER to determine a notional *maximum allowed revenue*, a notional X factor and a notional opening value of the regulatory asset base for the *regulatory year* that comprises the transitional regulatory control period.

- (d) The transitional regulatory control period of an affected TNSP must be treated as if it were the last *regulatory year* of the current regulatory control period of the affected TNSP, and not a separate *regulatory control period*, for the purposes of the application of the following clauses of current Chapter 6A in respect of a *transmission determination* for the subsequent regulatory control period of that affected TNSP: clauses S6A.1.1(6) and S6A.1.2(7).
- (e) The transitional regulatory control period of an affected TNSP must be treated as if it were the first *regulatory year* of the subsequent regulatory control period of that affected TNSP, and not a separate *regulatory control period*, for the purposes of the application of the following clauses of current Chapter 6A in respect of a *transmission determination* for the affected TNSP for that subsequent regulatory control period: clauses 6A.6.2(i), 6A.6.3(c)(2), 6A.7.1 and 6A.8.
- (f) The transitional regulatory control period of an affected TNSP must be treated as if it were the first *regulatory year* of the subsequent regulatory control period of that affected TNSP, and not a separate *regulatory control period*, for the purposes of the application of the following clauses of current Chapter 6A in respect of a *transmission determination* for the affected TNSP for the regulatory control period that follows that subsequent *regulatory control period*: clauses 6A.6.1(e)(1), (3), S6A.2.1 and S6A.2.3(a).
- (g) Nothing in this clause 11.58.4 has the effect of actually rendering the transitional regulatory control period as the first *regulatory year* of the subsequent regulatory control period and, except for the purposes of the application of paragraphs (b) to (f) in accordance with its terms, the transitional regulatory control period must be treated as a *regulatory control period* that is separate from the subsequent regulatory control period.
- (h) For the purposes only of the application of clause 6A.7.2 of current Chapter 6A in respect of *network support payments* made by an affected TNSP during the transitional regulatory control period, the following provisions apply:
 - (1) for the purposes of the application of clause 6A.7.2 of current Chapter 6A and the definition of "network support pass through amount" in

Chapter 10, but not for the purposes of the definitions of "network support event", "negative network support event" and "positive network support event" in Chapter 10, a *network support event* arising out of *network support payments* made during the transitional regulatory control period will be taken to have occurred instead in the first year of the subsequent regulatory control period of that affected TNSP; and

- (2) for the purposes of the definitions of "network support event", "negative network support event" and "positive network support event" in Chapter 10, the relevant *annual building block revenue requirement* and capital expenditure allowance will be those which are used in the calculation of the notional *maximum allowed revenue* for the transitional regulatory control period under paragraph (c).

Adjustment to maximum allowed revenue

- (i) An affected TNSP's *total revenue cap* for its subsequent regulatory control period must be fully adjusted for the adjustment amount determined in accordance with paragraph (j). The adjustment must be made by increasing (where the adjustment amount is negative) or decreasing (where the adjustment amount is positive) the *maximum allowed revenue* of one or more *regulatory years* of the subsequent regulatory control period as the AER considers appropriate, provided that the aggregate of all such increases or decreases for the relevant *regulatory years* is equivalent in net present value terms to the adjustment amount.
- (j) For the purposes of paragraph (i), the adjustment amount is calculated as:
 - (1) the amount of the *maximum allowed revenue* that was approved for the transitional regulatory control period under clause 11.58.3(b) or (d); less
 - (2) the amount of the notional *maximum allowed revenue* for the transitional regulatory control period that is determined under paragraph (c).
- (k) The determination by the AER of the amount of the notional *maximum allowed revenue* for the transitional regulatory control period under paragraph (c), and of the adjustment amount under paragraph (j), are each taken to be decisions for the purposes of clause 6A.14.1 of current Chapter 6A.

Length of subsequent regulatory control period

- (l) If:
 - (1) an affected TNSP proposes in its *Revenue Proposal* a period of 4 *regulatory years* as the period for the subsequent regulatory control period of the affected TNSP, then the AER must, in its *transmission determination* for that subsequent regulatory control period, approve that period as (and that period will be) the *regulatory control period*

for the affected TNSP that immediately follows the transitional regulatory control period; or

(2) an affected TNSP proposes in its *Revenue Proposal*:

(i) a period of less than 4 *regulatory years* but not less than 3 *regulatory years*; or

(ii) a period of more than 4 *regulatory years*,

as the period for the subsequent regulatory control period of the affected TNSP, then the AER may, in its *transmission determination* for that subsequent regulatory control period, approve that period as (in which case that period will be) the *regulatory control period* for the affected TNSP that immediately follows the transitional regulatory control period,

and the provisions of the *Rules* must be applied consistently with these requirements.

Framework and approach paper

(m) The AER must make a *framework and approach paper* or *papers* that apply in respect of a *transmission determination* for an affected TNSP for the subsequent regulatory control period of that affected TNSP, for the matters referred to in clause 6A.10.1A(b) of current Chapter 6A and in clause 11.58.3(g), in accordance with current Chapter 6A (as modified by this clause 11.58.4).

Note:

The matters referred to in clause 11.58.3(g) are required to be included in the *framework and approach paper* even though they relate to the transitional regulatory control period rather than the subsequent regulatory control period.

Modifications to time periods and process current Chapter 6A – NSW TNSP, Tasmanian TNSP and Directlink

(n) For the purposes of making a *transmission determination* for the subsequent *regulatory control period* of an affected TNSP or for the *regulatory control period* commencing 1 July 2015 for Directlink, current Chapter 6A applies subject to the further modifications set out in the following table:

Description	Reference	Transitional treatment
Timing for the AER to make a <i>framework and approach paper</i>	Clause 6A.10.1A(e)	"23 months" is replaced with "17 months".
Timing for submission of information about forecasting	Clause 6A.10.1B(b)(1)	"24 months" is replaced with "19 months".

Description	Reference	Transitional treatment
methodology.		
Timing for the <i>Transmission Network Service Provider</i> to submit a <i>Revenue Proposal</i> , pricing methodology and negotiating framework.	Clause 6A.10.1(a)(1)	"17 months" is replaced with "13 months".
Publication of an issues paper with respect to a <i>Revenue Proposal</i> , pricing methodology and negotiating framework.	Clause 6A.11.3(b), (b1) and (b2)	These rules do not apply.
Written submissions on a <i>Revenue Proposal</i> .	Clause 6A.11.3(c)	Clause 6A.11.3(c) of former Chapter 6A applies instead of clause 6A.11.3(c) of current Chapter 6A.
Written submissions on draft decision.	Clause 6A.12.2(c)	Clause 6A.12.2(c) of former Chapter 6A applies instead of clause 6A.12.2(c) of current Chapter 6A but as if "30 business days" were substituted for "45 business days".
Period in which a <i>Transmission Network Service Provider</i> may submit a revised <i>Revenue Proposal</i> , pricing methodology or negotiating framework.	Clause 6A.12.3(a)	Clause 6A.12.3(a) of former Chapter 6A applies instead of clause 6A.12.3(a) of current Chapter 6A.
Submissions on specified matters.	Clause 6A.12.4	This rule does not apply.

- (o) For the purposes of making a *transmission determination* for the subsequent regulatory control period of an affected TNSP or for the *regulatory control period* commencing 1 July 2015 for Directlink, the *AER* must:

- (1) *publish* an invitation to attend a public forum on the *Revenue Proposal*, the proposed *negotiating framework*, the proposed *pricing methodology* and the information submitted or resubmitted under clause 6A.10.1 or clause 6A.11.2 (as the case may be) of current Chapter 6A (as modified under paragraph (n)) and on the proposed *Negotiated Transmission Service Criteria published* under clause 6A.11.3(a)(5) of current Chapter 6A; and
- (2) hold a public forum on that *Revenue Proposal*, that proposed *negotiating framework*, that proposed *pricing methodology*, that information and those proposed *Negotiated Transmission Service Criteria* not more than 15 *business days* after the *publication* of the invitation under clause 6A.11.3(a)(6) of current Chapter 6A.

11.58.5 Review of past capital expenditure

For the purposes of the application of clause S6A.2.2A of current Chapter 6A in respect of an affected TNSP:

- (a) the review period (as defined in clause S6A.2.2A(a1) of current Chapter 6A) does not include the transitional regulatory control period or any *regulatory year* that precedes the transitional regulatory control period;
- (b) capital expenditure incurred in the *regulatory year* in which the first *Capital Expenditure Incentive Guidelines* were *published* or any prior *regulatory year* is excluded from the capital expenditure referred to in clause S6A.2.2A(d) for the purposes of determining whether the *margin requirement* has been satisfied and clause S6A.2.2A(i) does not apply in respect of any margin that forms part of that excluded capital expenditure; and
- (c) capital expenditure incurred in the *regulatory year* in which the first *Capital Expenditure Incentive Guidelines* were *published* or any prior *regulatory year* is excluded from the capital expenditure referred to in clause S6A.2.2A(e) for the purposes of determining whether the *capitalisation requirement* has been satisfied and clause S6A.2.2A(j) does not apply in respect of any capitalised operating expenditure that forms part of that excluded capital expenditure.

Division 4 Transitional provisions for the Victorian TNSP

11.59 Special provisions applying to the Victorian TNSP

11.59.1 Definitions

In this Division 4:

Amending Rules means Schedules 2 and 3 of the *National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2012*.

commencement date means the date the Amending Rules come into force.

current Chapter 6A means Chapter 6A of the *Rules* as in force immediately after the Amending Rules come into force.

current regulatory control period means the *regulatory control period* for the Victorian TNSP that ends on 31 March 2014.

former Chapter 6A/10 means Chapters 6A and 10 of the *Rules* as in force immediately before the Amending Rules come into force.

next regulatory control period means the *regulatory control period* for the Victorian TNSP that immediately follows the current regulatory control period.

Victorian TNSP means SPI PowerNet Pty Ltd ACN 079 798 173 or any successor to its business.

11.59.2 Application of rule 11.59

This rule 11.59 prevails to the extent of any inconsistency over any other clause of the *Rules*.

11.59.3 Former Chapter 6A/10 applies

- (a) Subject to paragraph (b), former Chapter 6A/10 applies in respect of the making of a *transmission determination* for the Victorian TNSP for the next regulatory control period.
- (b) A *transmission determination* for the Victorian TNSP for the next regulatory control period must specify that the next regulatory control period commences on 1 April 2014 and ends on 31 March 2017, and the provisions of the *Rules* must be applied consistently with this requirement.

11.59.4 Review of past capital expenditure

For the purposes of the application of clause S6A.2.2A of current Chapter 6A in respect of the Victorian TNSP:

- (a) the review period (as defined in clause S6A.2.2A(a1) of current Chapter 6A) does not include the *regulatory year* in which the first *Capital Expenditure Incentive Guidelines* were *published* or any *regulatory year* that precedes that *regulatory year*;
- (b) capital expenditure incurred in the *regulatory year* in which the first *Capital Expenditure Incentive Guidelines* were *published* or any prior *regulatory year* is excluded from the capital expenditure referred to in clause S6A.2.2A(d) for the purposes of determining whether the *margin requirement* has been satisfied and clause S6A.2.2A(i) does not apply in respect of any margin that forms part of that excluded capital expenditure; and

- (c) capital expenditure incurred in the *regulatory year* in which the first *Capital Expenditure Incentive Guidelines* were published or any prior regulatory year is excluded from the capital expenditure referred to in clause S6A.2.2A(e) for the purposes of determining whether the *capitalisation requirement* has been satisfied and clause S6A.2.2A(j) does not apply in respect of any capitalised operating expenditure that forms part of that excluded capital expenditure.

Division 5 Transitional provisions for Qld/SA and Victorian Distribution Network Service Providers

11.60 Special provisions applying to the Qld/SA and Victorian Distribution Network Service Providers

11.60.1 Definitions

In this Division 5:

affected DNSP means a Qld/SA DNSP or a Victorian DNSP.

Amending Rules means Schedules 1 and 3 of the *National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2012*.

current Chapter 6 means Chapter 6 of the *Rules* as in force immediately after the Amending Rules come into force.

current regulatory control period, of an affected DNSP, means:

- (a) for a Qld/SA DNSP, the *regulatory control period* that ends on 30 June 2015; and
- (b) for a Victorian DNSP, the *regulatory control period* that ends on 31 December 2015.

former Chapter 6 means Chapter 6 of the *Rules* as in force immediately before the Amending Rules come into force.

Qld/SA DNSP means each of the following *Distribution Network Service Providers*:

- (a) Energex Limited ACN 078 849 055 or any successor to its business;
- (b) Ergon Energy Corporation Limited ACN 087 646 062 or any successor to its business; and
- (c) SA Power Networks (formerly known as ETSA Utilities) ABN 13 332 330 749 or any successor to its business.

next regulatory control period, of an affected DNSP, means the *regulatory control period* for the affected DNSP that immediately follows the current regulatory control period.

Note:

The definition of *regulatory control period* for the purposes of this definition is affected by clause 11.60.3(d).

Victorian DNSP means each of the following *Distribution Network Service Providers*:

- (a) United Energy Distribution Pty Ltd ACN 064 651 029 or any successor to its business;
- (b) Jemena Electricity Networks (Vic) Limited ACN 064 651 083 or any successor to its business;
- (c) CitiPower Pty ACN 064 651 056 or any successor to its business;
- (d) Powercor Australia Limited ACN 064 651 109 or any successor to its business; and
- (e) SPI Electricity Pty Limited ACN 064 651 118 or any successor to its business.

11.60.2 Application of rule 11.60

This rule 11.60 prevails to the extent of any inconsistency over any other clause of the *Rules*.

11.60.3 Distribution determination for next regulatory control period

- (a) Subject to paragraphs (b), (c) and (d), current Chapter 6 applies in respect of the making of a distribution determination for an affected DNSP for the next regulatory control period of that affected DNSP.
- (b) For the purposes of making a distribution determination for the next regulatory control period of an affected DNSP:
 - (1) the following clauses of current Chapter 6 do not apply: clauses 6.5.9(b)(2), 6.9.3(b), (b1), (b2), 6.10 and 6.11.1A;
 - (2) all references in a rule (other than rule 6.10) to a draft distribution determination under rule 6.10 are deleted; and
 - (3) the *AER* must:
 - (i) *publish* an invitation to attend a public forum on the *regulatory proposal* submitted or resubmitted under clause 6.8.2 or 6.9.2 (as the case may be) of current Chapter 6 (as modified under paragraph (c)) and on the proposed *Negotiated Distribution Service Criteria published* under clause 6.9.3(a)(1) of current Chapter 6; and
 - (ii) hold a public forum on that *regulatory proposal* and those proposed *Negotiated Distribution Service Criteria* not more than

15 *business days* after the *publication* of the invitation under clause 6.9.3(a)(2) of current Chapter 6.

- (c) For the purposes of making a distribution determination for the next regulatory control period of an affected DNSP, current Chapter 6 is subject to the further modifications set out in the following table:

Description	Reference	Transitional treatment
Timing for a <i>Distribution Network Service Provider</i> to request the <i>AER</i> to make an amended or replacement <i>framework and approach paper</i> .	Clause 6.8.1(c)(1)	"32 months" is replaced with "23 months".
Timing for the <i>AER</i> to <i>publish</i> a notice inviting submissions on whether it is necessary or desirable to amend or replace a <i>framework and approach paper</i> .	Clause 6.8.1(c)(2)	"31 months" is replaced with "22 months".
Timing for the <i>AER's</i> decision on the amendment or replacement of a <i>framework and approach paper</i> .	Clause 6.8.1(c)(3)	"30 months" is replaced with "21 months".
Timing for the <i>AER</i> to make, amend or replace a <i>framework and approach paper</i> .	Clause 6.8.1(e)	"23 months" is replaced with "14 months".
Timing for submission of information about forecasting methodology	Clause 6.8.1A(b)(1)	"24 months" is replaced with "19 months".
Timing for the <i>Distribution Network Service Provider</i> to submit a <i>regulatory proposal</i> .	Clause 6.8.2(b)(1)	"17 months" is replaced with "8 months".
Written submissions on <i>regulatory proposal</i> .	Clause 6.9.3(c)	Clause 6.9.3(c) of former Chapter 6

Description	Reference	Transitional treatment
		applies instead of clause 6.9.3(c) of current Chapter 6.
Notification of value of dual function assets	Clause 6.25(a)	"32 months" is replaced with "23 months".
Timing of value of dual function assets	Clause 6.25(a)	"36 months" is replaced with "24 months"

- (d) If an affected DNSP proposes in its *regulatory proposal* a period of less than 5 *regulatory years* but not less than 3 *regulatory years* as the period for the next regulatory control period of the affected DNSP, then the *AER* may, in its distribution determination for the next regulatory control period, approve that period as (in which case that period will be) the *regulatory control period* for the affected DNSP that immediately follows the current regulatory control period, and the provisions of the *Rules* must be applied consistently with these requirements.

11.60.4 Re-opening of distribution determination for next regulatory control period

- (a) At the same time as the *AER publishes* the distribution determination for the next regulatory control period of an affected DNSP under clause 6.11.2 of current Chapter 6, the *AER* must also *publish* an invitation for written submissions on the revocation and substitution of that distribution determination.
- (b) Any person may make a written submission to the *AER* in relation to the revocation and substitution of the distribution determination referred to in paragraph (a) within the time period specified in the invitation referred to in that clause, which must not be earlier than 45 *business days* after the making of that distribution determination. Without otherwise limiting the manner in which the affected DNSP may make such submissions, the affected DNSP may make a submission in the form of revisions to the *regulatory proposal* that it submitted to the *AER* in relation to the distribution determination referred to in paragraph (a).
- (c) No later than 8 months before the commencement of the second *regulatory year* of the next regulatory control period of an affected DNSP, the *AER* must revoke the distribution determination for that next regulatory control period and make a new distribution determination in substitution for the revoked determination which takes effect as at the date it is made and applies in respect of the next regulatory control period.
- (d) The new distribution determination made under paragraph (c) must provide for the following adjustments:

- (1) for *standard control services*, the affected DNSP's *total revenue requirement* for the next regulatory control period must be fully adjusted for the amount determined in accordance with paragraph (e). The adjustment must be made by increasing (where the adjustment amount is negative) or decreasing (where the adjustment amount is positive) the *annual revenue requirement* of one or more remaining *regulatory years* of the next regulatory control period as the AER considers appropriate provided that the aggregate of all such increases or decreases for the relevant *regulatory years* is equivalent in net present value terms to the adjustment amount; and
 - (2) for *alternative control services*, such adjustments as are required to accommodate any difference between revenues or prices that are approved, under or as a result of the revoked determination, for the first *regulatory year* of the next regulatory control period and revenues and prices that are approved, under or as a result of the new distribution determination, for that first *regulatory year* (including, if appropriate through providing for adjustments to any existing or future approved *pricing proposals*). Any such adjustments must be made such that they are equivalent in net present value terms to that difference.
- (e) For the purposes of paragraph (d), the adjustment amount is calculated as:
- (1) the amount of the *annual revenue requirement* that was approved for the first *regulatory year* of the next regulatory control period in the revoked determination; less
 - (2) the amount of the *annual revenue requirement* for the first *regulatory year* of the next regulatory control period that is determined in the new distribution determination,
- subject to such modifications in relation to the calculation of that adjustment amount as are necessary by virtue of the application of a price cap or price control, rather than a revenue cap or revenue control, in respect of any *standard control services* that are provided by the affected DNSP.
- (f) In making a new distribution determination as referred to in paragraph (c), and subject to rule 6.14 of current Chapter 6 (as modified by paragraphs (g) and (h) below), the AER must have regard to each of the following:
- (1) the matters it would be required to have regard to if it were making a final distribution determination under current Chapter 6 subsequent to it making a draft distribution determination that is the same as the revoked determination including (except where subparagraph (3) below applies) the *regulatory proposal* that was submitted to the AER in relation to the revoked determination;
 - (2) written submissions received under paragraph (b);

- (3) any revisions to the *regulatory proposal* that was submitted to the *AER* in relation to the revoked determination and that are given to the *AER* under paragraph (b); and
- (4) any analysis undertaken by or for the *AER* that is *published* prior to the making of the distribution determination or as part of the distribution determination.
- (g) Clauses 6.5.6(e)(12) and 6.5.7(e)(12) of current Chapter 6 apply for the purposes of paragraph (f) as if each reference in those clauses to the affected DNSP's revised *regulatory proposal* under clause 6.10.3 was instead a reference to the affected DNSP's *regulatory proposal* in relation to the revoked determination.
- (h) Clause 6.5.9(b)(2) does not apply for the purposes of making a new distribution determination as referred to in paragraph (c).
- (i) In making a new distribution determination as referred to in paragraph (c), the *AER* must make each of the decisions referred to in clause 6.12.1 of current Chapter 6.
- (j) Rule 6.14 of current Chapter 6 applies for the purposes of paragraph (f) as if the words "or clause 11.60.4(a)" were inserted after the word "Chapter" in paragraph (c) of that rule.
- (k) The *AER* must use its best endeavours to *publish*, a reasonable time prior to the making of the new distribution determination referred to in paragraph (c), any analysis undertaken by or for it on which it proposes to rely, or to which it proposes to refer, for the purposes of that new distribution determination.
- (l) The *AER* must as soon as practicable *publish*:
 - (1) notice of the making of a new distribution determination under paragraph (c);
 - (2) the new distribution determination itself; and
 - (3) the *AER*'s reasons for making the new distribution determination, including such decisions made by it as are referred to in rule 6.12.

11.60.5 Review of past capital expenditure

For the purposes of the application of clause S6.2.2A of current Chapter 6 in respect of an affected DNSP:

- (a) the review period (as defined in clause S6.2.2A(a1) of current Chapter 6) does not include the *regulatory year* in which the first *Capital Expenditure Incentive Guidelines* were *published* or any *regulatory year* that precedes that *regulatory year*;

- (b) capital expenditure incurred in the *regulatory year* in which the first *Capital Expenditure Incentive Guidelines* were published or any prior *regulatory year* is excluded from the capital expenditure referred to in clause S6.2.2A(d) for the purposes of determining whether the *margin requirement* has been satisfied and clause S6.2.2A(i) does not apply in respect of any margin that forms part of that excluded capital expenditure; and
- (c) capital expenditure incurred in the *regulatory year* in which the first *Capital Expenditure Incentive Guidelines* were published or any prior *regulatory year* is excluded from the capital expenditure referred to in clause S6.2.2A(e) for the purposes of determining whether the *capitalisation requirement* has been satisfied and clause S6.2.2A(j) does not apply in respect of any capitalised operating expenditure that forms part of that excluded capital expenditure.

Division 6 Review of past capital expenditure

11.61 Definitions and application

- (a) In this Division 6:

Amending Rules means the *National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2012*.

current Chapter 6 means Chapter 6 of the *Rules* as in force immediately after Schedules 1 and 3 of the Amending Rules come into force.

current Chapter 6A means Chapter 6A of the *Rules* as in force immediately after Schedules 2 and 3 of the Amending Rules come into force.

- (b) This Division 6 applies to:
 - (1) a *Distribution Network Service Provider* that is not an affected DNSP under Division 2 or an affected DNSP under Division 5; and
 - (2) a *Transmission Network Service Provider* that is not an affected TNSP under Division 3 or the Victorian TNSP under Division 4.

11.62 Review of past capital expenditure under Chapter 6

For the purposes of the application of clause S6.2.2A of current Chapter 6 in respect of a *Distribution Network Service Provider* to which this Division 6 applies:

- (a) the review period (as defined in clause S6.2.2A(a1) of current Chapter 6) does not include the *regulatory year* in which the first *Capital Expenditure Incentive Guidelines* were published or any *regulatory year* that precedes that *regulatory year*;

- (b) capital expenditure incurred in the *regulatory year* in which the first *Capital Expenditure Incentive Guidelines* were *published* or any prior *regulatory year* is excluded from the capital expenditure referred to in clause S6.2.2A(d) for the purposes of determining whether the *margin requirement* has been satisfied and clause S6.2.2A(i) does not apply in respect of any margin that forms part of that excluded capital expenditure; and
- (c) capital expenditure incurred in the *regulatory year* in which the first *Capital Expenditure Incentive Guidelines* were *published* or any prior *regulatory year* is excluded from the capital expenditure referred to in clause S6.2.2A(e) for the purposes of determining whether the *capitalisation requirement* has been satisfied and clause S6.2.2A(j) does not apply in respect of any capitalised operating expenditure that forms part of that excluded capital expenditure.

11.63 Review of past capital expenditure under Chapter 6A

For the purposes of the application of clause S6A.2.2A of current Chapter 6A in respect of a *Transmission Network Service Provider* to which this Division 6 applies:

- (a) the review period (as defined in clause S6A.2.2A(a1) of current Chapter 6A) does not include the *regulatory year* in which the first *Capital Expenditure Incentive Guidelines* were *published* or any *regulatory year* that precedes that *regulatory year*;
- (b) capital expenditure incurred in the *regulatory year* in which the first *Capital Expenditure Incentive Guidelines* were *published* or any prior *regulatory year* is excluded from the capital expenditure referred to in clause S6A.2.2A(d) for the purposes of determining whether the *margin requirement* has been satisfied and clause S6A.2.2A(i) does not apply in respect of any margin that forms part of that excluded capital expenditure; and
- (c) capital expenditure incurred in the *regulatory year* in which the first *Capital Expenditure Incentive Guidelines* were *published* or any prior *regulatory year* is excluded from the capital expenditure referred to in clause S6A.2.2A(e) for the purposes of determining whether the *capitalisation requirement* has been satisfied and clause S6A.2.2A(j) does not apply in respect of any capitalised operating expenditure that forms part of that excluded capital expenditure.

Part ZX Inter-regional Transmission Charging

11.64 Rules consequent on the making of the National Electricity Amendment (Inter-regional Transmission Charging) Rule 2013

11.64.1 Definitions

For the purposes of this rule 11.64:

Amending Rule means the National Electricity Amendment (Inter-regional Transmission Charging) Rule 2013.

commencement date means the date of commencement of Schedule 3 of the Amending Rule.

proposed amended pricing methodology means proposed amendments to the *pricing methodology* by a *Transmission Network Service Provider* as referred to in clause 11.64.3(a)(1).

regulatory year 1 means the first *regulatory year* of the *Transmission Network Service Provider's transmission determination* that commences after the commencement date.

regulatory year 2 means the *regulatory year* that follows regulatory year 1.

11.64.2 Amendments to the pricing methodology guidelines

- (a) By no later than 30 September 2014, the *AER* must amend the *pricing methodology guidelines* to take into account the Amending Rule.
- (b) In amending the *pricing methodology guidelines* under paragraph (a), the *AER* must set out the basis on which a *Transmission Network Service Provider* who is also a *Co-ordinating Network Service Provider* is to publish details of *modified load export charges* that are to apply for the following *financial year* as referred to in clause 6A.24.2(b).

11.64.3 Amendments to the pricing methodologies of Transmission Network Service Providers

- (a) By no later than 27 February 2015, each *Transmission Network Service Provider*:
 - (1) must amend their *pricing methodology* to:
 - (i) comply with the requirements of the *pricing methodology guidelines* amended under clause 11.64.2(a);
 - (ii) comply with the requirements of this Amending Rule; and
 - (iii) set out the process by which the methodology, formula, process or approach for adjustments in clause 6A.23.3(f) are proposed to be taken,

(the "proposed amended pricing methodology"); and
 - (2) must submit the proposed amended pricing methodology to the *AER*.
- (b) Despite the date referred to in paragraph (a), each *Transmission Network Service Provider* must use its best endeavours to amend its *pricing methodology* in accordance with subparagraph (a)(1) as soon as practicable

after the *AER* has amended its *pricing methodology guidelines* under clause 11.64.2(a).

- (c) All references in clauses 6A.11.1, 6A.11.2, 6A.11.3, 6A.14.3(g) and 6A.14.3(h) to the "proposed *pricing methodology*" apply to the "proposed amended pricing methodology" submitted in accordance with subparagraph (a)(2).
- (d) Despite paragraph (c), the time specified in the invitation to make submissions on the proposed amended pricing methodology must not be earlier than 20 *business days* after its publication by the *AER*.
- (e) By no later than 60 *business days* after the relevant time referred to in paragraph (d), or as soon as practicable after that date, the *AER* must *publish*:
 - (1) notice of the making of the final decision on the proposed amended pricing methodology; and
 - (2) the final decision on the proposed amended pricing methodology, including the reasons required to be included in it.
- (f) Despite clauses 6A.24.1(e), (f) and item 2 in clause S6A.4.2(k), a proposed amended pricing methodology that is approved by the *AER* under paragraph (e) will be deemed to be the *Transmission Network Service Provider's pricing methodology* from the date of its approval by the *AER*.

11.64.4 Commencement of clause 6A.23.3(f) for further adjustments

- (a) Despite any other provision of the *Rules* (including any guideline or procedure made under the *Rules*), for regulatory year 1 and regulatory year 2, adjustments as referred to in clause 6A.23.3(f) must be determined in accordance with the methodology, formula, process or approach contained in the relevant *Transmission Network Service Provider's pricing methodology* approved under clause 11.64.3(e).

Part ZY Network Service Provider Expenditure Objectives

11.65 Rules consequent on the making of the National Electricity Amendment (Network Service Provider Expenditure Objectives) Rule 2013

11.65.1 Definitions

For the purposes of this rule 11.65:

Amending Rule means the *National Electricity Amendment (Network Service Provider Expenditure Objectives) Rule 2013*.

commencement date means the date of commencement of the Amending Rule.

11.65.2 Application of rule 11.65

From the commencement date, despite clauses 11.55.3, 11.57.3 and 11.60.2, in rules 11.55 to 11.60, references to:

- (a) 'current Chapter 6' are to be read as Chapter 6 of the *Rules* as in force immediately after the Amending Rule comes into force; and
- (b) 'current Chapter 6A' are to be read as Chapter 6A of the *Rules* as in force immediately after the Amending Rule comes into force.

Part ZZ Access to NMI Standing Data

11.66 Rules consequent on the making of the National Electricity Amendment (Access to NMI Standing Data) Rule 2013

11.66.1 Definitions

In this rule 11.66:

Amending Rule means the *National Electricity Amendment (Access to NMI Standing Data) Rule 2013*.

Commencement Date means the date on which the Amending Rule commences operation.

11.66.2 Minor amendment of the Market Settlement and Transfer Solution Procedures

If, and only to the extent of, amending the *Market Settlement and Transfer Solution Procedures* to take into account the Amending Rule, AEMO:

- (a) is not required to comply with the *Rules consultation procedures*;
- (b) within 10 months after the Commencement Date, must:
 - (1) publish a notice on its website that it intends to amend the *Market Settlement and Transfer Solution Procedures* to take into account the Amending Rule;
 - (2) make available on its website a copy of the *Market Settlement and Transfer Solution Procedures* marked up with the proposed amendments to take into account the Amending Rule; and
 - (3) invite submissions on procedures made available under subparagraph (2) for a period of not less than 14 days; and
- (c) not later than 12 months after the Commencement Date, must:
 - (1) consider submissions received under paragraph (b)(3);

- (2) make available on its website a description of submissions it considered under subparagraph (1) with an explanation how it considered those submissions;
- (3) publish on its website a notice that the *Market Settlement and Transfer Solution Procedures* has been amended to take into account the Amending Rule; and
- (4) on the same day as the notice referred to in subparagraph (3), make available on its website the amended the *Market Settlement and Transfer Solution Procedures*.

Part ZZA Publication of Zone Substation Data

11.67 Rules consequent on the making of the National Electricity Amendment (Publication of Zone Substation Data) Rule 2014

11.67.1 Definitions

In this rule 11.67:

Amending Rule means the *National Electricity Amendment (Publication of Zone Substation Data) Rule 2014*.

Commencement Date means the date on which the Amending Rule commences operation.

DAPR date has the meaning given to it in clause 5.13.2(a).

11.67.2 Distribution Network Service Providers' obligations to commence on the next DAPR date

Despite rule 5.13A:

- (a) a *Distribution Network Service Provider* is not required to comply with its obligations under rule 5.13A until the first DAPR date for that *Distribution Network Service Provider* after the Commencement Date; and
- (b) a person may not make a request to a *Distribution Network Service Provider* under clause 5.13A(e) until the first DAPR date for that *Distribution Network Service Provider* after the Commencement Date.

Part ZZB Connecting Embedded Generators

11.68 Rules consequential on the making of the National Electricity Amendment (Connecting embedded generators) Rule 2014

11.68.1 Definitions

For the purposes of this rule 11.68:

Amending Rule means the National Electricity Amendment (Connecting embedded generators) Rule 2014.

commencement date means the date on which the Amending Rule commences operations.

11.68.2 Continuation of enquiries lodged

- (a) Unless an *Embedded Generator* and *Distribution Network Service Provider* otherwise agree, any enquiry lodged by the *Connection Applicant* under clause 5.3.2 that has not been responded to or otherwise finalised under clause 5.3.3 on the commencement date, must be responded to or finalised under clause 5.3.3 unless both the *Connection Applicant* and the *Distribution Network Service Provider* agree otherwise.

Part ZZC Customer access to information about their energy consumption

11.69 Rules consequential on the making of the National Electricity Amendment (Customer access to information about their energy consumption) Rule 2014

11.69.1 Definitions

For the purposes of this rule 11.69:

amending rule means the National Electricity Amendment (Customer access to information about their energy consumption) Rule 2014.

commencement date means 1 December 2014.

11.69.2 AEMO to develop and publish the metering data provision procedure

- (a) The *metering data provision procedures* must be developed and *published* by AEMO by 1 September 2015.
- (b) The procedures *published* by AEMO under paragraph (a) will commence on 1 March 2016.

Part ZZD National Electricity Amendment (Distribution Network Pricing Arrangements) Rule 2014

Division 1 Miscellaneous transitional provisions

11.70 General provisions

11.70.1 Definitions

In this Part ZZD:

Amending Rules means Schedules 1, 3 and 4 of the National Electricity Amendment (Distribution Network Pricing Arrangements) Rule 2014.

current Chapter 6 means Chapter 6 of the *Rules* as in force immediately after the Amending Rules come into force.

former Chapter 6 means Chapter 6 of the *Rules* as in force immediately before the Amending Rules come into force.

NSW/ACT DNSP means each of the following *Distribution Network Service Providers*:

- (a) ActewAGL, the joint venture between ACTEW Distribution Limited ACN 073 025 224 and Jemena Networks (ACT) Pty Ltd ACN 008 552 663 providing distribution services in the Australian Capital Territory, or any successor to its business;
- (b) Ausgrid, the energy services corporation of that name (formerly known as EnergyAustralia), which is constituted under section 7 of the *Energy Services Corporations Act 1995* (NSW) and specified in Part 2 of Schedule 1 to that Act, or any successor to its business;
- (c) Endeavour Energy, the energy services corporation of that name (formerly known as Integral Energy), which is constituted under section 7 of the *Energy Services Corporations Act 1995* (NSW) and specified in Part 2 of Schedule 1 to that Act, or any successor to its business; and
- (d) Essential Energy, the energy services corporation of that name (formerly known as Country Energy), which is constituted under section 7 of the *Energy Services Corporations Act 1995* (NSW) and specified in Part 2 of Schedule 1 to that Act, or any successor to its business.

Qld/SA DNSP means each of the following *Distribution Network Service Providers*:

- (a) Energex Limited ACN 078 849 055 or any successor to its business;
- (b) Ergon Energy Corporation Limited ACN 087 646 062 or any successor to its business; and
- (c) SA Power Networks (formerly known as ETSA Utilities) ABN 13 332 330 749 or any successor to its business.

SA TNSP means ElectraNet Pty Ltd ACN 094 482 416, trading as ElectraNet, or any successor to its business.

Tasmanian DNSP means Aurora Energy Pty Ltd ACN 082 464 622, or any successor to its business.

Victorian DNSP means each of the following *Distribution Network Service Providers*:

- (a) United Energy Distribution Pty Ltd ACN 064 651 029 or any successor to its business;
- (b) Jemena Electricity Networks (Vic) Limited ACN 064 651 083 or any successor to its business;
- (c) CitiPower Pty ACN 064 651 056 or any successor to its business;
- (d) Powercor Australia Limited ACN 064 651 109 or any successor to its business; and
- (e) SPI Electricity Pty Limited ACN 064 651 118 or any successor to its business.

11.70.2 Application of Part ZZB

This Part ZZB prevails to the extent of any inconsistency over any other clause of the *Rules*.

11.71 Special provisions applying to SA TNSP

- (a) This rule 11.71 applies in relation to the SA TNSP.
- (b) Solely for the purpose of the setting and *publication* of the SA TNSP's prices for *prescribed transmission services* for the *regulatory year* commencing 1 July 2017 in accordance with rules 6A.23 and 6A.24, paragraph 6A.3.1(1) is amended to read "(1) the *revenue determination* forming part of the applicable *transmission determination*, but as if the Δ CPI figure in the formula in the *revenue determination* to calculate the allowed revenue for the regulatory year commencing 1 July 2017 were the estimated Δ CPI figure *published* by the AER under clause 11.71(c)".
- (c) The AER must, by a date that is 5 months prior to the commencement of the *regulatory year* commencing 1 July 2017, *publish* its reasonable estimate of the annual percentage change in the ABS consumer price index (CPI) all groups, weighted average of eight capital cities from March 2016 to March 2017 (the Δ CPI).
- (d) Paragraph (b) does not otherwise alter the meaning of the *maximum allowed revenue* of the SA TNSP for the *regulatory year* commencing 1 July 2017.

Note

For example, any *over-recovery amount* or *under-recovery amount* resulting from the difference between the estimated Δ CPI published by the AER and the actual Δ CPI published by the Australian Bureau of Statistics would lead to the adjustment of the *pre-adjusted non-locational component* under clause 6A.23.3.

Division 2 Transitional provisions for NSW/ACT and Qld/SA Distribution Network Service Providers

11.72 General provisions

11.772.1 Definitions

In this Division 2:

affected DNSP means a NSW/ACT DNSP or a Qld/SA DNSP.

initial regulatory control period means the *regulatory control period* commencing 1 July 2015.

11.73 Special provisions applying to affected DNSPs

11.73.1 Distribution determination and pricing proposals

- (a) Former Chapter 6 governs the making of a distribution determination (not including a *tariff structure statement*) for the initial regulatory control period of an affected DNSP.
- (b) Former Chapter 6 applies in relation to an affected DNSP's *pricing proposals* for the first and second *regulatory years* of the initial regulatory control period of the affected DNSP.
- (c) Current Chapter 6 applies in relation to an affected DNSP's *pricing proposals* for the third and remaining *regulatory years* of the initial regulatory control period of the affected DNSP subject to the modifications set out in the following table:

Description	Reference	Transitional treatment
Submission of a <i>pricing proposal</i>	Clause 6.18.2(b)(7)	"including" is replaced with "and".
Approval of a <i>pricing proposal</i>	Clause 6.18.8(a)(1)	"including" is replaced with "and".

11.73.2 Tariff structure statement

- (a) The making, amendment and operation of an affected DNSP's *tariff structure statement* for the initial regulatory control period is governed by current Chapter 6 subject to the modifications set out in the following table:

Description	Reference	Transitional treatment
Submission of <i>tariff structure statement</i>	Clause 6.8.2(a), (b), (e), (f)	All references to "regulatory proposal" are removed. Sub-paragraphs (b)(1) and (b)(2) are replaced with "by 27 November 2015".
Requirements for a <i>regulatory proposal</i>	Clause 6.8.2(c), (c1), (c2), (d)	These rules do not apply. Insert a new clause 6.8.2(c): "A proposed <i>tariff structure statement</i> must be accompanied by information that contains a description (with supporting materials) of how the proposed <i>tariff structure statement</i> complies with the <i>pricing principles for direct control services</i> ".
Overview paper to accompany a proposed <i>tariff structure statement</i>	Clause 6.8.2(c1a)	"The overview paper must also include" is replaced with "The proposed <i>tariff structure statement</i> must be accompanied by an overview paper which includes".
Preliminary examination of a <i>tariff structure statement</i>	Clause 6.9.1	All references to "regulatory proposal" are removed. Sub-paragraph (a)(1) does not apply.
Resubmission of proposal	Clause 6.9.2	All references to "regulatory proposal" are removed.

Description	Reference	Transitional treatment
Consultation of the proposed <i>tariff structure statement</i>	Clause 6.9.3	Sub-paragraphs (a)(1) and (a)(4) do not apply. All references to "<i>regulatory proposal</i>" are removed. In all instances, "sub-paragraphs (a)(1) to (a)(4)" is replaced with "sub-paragraphs (a)(2) and (a)(3)". In all instances, "sub-paragraphs (a)(1) to (a)(3)" is replaced with "sub-paragraphs (a)(2) and (a)(3)".
Draft determination on a <i>tariff structure statement</i>	Clause 6.10.1	In all instances, "draft distribution determination in relation to" is replaced with "draft determination on the proposed <i>tariff structure statement</i> submitted by". In all instances in sub-paragraph (b)(3), "draft distribution determination" is replaced with "draft determination". All references to "<i>regulatory proposal</i>" are removed. In sub-paragraph (b)(2), "sub-paragraphs 6.9.3(a)(1) to 6.9.3(a)(4)" is replaced with "sub-paragraphs 6.9.3(a)(2) and (3)".
Publication of draft determination on a <i>tariff</i>	Clause 6.10.2	In all instances, "distribution

Description	Reference	Transitional treatment
<i>structure statement</i>		determination" is replaced with "determination on the proposed <i>tariff structure statement</i>". In paragraph (a), before "<i>publish</i>", add "but by no later than 1 July 2016". Sub-paragraph (a)(3) is replaced with "(3) the <i>AER</i>'s reasons for suggesting that the proposed <i>tariff structure statement</i> should or should not be approved;". Sub-paragraph (a)(4) and paragraph (b) do not apply.
Submission of revised proposal	Clause 6.10.3	All references to "revised <i>regulatory proposal</i>" are removed. Paragraphs (c) and (c1) do not apply. In all instances, "distribution determination" is replaced with "determination on the proposed <i>tariff structure statement</i>".
Submission on specified matters	Clause 6.10.4	All references to "revised <i>regulatory proposal</i>" are removed.
Making of determination	Clause 6.11.1	In all instances, "distribution determination" is replaced with "determination on the proposed <i>tariff structure</i>

Description	Reference	Transitional treatment
		<i>statement</i>". All references to "<i>regulatory proposal</i>" are removed. In paragraphs (a) and (b), "in relation" is replaced with "submitted by".
Out of scope revised regulatory proposal or late submissions	Clause 6.11.1A	In all instances, "distribution determination" is replaced with "determination on the proposed <i>tariff structure statement</i>". All references to "revised <i>regulatory proposal</i>" and "<i>regulatory proposal</i>" are removed.
Notice of determination	Clause 6.11.2	In all instances, "distribution determination" is replaced with "determination on the proposed <i>tariff structure statement</i>". "2 months before the commencement of the relevant <i>regulatory control period</i>" is replaced with "30 January 2017". Paragraph (3) is replaced with "(3) the AER's reasons for making the determination in its final form".
Commencement of the <i>tariff structure</i>	Clause 6.11.3	Paragraph (a) is replaced with "(a) A

Description	Reference	Transitional treatment
<i>statement</i>		<i>tariff structure statement</i> included in the AER's determination under this rule 6.11 takes effect at the commencement of the third <i>regulatory year</i> of the <i>regulatory control period</i> to which it relates". Paragraph (b) does not apply.
Constituent decisions of a distribution determination	Clause 6.12.1	This rule does not apply.
Reasons for decisions	Clause 6.12.2	In paragraph (a), "draft distribution determination" is replaced with "draft determination". In paragraph (a), "final distribution determination" is replaced with "final determination". In sub-paragraph (a)(2), delete from ", including:" to the end of sub-paragraph (ii). Paragraph (b) does not apply.
Extent of the AER's discretion in making the determination	Clause 6.12.3(a)-(j)	These rules do not apply.
Amending a proposed <i>tariff structure statement</i>	Clause 6.12.3(l)	"distribution determination in relation to a <i>Distribution Network Service Provider</i> " is replaced with "final determination under rule

Description	Reference	Transitional treatment
		6.11". "that distribution determination" is replaced with "that determination".
Revocation and substitution of a <i>tariff structure statement</i> for wrong information or error	Rule 6.13	In all instances, "distribution determination" is replaced with " <i>tariff structure statement</i> ".
Tariff structure statement	Clause 6.18.1A(f)	Insert "subsequent" before " <i>regulatory year</i> ".
Amending a current <i>tariff structure statement</i>	Clause 6.18.1B	"(other than the first <i>regulatory year</i> of a <i>regulatory control period</i>)" is replaced with "(other than the third <i>regulatory year</i> of a <i>regulatory control period</i>)".
Sub-threshold tariffs	Clause 6.18.1C(a)	"(other than the first <i>regulatory year</i> of a <i>regulatory control period</i>)" is replaced with "(other than the third <i>regulatory year</i> of a <i>regulatory control period</i>)".

- (b) For the avoidance of doubt, an affected DNSP's *tariff structure statement* for the initial regulatory control period does not form a part of the distribution determination for the initial regulatory control period of that affected DNSP.

11.73.3 Dispute resolution

Until the end of the second *regulatory year* of the initial regulatory control period of an affected DNSP, the reference in clause 6.22.2(a)(1) to "the *Distribution Network Service Provider's tariff structure statement*" is deemed to be removed.

Division 3 Transitional provisions for Tasmanian Distribution Network Service Provider

11.74 Application of former Chapter 6

Former Chapter 6 applies to the exclusion of current Chapter 6 in relation to the *regulatory control period* of the Tasmanian DNSP commencing 1 July 2012.

Division 4 Transitional provisions for Victorian Distribution Network Service Providers

11.75 General provisions

11.75.1 Definitions

In this Division 4:

affected DNSP means a Victorian DNSP.

initial regulatory control period means the regulatory control period commencing 1 January 2016.

11.76 Special provisions applying to affected DNSPs

11.76.1 Distribution determination and pricing proposals

- (a) Former Chapter 6 governs the making of a distribution determination (not including a *tariff structure statement*) for the initial regulatory control period of an affected DNSP.
- (b) Former Chapter 6 applies in relation to an affected DNSP's *pricing proposal* for the first *regulatory year* of the initial regulatory control period of the affected DNSP.
- (c) Current Chapter 6 applies in relation to an affected DNSP's *pricing proposals* for the second and remaining *regulatory years* of the initial regulatory control period of the affected DNSP. subject to the modifications set out in the following table:

Description	Reference	Transitional treatment
Submission of a <i>pricing proposal</i>	Clause 6.18.2(b)(7)	"including" is replaced with "and".
Approval of a <i>pricing proposal</i>	Clause 6.18.8(a)(1)	"including" is replaced with "and".

11.76.2 Tariff structure statement

- (a) The making, amendment and operation of an affected DNSP's *tariff structure statement* for the initial regulatory control period is governed by current Chapter 6 subject to the modifications set out in the following table:

Description	Reference	Transitional treatment
Submission of <i>tariff structure statement</i>	Clause 6.8.2(a), (b), (e), (f)	All references to " <i>regulatory proposal</i> " are removed. Sub-paragraphs (b)(1) and (b)(2) are replaced with "by 25 September 2015".
Requirements for a <i>regulatory proposal</i>	Clause 6.8.2(c), (c1), (c2), (d)	These rules do not apply. Insert a new clause 6.8.2(c): "A proposed <i>tariff structure statement</i> must be accompanied by information that contains a description (with supporting materials) of how the proposed <i>tariff structure statement</i> complies with the <i>pricing principles for direct control services</i> ".
Overview paper to accompany a proposed <i>tariff structure statement</i>	Clause 6.8.2(c1a)	"The overview paper must also include" is replaced with "The proposed <i>tariff structure statement</i> must be accompanied by an overview paper which includes".
Preliminary examination of a <i>tariff structure statement</i>	Clause 6.9.1	All references to " <i>regulatory proposal</i> " are removed. Sub-paragraph (a)(1)

Description	Reference	Transitional treatment
		does not apply.
Resubmission of proposal	Clause 6.9.2	All references to "<i>regulatory proposal</i>" are removed. In paragraph (a), "20 <i>business days</i>" is replaced with "10 <i>business days</i>".
Consultation of the proposed <i>tariff structure statement</i>	Clause 6.9.3	Sub-paragraphs (a)(1) and (a)(4) do not apply. All references to "<i>regulatory proposal</i>" are removed. In all instances, "sub-paragraphs (a)(1) to (a)(4)" is replaced with "sub-paragraphs (a)(2) and (a)(3)". In all instances, "sub-paragraphs (a)(1) to (a)(3)" is replaced with "sub-paragraphs (a)(2) and (a)(3)". In sub-paragraph (b)(1), "40 <i>business days</i>" is replaced with "30 <i>business days</i>". In paragraph (c), "30 <i>business days</i>" is replaced with "15 <i>business days</i>".
Draft determination on a <i>tariff structure statement</i>	Clause 6.10.1	In all instances, "draft distribution determination in relation to" is replaced with "draft determination on the proposed <i>tariff structure statement</i> submitted by".

Description	Reference	Transitional treatment
		In all instances in sub-paragraph (b)(3), "draft distribution determination" is replaced with "draft determination". All references to "<i>regulatory proposal</i>" are removed. In sub-paragraph (b)(2), "sub-paragraphs 6.9.3(a)(1) to 6.9.3(a)(4)" is replaced with "sub-paragraphs 6.9.3(a)(2) and (3)".
Publication of draft determination on a <i>tariff structure statement</i>	Clause 6.10.2	In all instances, "distribution determination" is replaced with "determination on the proposed <i>tariff structure statement</i>". In paragraph (a), before "<i>publish</i>", add "but by no later than 22 February 2016". Sub-paragraph (a)(3) is replaced with "(3) the AER's reasons for suggesting that the proposed <i>tariff structure statement</i> should or should not be approved;". Sub-paragraph (a)(4) and paragraph (b) do not apply.
Submission of revised proposal	Clause 6.10.3	All references to " <i>revised regulatory proposal</i> " are removed.

Description	Reference	Transitional treatment
		Paragraphs (c) and (c1) do not apply. In all instances, "distribution determination" is replaced with "determination on the proposed <i>tariff structure statement</i>".
Submission on specified matters	Clause 6.10.4	All references to "revised regulatory proposal" are removed.
Making of determination	Clause 6.11.1	In all instances, "distribution determination" is replaced with "determination on the proposed <i>tariff structure statement</i>". All references to "<i>regulatory proposal</i>" are removed. In paragraphs (a) and (b), "in relation" is replaced with "submitted by".
Out of scope revised regulatory proposal or late submissions	Clause 6.11.1A	In all instances, "distribution determination" is replaced with "determination on the proposed <i>tariff structure statement</i>". All references to "revised <i>regulatory proposal</i>" and "<i>regulatory proposal</i>" are removed.
Notice of determination	Clause 6.11.2	In all instances, "distribution

Description	Reference	Transitional treatment
		determination" is replaced with "determination on the proposed <i>tariff structure statement</i>". "2 months before the commencement of the relevant <i>regulatory control period</i>" is replaced with "29 July 2016". Paragraph (3) is replaced with "(3) the AER's reasons for making the determination in its final form".
Commencement of the <i>tariff structure statement</i>	Clause 6.11.3	Paragraph (a) is replaced with "(a) A <i>tariff structure statement</i> included in the AER's determination under this rule 6.11 takes effect at the commencement of the second <i>regulatory year</i> of the <i>regulatory control period</i> to which it relates". Paragraph (b) does not apply.
Constituent decisions of a distribution determination	Clause 6.12.1	This rule does not apply.
Reasons for decisions	Clause 6.12.2	In paragraph (a), "draft distribution determination" is replaced with "draft determination". In paragraph (a), "final distribution

Description	Reference	Transitional treatment
		determination" is replaced with "final determination". In sub-paragraph (a)(2), delete from ", including:" to the end of sub-paragraph (ii). Paragraph (b) does not apply.
Extent of the AER's discretion in making the determination	Clause 6.12.3(a)-(j)	These rules do not apply.
Amending a proposed <i>tariff structure statement</i>	Clause 6.12.3(l)	"distribution determination in relation to a <i>Distribution Network Service Provider</i>" is replaced with "final determination under rule 6.11". "that distribution determination" is replaced with "that determination".
Revocation and substitution of a <i>tariff structure statement</i> for wrong information or error	Rule 6.13	In all instances, "distribution determination" is replaced with " <i>tariff structure statement</i> ".
Tariff structure statement	Clause 6.18.1A(f)	Insert "subsequent" before " <i>regulatory year</i> ".
Amending a current <i>tariff structure statement</i>	Clause 6.18.1B	"(other than the first <i>regulatory year</i> of a <i>regulatory control period</i>)" is replaced with "(other than the second <i>regulatory year</i> of a <i>regulatory control period</i>)".

Description	Reference	Transitional treatment
Sub-threshold tariffs	Clause 6.18.1C(a)	"(other than the first <i>regulatory year</i> of a <i>regulatory control period</i>)" is replaced with "(other than the second <i>regulatory year</i> of a <i>regulatory control period</i>)".

- (b) For the avoidance of doubt, an affected DNSP's *tariff structure statement* for the initial regulatory control period does not form a part of the distribution determination for the initial regulatory control period of that affected DNSP.

11.76.3 Dispute resolution

Until the end of the first *regulatory year* of the initial regulatory control period of an affected DNSP, the reference in clause 6.22.2(a)(1) to "the *Distribution Network Service Provider's tariff structure statement*" is deemed to be removed.

Part ZZE Early Application of Network Capability Component (STPIS)

11.77 Rules consequent on the making of the National Electricity Amendment (Early Application of Service Target Performance Incentive Scheme (STPIS) Components for Transmission Businesses) Rule 2015

11.77.1 Definitions

For the purposes of this rule 11.77:

Amending Rule means the National Electricity Amendment (Early Application of Service Target Performance Incentive Scheme (STPIS) Components for Transmission Businesses) Rule 2015.

commencement date means the day on which the Amending Rule commences operation.

current regulatory control period means, for a *Transmission Network Service Provider*, a *regulatory control period* that commenced before the commencement date and, as at the commencement date, has not ended.

network capability component means the network capability component described in the relevant STIPS.

priority project has the meaning set out in the glossary of the relevant STPIS.

proposal means the proposal described in clause 11.77.3(b).

relevant STPIS means version 4.1 of the *service target performance incentive scheme* dated September 2014.

start date means the date from which the network capability component will apply to a *Transmission Network Service Provider*.

11.77.2 Purpose

The purpose of this rule 11.77 is to allow a *Transmission Network Service Provider* to apply to the *AER* for the application of the network capability component during its current regulatory control period.

11.77.3 Earlier application of the network capability component of the service target performance incentive scheme

- (a) The Amending Rule applies to a *Transmission Network Service Provider*, which will be subject to the network capability component during its next *regulatory control period*, for the current regulatory control period.

Submission of proposal

- (b) If a *Transmission Network Service Provider* wishes the network capability component to apply to it during its current regulatory control period, the *Transmission Network Service Provider* must submit a proposal to the *AER* setting out:
- (1) the proposed start date for the network capability component, which must be a date no earlier than 60 *business days* after the proposal is submitted;
 - (2) if relevant, information on whether the *Transmission Network Service Provider* could apply the network capability component earlier than the proposed start date;
 - (3) its network capability incentive parameter action plan (NCIPAP) that covers the period from the proposed start date to the end of its current regulatory control period and complies with clause 5.2(b)-(j) and (q) of the relevant STPIS; and
 - (4) a description of how the *Transmission Network Service Provider* has engaged with electricity consumers in relation to its NCIPAP and how the *Transmission Network Service Provider* has sought to address any relevant concerns identified as a result of that engagement.

Preliminary examination and determination on compliance with relevant information requirements

- (c) If the *AER* receives a proposal under paragraph (b), it must:

- (1) make a determination on whether the proposal complies with the relevant information requirements of the submission guidelines in respect of the relevant STPIS; and
 - (2) notify the *Transmission Network Service Provider* of its determination within 10 *business days* after receiving the proposal.
- (d) A determination referred to in paragraph (c) must be accompanied by written reasons that set out, where applicable:
 - (1) the respects in which the proposal does not comply with the relevant information requirements of the submission guidelines; and
 - (2) the requirements that have not been complied with.

Revision of proposal

- (e) If the *AER* notifies a *Transmission Network Service Provider* that its proposal does not comply with the relevant information requirements of the submission guidelines in a determination under paragraph (c), the *Transmission Network Service Provider*:
 - (1) must, within 10 *business days* after receiving that notice, submit a revised proposal in a form that complies with the relevant information requirements identified in that determination; and
 - (2) may only make changes to its proposal under paragraph (b) to address the matters raised in the determination made under paragraph (d).

Publication and consultation on proposal

- (f) The *AER* must, as soon as practicable, *publish*
 - (1) the proposal or any revised proposal, submitted under paragraphs (b) or (e); and
 - (2) an invitation for written submissions from any person on the proposal within a period specified by the *AER*, being a period not less than 20 *business days* from the date of publication of the invitation for submissions.
- (g) Any person may make a written submission to the *AER* on the proposal, within the period specified in the invitation referred to in paragraph (f)(2).

Making of final decision

- (h) In making its final decision, the *AER* must consider the proposal, or any revised proposal, submitted under paragraph (b) or (e), and any written submissions made on the proposal or any revised proposal.
- (i) The *AER* must make its final decision in accordance with paragraphs (j) - (n).

- (j) In determining whether to approve a priority project and the ranking of such projects, the *AER* is to apply clauses 5.2(k)-(q) of the relevant STIPS and is to consider any submissions made pursuant to paragraph (f)(2).

Requirements relating to final decision

- (k) A final decision under paragraph (i) is a decision by the *AER* on whether to apply the network capability component to a *Transmission Network Service Provider* during its current regulatory control period and (where relevant) must include a decision on:
 - (1) the start date; and
 - (2) the *Transmission Network Service Provider's* priority projects,and set out reasons for the decision.
- (l) The *AER* may make a decision on a start date which is different to the proposed start date, provided the start date is not later than the proposed start date.
- (m) If the *AER* makes a final decision that the network capability component will apply to a *Transmission Network Service Provider* then it will apply to the relevant *Transmission Network Service Provider* from the start date.

Notice of final decision

- (n) The *AER* must, at least 1 *business day* before the start date, but not later than 20 *business days* before the proposed start date, *publish*:
 - (1) notice of the making of the final decision; and
 - (2) the final decision, including its reasons.

Actions performed prior to the commencement date

- (o) Any action taken by a *Transmission Network Service Provider* prior to the commencement date that fulfils the requirements of paragraph (b)(3) is taken to satisfy the requirements of that paragraph, notwithstanding it was done prior to the commencement date.

Part ZZF National Electricity Amendment (Governance arrangements and implementation of the reliability standard and settings) Rule 2015

11.78 Rules consequent on the making of the National Electricity Amendment (Governance arrangements and implementation of the reliability standards and settings) Rule 2015

11.78.1 Definitions

In this Part ZZF:

Amending Rule means the National Electricity Amendment (Governance arrangements and implementation of the reliability standard and settings) Rule 2015.

commencement date means the commencement date of the Amending Rule.

current Chapter 3 means Chapter 3 of the *Rules* as in force immediately after the commencement date.

current Chapter 4 means Chapter 4 of the *Rules* as in force immediately after the commencement date.

current Chapter 10 means Chapter 10 of the *Rules* as in force immediately after the commencement date.

former Chapter 10 means Chapter 10 of the *Rules* as in force immediately before the commencement date.

RSIG commencement date means 31 December 2015.

11.78.2 Existing power system security and reliability standards

For the avoidance of doubt:

- (a) with effect from the commencement date, the *reliability standard* (as defined in former Chapter 10) ceases to have any effect and the *reliability standard* (as defined in current chapter 10) has effect for the purposes of these *Rules*.
- (b) the *Reliability Panel* is not required to make any change to the *power system security standards* as a result of the Amending Rule.

11.78.3 Reliability standard and settings guidelines

The *Reliability Panel* must publish the first *reliability standard and settings guidelines* by 1 January 2017.

11.78.4 Reliability standard implementation guidelines

- (a) *AEMO* must publish the first *reliability standard implementation guidelines* by the RSIG commencement date.
- (b) In this clause 11.78.4:
 - (1) a reference to a “former clause...” is a reference to a clause of the *Rules* as in force immediately before the commencement date;
 - (2) a reference to a “former definition...” is a reference to a definition in Chapter 10 of the *Rules* as in force immediately before the commencement date; and

- (3) a reference to a “current definition...” is a reference to a definition in Chapter 10 of the Rules as in force immediately after the commencement date.
- (c) Current Chapter 3 applies from the commencement date subject to the modifications set out in the following table:

Description	Reference	Transitional treatment
Administration of PASA	Clause 3.7.1	Former clause 3.7.1 continues to apply until the RSIG commencement date.
Medium Term PASA	Clause 3.7.2	Former clause 3.7.2 continues to apply until the RSIG commencement date.
Short Term PASA	Clause 3.7.3	Former clause 3.7.3 continues to apply until the RSIG commencement date

- (d) Current Chapter 4 applies from the commencement date subject to the modifications set out in the following table:

Description	Reference	Transitional treatment
Reliable Operating State	Clause 4.2.7	Former clause 4.2.7 continues to apply until the RSIG commencement date but as if the words “ <i>power system security and reliability standards</i> ” were replaced with the words “ <i>reliability standard</i> ”.
Responsibility of AEMO for <i>power system security</i>	Clause 4.3.1	Former clause 4.3.1 continues to apply until the RSIG commencement date but as if the words “ <i>power system security and reliability standards</i> ” (wherever occurring in

Description	Reference	Transitional treatment
		that clause) were replaced with the words “ <i>power system security standards</i> ”.
Declaration of conditions	Clause 4.8.4	Former clause 4.8.4 continues to apply until the RSIG commencement date.
Load forecasting	Clause 4.9.1	Former clause 4.9.1 continues to apply until the RSIG commencement date but as if the words “ <i>power system security and reliability standards</i> ” (wherever occurring in that clause) were replaced with the words “ <i>power system security standards</i> ”.

- (e) Current Chapter 10 applies from the commencement date subject to the modifications set out in the following table:

Description	Reference	Transitional treatment
Definitions of <i>medium term capacity reserve</i> and <i>short term capacity reserve</i>	Chapter 10	The former definitions of “ <i>medium term capacity reserve</i> and <i>short term capacity reserve</i> ” continue in effect until the RSIG commencement date.
<i>medium term capacity reserve standard</i>	Chapter 10	The former definition of “ <i>medium term capacity reserve standard</i> ” continues in effect until the RSIG commencement date but as if the words “ <i>power system security and reliability standards</i> ”

Description	Reference	Transitional treatment
		were replaced with the words “ <i>reliability standard</i> ”.
<i>power system security standards</i>	Chapter 10	Until the RSIG commencement date, the current definition applies but as if the following words were inserted before the full stop at the end of the definition “, <i>short term capacity reserves and medium term capacity reserves</i> ”

Part ZZG Improving demand side participation information provided to AEMO by registered participants

11.79 Rules consequential on making of the National Electricity Amendment (Improving demand side participation information provided to AEMO by registered participants) Rule 2015

11.79.1 AEMO to develop and publish the demand side participation information guidelines

- (a) The first demand side participation information guidelines (as defined in rule 3.7D) must be developed and *published* by AEMO by 26 September 2016.

Part ZZH Transitional Arrangements for Aligning TasNetworks' regulatory control periods

11.80 National Electricity Amendment (Aligning TasNetworks' regulatory control periods) Rule 2015

11.80.1 Definitions

For the purposes of this rule 11.80:

Amending Rule means the National Electricity Amendment (Aligning TasNetworks' regulatory control periods) Rule 2015.

commencement date means the date on which the Amending Rule commences operation.

current regulatory control period means the *regulatory control period* for TasNetworks that ends on 30 June 2017.

next regulatory control period means the *regulatory control period* for TasNetworks that immediately follows the current regulatory control period.

subsequent regulatory control period means the *regulatory control period* for TasNetworks that immediately follows the next regulatory control period.

TasNetworks means Tasmanian Networks Pty Ltd ACN 167 357 299, in its capacity as *Distribution Network Service Provider*.

Note

The current distribution determination in place for TasNetworks was made for its predecessor, Aurora Energy Pty Limited (ACN 082 464 622).

11.80.2 Application of rule 11.80

This rule 11.80 prevails to the extent of any inconsistency over any other clause of the Rules.

11.80.3 Next regulatory control period

A distribution determination for TasNetworks for the next regulatory control period must specify that the next regulatory control period commences on 1 July 2017 and ends on 30 June 2019, and the provisions of the *Rules* must be applied consistently with this requirement.

11.80.4 Subsequent regulatory control period

For the purposes of making a distribution determination for TasNetworks for the subsequent regulatory control period, the provisions of the *Rules* must be applied consistently with the requirement in clause 11.80.3.

Part ZZI System Restart Ancillary Services

11.81 Rules consequential on the making of the National Electricity Amendment (System Restart Ancillary Services) Rule 2015

11.81.1 Definitions

For the purposes of this rule 11.81:

Amending Rule means the National Electricity Amendment (System Restart Ancillary Services) Rule 2015.

Commencement Date means the date of commencement of the Amending Rule.

existing SRAS contract means an *ancillary services agreement* between AEMO and another person for the provision of *system restart ancillary services* entered into prior to the Commencement Date.

old clause 3.11.4A means clause 3.11.4A of the *Rules* as in force immediately prior to the Commencement Date.

11.81.2 System restart standard

As soon as practicable after the Commencement Date, the *Reliability Panel* must revise the *system restart standard* to take into account the Amending Rule and provide the revised standard to the *AEMC*.

11.81.3 SRAS Guideline

As soon as practicable after the *AEMC publishes* the *system restart standard* as revised by the *Reliability Panel* under clause 11.81.2, *AEMO* must develop and *publish* the first SRAS Guideline and NSCAS tender guidelines.

11.81.4 Regional Benefit Ancillary Services Procedures

As soon as practicable after the Commencement Date, *AEMO* must amend and *publish* the Regional Benefit Ancillary Services Procedures referred to in clause 3.15.6A to take into account the Amending Rule.

11.81.5 Consultation prior to the Commencement Date

If, prior to the Commencement Date, and for the purposes of developing or amending the standards, guidelines and procedures referred to in clauses 11.81.2 to 11.81.4, either *AEMO* or the *Reliability Panel* undertook a consultation, step decision or action equivalent to that consultation, step decision or action as required under:

- (a) in the case of *AEMO*, the *Rules consultation procedures*; or
- (b) in the case of the *Reliability Panel*, the requirements of clause 8.8.3(d) to (j), then that consultation, step decision or action is taken to satisfy the relevant requirement for the equivalent consultation, step decision or action.

11.81.6 Existing SRAS Contract

- (a) *AEMO* may continue to acquire *system restart ancillary services* under an existing SRAS contract and may extend the period of an existing SRAS contract for such period as *AEMO* and that person reasonably determine.
- (b) Any reference in an existing SRAS contract to a document *published* by *AEMO* under old clause 3.11.4A is taken to be a reference to the relevant provision of that document as in effect immediately before the Commencement Date.

Part ZZJ Demand management incentive scheme

11.82 Rules consequential on making of the National Electricity Amendment (Demand management incentive scheme) Rule 2015

11.82.1 Definitions

- (a) In this rule 11.82:

Amending Rule means the National Electricity Amendment (Demand Management Incentive Scheme) Rule 2015.

commencement date means the date Schedules 1, 2 and 3 of the Amending Rule commence.

new clauses 6.6.3 and 6.6.3A means clauses 6.6.3 and 6.6.3A of the *Rules* as in force after the commencement date.

- (b) Italicised terms used in this rule have the same meaning as under Schedule 3 of the Amending Rule.

11.82.2 AER to develop and publish the demand management incentive scheme and demand management innovation allowance mechanism

- (a) By 1 December 2016, the *AER* must develop and *publish* the first:
- (i) *demand management incentive scheme* under new clause 6.6.3; and
 - (ii) *demand management innovation allowance mechanism* under new clause 6.6.3A.

Part ZZK AEMO access to demand forecasting information

11.83 Rules consequential on the making of the National Electricity Amendment (AEMO access to demand forecasting information) Rule 2015

11.83.1 AEMO to include supporting information in NTNDP database

Despite clause 5.20.4(b2), *AEMO* must include the information referred to in that clause in the *NTNDP database* by no later than 1 July 2017.

Part ZZL Compensation arrangements following application of an Administered Price Cap or Administered Floor Price

11.84 Rules consequential on the making of the National Electricity Amendment (Compensation Arrangements following application of an Administered Price Cap and Administered Floor Price) Rule 2016

11.84.1 Definitions

In this rule 11.84:

Amending Rule means the National Electricity Amendment (Compensation Arrangements following application of an Administered Price Cap and Administered Floor Price) Rule 2016.

commencement date means the date Schedule 1 of the Amending Rule commences operation.

existing compensation guidelines means the compensation guidelines made by the AEMC under old clause 3.14.6.

old clause 3.14.6 means clause 3.14.6 of the *Rules* as in force immediately prior to the commencement date.

11.84.2 Compensation Guidelines

By the commencement date, the AEMC must, in accordance with the *transmission consultation procedures*, amend the existing compensation guidelines to take into account the Amending Rule and *publish* the compensation guidelines under clause 3.14.6(c) .

Part ZZM Common definitions of distribution reliability measures

11.85 Rules consequential on the making of the National Electricity Amendment (Common definitions of distribution reliability measures) Rule 2015

11.85.1 Definitions

(a) In this rule 11.85:

Amending Rule means the National Electricity Amendment (Common definitions of distribution reliability measures) Rule 2015.

effective date means 30 June 2017.

11.85.2 Distribution reliability measures guidelines

Despite clause 6.28(a), the *AER* must develop and *publish* the *distribution reliability measures guidelines* by 30 June 2017.

11.85.3 Amended STPIS

- (a) If, prior to the effective date, and for the purposes of developing changes to the current version of the *service target performance incentive scheme* in anticipation of the Amending Rule, the *AER* undertook a consultation, step, decision or action equivalent to that as required in the *distribution consultation procedures* or otherwise under the *Rules*, then that consultation, step, decision or action is taken to satisfy the equivalent consultation step, decision or action under the *distribution consultation procedures* or *Rules*.

Part ZZN Expanding competition in metering and metering related services

11.86 Rules consequent on making of the National Electricity Amendment (Expanding competition in metering and related services) Rule 2015

11.86.1 Definitions

Subject to this rule 11.86, in this rule 11.86:

Amending Rule means the National Electricity Amendment (Expanding competition in metering and metering related services) Rule 2015.

effective date means 1 December 2017.

old Chapter 7 means the Chapter 7 of the *Rules* as in force immediately before the effective date.

new Chapter 7 means the Chapter 7 of the *Rules* as in force immediately after the effective date.

new rule 2.4A means the new rule 2.4A of Chapter 2 of the *Rules* as in force immediately after the commencement of Schedule 1 of the Amending Rule and a reference to new clause 2.4A.1 or 2.4A.2 has a corresponding meaning.

11.86.2 References to old Chapter 7

Unless the context otherwise requires, on and from the effective date every reference to old Chapter 7 in the *Rules* or a document produced under the *Rules* is deemed to be a reference to the new Chapter 7.

11.86.3 References to provisions of the old Chapter 7

Unless the context otherwise requires, on and from the effective date every reference to a provision of the old Chapter 7 in the *Rules* or a document produced under the *Rules* is deemed to be a reference to the corresponding provision of the new Chapter 7 (if any).

11.86.4 References to responsible person

Unless the context otherwise requires, on and from the effective date every reference to a *responsible person* in the *Rules* or a document produced under the *Rules* is deemed to be a reference to a *Metering Coordinator*.

11.86.5 Continued operation of old Rules until the effective date

Subject to this rule 11.86, old Chapter 7:

- (a) continues to apply until the effective date; and
- (b) ceases to apply on and from the effective date.

11.86.6 New and amended procedures

- (a) By 1 September 2016, *AEMO* must amend and *publish* the following procedures to take into account the Amending Rule:
 - (1) *service level procedures*;
 - (2) *Market Settlement and Transfer Solution Procedures*;
 - (3) *metrology procedure*;
 - (4) *meter churn procedures*; and
 - (5) *RoLR Procedures*.
- (b) By 1 September 2016, *AEMO* must develop and *publish* the following procedures to take into account the Amending Rule:
 - (1) *emergency priority procedures*;
 - (2) procedures relating to the *minimum services specification* in accordance with clause 7.8.3(b) of new Chapter 7; and
 - (3) procedures relating to the installation and removal of *network devices* in accordance with clause 7.8.6(i) of new Chapter 7.
- (c) *AEMO* in its complete discretion may amend:
 - (1) the *service level procedures* to make provision for the procedures listed in subparagraphs (b)(1) and b(2); and

- (2) the *meter churn procedures* to make provision for the procedures listed in subparagraph (b)(3),

instead of developing new procedures.
- (d) By 1 March 2017, *AEMO* must develop and *publish* information relating to the process by which persons can apply for registration as *Metering Coordinators* under new rule 2.4A to take into account the Amending Rule.
- (e) **[Deleted]**
- (f) **[Deleted]**
- (g) By the date which is six months after the date on which *AEMO publishes* the information referred to in paragraph (d), *AEMO* must develop and *publish* a procedure relating to the issue of a *Metering Coordinator* default notice in accordance with clause 7.7.3(a) of new Chapter 7.
- (h) *AEMO* must:
 - (1) comply with the *Rules consultation procedures* when meeting its obligations under paragraphs (a), (b) and (g); and
 - (2) for the purposes of the *Rules consultation procedures*, consult with any person that has, in *AEMO's* opinion, or identifies itself to *AEMO* as having, an interest in the relevant procedure listed in subparagraph (1).

11.86.7 Metering Coordinator for type 5 or 6 metering installation from effective date

- (a) On and from the effective date, a *Local Network Service Provider* that was the *responsible person* for a type 5 or 6 *metering installation* connected to, or proposed to be connected to, the *Local Network Service Provider's network* under clause 7.2.3(a)(2) of old Chapter 7 or clause 9.9C.3 immediately before the effective date must be appointed as the *Metering Coordinator* by the *financially responsible Market Participant*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) By no later than 1 September 2017, the *Local Network Service Provider* must provide each *financially responsible Market Participant* with a standard set of terms and conditions on which it will agree to act as the *Metering Coordinator* with respect to a type 5 or type 6 *metering installation* referred to in paragraph (a).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) Unless the *financially responsible Market Participant* and *Local Network Service Provider* agree other terms and conditions to apply to the *Local Network Service Provider's* appointment as the *Metering Coordinator* under paragraph (a) prior to the effective date, the *Local Network Service Provider* will be deemed to be appointed as the *Metering Coordinator* on the standard terms and conditions of appointment referred to in paragraph (b) on and from the effective date.
- (d) The terms and conditions on which a *Local Network Service Provider* is appointed as *Metering Coordinator* under paragraph (a) or deemed to be appointed as *Metering Coordinator* under paragraph (c) must:
 - (1) include terms as to price which are consistent with Chapter 6 and, where relevant, Chapter 11;
 - (2) include a scope of services which is consistent with the responsibilities of the *Metering Coordinator* with respect to the *connection point* under new Chapter 7;
 - (3) provide that the *financially responsible Market Participant* may terminate the appointment or deemed appointment on reasonable notice to the *Metering Coordinator*;
 - (4) require the *Local Network Service Provider* promptly to notify the *financially responsible Market Participant* of a *metering installation malfunction* which occurs to a *metering installation* other than the installations referred to in clause 7.8.10(a)(1) of new Chapter 7;
 - (5) require the *financially responsible Market Participant* which receives a notice from the *Local Network Service Provider* under subparagraph (4) to promptly appoint a *Metering Coordinator*; and
 - (6) subject to paragraph (e), must not prevent, hinder or otherwise impede a *financially responsible Market Participant* from appointing a person other than the *Local Network Service Provider* as *Metering Coordinator* on any day following the effective date.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (e) Subparagraph (d)(6) does not prevent the terms and conditions on which a *Metering Coordinator* is appointed under paragraph (a) from including a requirement for the *financially responsible Market Participant* to pay the *Local Network Service Provider* an exit fee when the appointment ceases,

provided that the exit fee is consistent with Chapter 6 and, where relevant, Chapter 11.

- (f) An agreement between a *Local Network Service Provider* and the *financially responsible Market Participant* relating to the appointment under paragraph (a) or deemed appointment under paragraph (c) of the *Local Network Service Provider* as *Metering Coordinator* may include agreed terms and conditions that are in addition to those required by paragraph (d), provided the additional terms and conditions are consistent with paragraph (d).
- (g) Any *Metering Coordinator* appointed under paragraph (a) or deemed to be appointed under paragraph (c):
 - (1) is not required to meet the requirements of new clause 2.4A.2(a)(4) except if, immediately before the effective date, the *Metering Coordinator* is the *responsible person for metering installations* that would fall within the definition of *small customer metering installations* under the Amending Rule.
 - (2) is not obliged to comply with clause 7.8.10(a)(2) of new Chapter 7; and
 - (3) must promptly notify the *financially responsible Market Participant* of a *metering installation malfunction* which occurs to a *metering installation* other than the installations referred to in clause 7.8.10(a)(1) of new Chapter 7.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (h) A *financially responsible Market Participant* which receives a notice under subparagraph (g)(3) must promptly appoint a *Metering Coordinator*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (i) Any *Metering Coordinator* appointed by the *financially responsible Market Participant* following a notice under subparagraph (g)(3) must comply with clause 7.8.10(a)(2) of new Chapter 7 within 10 *business days* after its appointment.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (j) For the avoidance of doubt:

- (1) any *Metering Coordinator* appointed under paragraph (a), or deemed to be appointed under paragraph (c), must comply with Chapter 2 of the *Rules*, including the requirement that a *Metering Coordinator* be registered with *AEMO* as a *Metering Coordinator* under new clause 2.4A.1(a) of Chapter 2 of the *Rules*; and
 - (2) to the extent of any inconsistency between this clause 11.86.7 and clause 7.6.1(a) of new Chapter 7, this clause 11.86.7 prevails.
- (k) Despite anything to the contrary in the terms and conditions on which a *Local Network Service Provider* is appointed as *Metering Coordinator* under paragraph (a) or a deemed appointment under paragraph (c), that appointment will continue until the earlier of:
- (1) the services provided with respect to the *metering installation* ceasing to be classified by the *AER* as *direct control services*; and
 - (2) a *Metering Coordinator* being appointed with respect to that *connection point* under new Chapter 7.

Note

The consequence of this provision is that the appointment or deemed appointment (as the case may be) will come to an end when a new or replacement metering installation is installed in accordance with clause 7.8.3 or 7.8.4 of new Chapter 7, provided that the *AER* does not classify services provided by small customer metering installations or type 4A *metering installations* as direct control services.

11.86.8 Distribution Ring Fencing Guidelines

- (a) *AER* must by 1 December 2016 *publish Distribution Ring-Fencing Guidelines*.

11.86.9 [Deleted]

Part ZZO Embedded Networks

11.87 Rules consequential on the making of the National Electricity Amendment (Embedded Networks) Rule 2015

11.87.1 Definitions

- (a) In this rule 11.87:

Amending Rule means the National Electricity Amendment (Embedded Networks) Rule 2015.

effective date means 1 December 2017.

old Chapter 7 means the Chapter 7 of the *Rules* as in force immediately before the effective date.

- (b) Italicised terms used in this rule, not otherwise defined, have the same meaning as under Schedule 3 of the Amending Rule.

11.87.2 Amended Procedures and NMI Standing Data Schedule

- (a) By 1 September 2016, *AEMO* must amend and *publish* the following procedures to take account of the Amending Rule:
 - (1) *Market Settlement and Transfer Solution Procedures*;
 - (2) *metrology procedure*; and
 - (3) *service level procedure*.
- (b) **[Deleted]**
- (c) **[Deleted]**
- (d) By 1 September 2016, *AEMO* must amend and *publish* the NMI Standing Data Schedule referred to in clause 3.13.12A to take account of the Amending Rule.
- (e) *AEMO* must:
 - (1) comply with the *Rules consultation procedures* when meeting its obligations under paragraphs (a) and (d); and
 - (2) for the purposes of the *Rules consultation procedures*, consult with any person that has, in *AEMO's* opinion, or identifies itself to *AEMO* as having, an interest in the relevant procedure listed in subparagraph (a).

11.87.3 ENM service level procedures and guide to embedded networks and list of Embedded Network Managers

- (a) By 1 March 2017, *AEMO* must develop and *publish* the:
 - (1) *ENM service level procedures*; and
 - (2) guide to *embedded networks* referred to in clause 7.16.6B of the Amending Rule,in accordance with the Amending Rule.
- (b) From 1 March 2017 to the effective date, *AEMO* must maintain and *publish* an interim list of *Embedded Network Managers* and update this list as persons are accredited as *Embedded Network Managers*.

11.87.4 Exemptions under section 13 of the National Electricity Law

- (a) By 1 December 2016, the *AER* must:

- (1) amend and *publish* the guidelines developed under clause 2.5.1(d) to take account of the Amending Rule; and
 - (2) make any determination under clause 2.5.1(d2) that it considers necessary.
- (b) If, prior to the effective date and for the purposes of developing *changes* to the guidelines referred to in paragraph (a) in anticipation of the Amending Rule, the *AER* undertook a consultation or step equivalent to that as required in the *Rules consultation procedures*, then that consultation or step is taken to satisfy the equivalent consultation or step under the *Rules consultation procedures*.

Part ZZP Meter Replacement Processes

11.88 Rules consequential on the making of the National Electricity Amendment (Meter Replacement Processes) Rule 2016

11.88.1 Definitions

In this rule 11.88:

Amending Rule means the National Electricity Amendment (Meter Replacement Processes) Rule 2016.

effective date means 1 December 2017.

11.88.2 Amended Procedures

- (a) By 1 September 2016, *AEMO* must amend and *publish* the following procedures, as required, to take into account the Amending Rule:
- (1) *Market Settlement and Transfer Solution Procedures*;
 - (2) *meter churn procedures*;
 - (3) *metrology procedure*; and
 - (4) *service level procedures*.
- (b) If, prior to the effective date and for the purposes of developing *changes* to the procedures referred to in paragraph (a) in anticipation of the Amending Rule, *AEMO* undertook consultation or a step equivalent to that required in the *Rules consultation procedures*, then that consultation or step is taken to satisfy the equivalent consultation or step under the *Rules consultation procedures*.

Part ZZQ Energy Adequacy Assessment Projection

11.89 Rules consequential to the National Electricity Amendment (Energy Adequacy Assessment Projection timeframes) Rule 2016

11.89.1 Amended guideline and timetable

- (a) By 31 October 2016, *AEMO* must amend and *publish* the *EAAP guidelines*, the *timetable* and the *reliability standard implementation guidelines* to take into account the *National Electricity Amendment (Energy Adequacy Assessment Projection timeframes) Rule 2016*.
- (b) Amendments to the *EAAP guidelines*, the *timetable* and the *reliability standard implementation guidelines* under paragraph (b) must take effect on 1 November 2016.

Part ZZR Reliability and emergency reserve trader (2016 amendments)

11.90 Rules consequent on the making of the National Electricity Amendment (Extension of the Reliability and Emergency Reserve Trader) Rule 2016

11.90.1 Definitions

For the purposes of this rule 11.90:

Amending Rule means the National Electricity Amendment (Extension of the Reliability and Emergency Reserve Trader) Rule 2016.

RERT procedures means the procedures made under clause 3.20.7(e).

Schedule 2 commencement date means the day on which schedule 2 of the Amending Rule commences operation.

11.90.2 Amendments to Reliability Panel's RERT Guidelines

No later than 28 February 2017, the *Reliability Panel* must amend the *RERT guidelines* in accordance with clause 3.20.8 to reflect the Amending Rule, with those amendments to take effect from the Schedule 2 commencement date.

11.90.3 Amendments to AEMO's RERT procedures

No later than the Schedule 2 commencement date, *AEMO* must amend the RERT procedures in accordance with clause 3.20.7(e) to reflect the Amending Rule and the amended *RERT guidelines* made under clause 11.90.2, with those amendments to take effect from the Schedule 2 commencement date.

11.90.4 Reserve contracts entered into before Schedule 2 commencement date

Nothing in this Amending Rule affects any *reserve contract* entered into prior to the Schedule 2 commencement date.

Part ZZS Updating the electricity B2B framework

11.91 Rules consequential on the making of the National Electricity Amendment (Updating the electricity B2B framework) rule 2016

11.91.1 Definitions

(a) In this rule 11.91:

Amending Rule means the National Electricity Amendment (Updating the electricity B2B framework) Rule 2016.

B2B Recommendation has the meaning given in clause 11.91.5.

commencement date means the date of commencement of Schedule 1 of the Amending Rule.

effective date means the date of commencement of Schedule 4 of the Amending Rule.

Existing B2B Procedures means the *B2B Procedures* as in force immediately before the commencement date.

New B2B Procedures means the *B2B Procedures* published by AEMO in accordance with clause 11.91.5.

New Chapter 7 means Chapter 7 of the *Rules* as in force on the effective date.

New Chapter 10 means Chapter 10 of the *Rules* as in force on the effective date.

New IEC has the meaning given in clause 11.91.4.

Old Chapter 7 means Chapter 7 of the *Rules* as in force immediately before the commencement date.

Old IEC means the *Information Exchange Committee* (as defined under Chapter 10 of the *Rules* as in force immediately before the commencement date) in existence immediately before the commencement date.

transitional period means the period beginning on the commencement date and ending immediately before the effective date.

(b) Italicised terms used in this rule, not otherwise defined, have the same meaning as under New Chapter 10.

11.91.2 B2B Procedures

- (a) The Existing B2B Procedures continue in force until the effective date.
- (b) During the transitional period, a reference to the “*B2B Procedures*” in Chapter 7 of the *Rules* is taken to be a reference to the Existing B2B Procedures.
- (c) *AEMO* must make available the Existing B2B Procedures on its website during the transitional period.

11.91.3 Information Exchange Committee Election Procedures and Information Exchange Committee Operating Manual

- (a) *AEMO* must:
 - (1) by 1 August 2016, prepare and *publish* the *Information Exchange Committee Election Procedures* and *Information Exchange Committee Operating Manual* to take into account the Amending Rule;
 - (2) ensure that the *Information Exchange Committee Election Procedures* published under subparagraph (1) include provisions in respect of those matters set out in clauses 7.17.6(g)(1) to (4) of New Chapter 7; and
 - (3) consult with *Distribution Network Service Providers, retailers, Local Retailers, Metering Providers* and *Metering Data Providers* prior to publishing the *Information Exchange Committee Election Procedures* and *Information Exchange Committee Operating Manual* under subparagraph (1).
- (b) *AEMO* is not required to comply with the *Rules consultation procedures* in respect of its obligations under paragraph (a).
- (c) Rule 8.2 does not apply to a decision made by *AEMO* with regard to the preparation and *publication* of the *Information Exchange Committee Election Procedures* and *Information Exchange Committee Operating Manual* under paragraph (a).
- (d) The New IEC, *AEMO* and *B2B Parties* must each comply with the *Information Exchange Committee Election Procedures* and *Information Exchange Committee Operating Manual* published under paragraph (a) during the transitional period.
- (e) The *Information Exchange Committee Election Procedures* and *Information Exchange Committee Operating Manual* published under paragraph (a) are deemed to be the *Information Exchange Committee Election Procedures* and *Information Exchange Committee Operating Manual* under New Chapter 7 in force on the effective date.

- (f) Consultation on the *Information Exchange Committee Election Procedures* and *Information Exchange Committee Operating Manual* undertaken by AEMO:
 - (1) prior to the commencement date; and
 - (2) for the purposes of developing the *Information Exchange Committee Election Procedures* and *Information Exchange Committee Operating Manual* in anticipation of the Amending Rule,is taken to form part of the consultation required under subparagraph (a)(3).

11.91.4 The New IEC

Establishment of the New IEC

- (a) Without limiting paragraph (b), AEMO must establish the *Information Exchange Committee* by 1 September 2016 in accordance with:
 - (1) clauses 7.17.6(b), 7.17.10 and 7.17.11(a) and (d) of New Chapter 7; and
 - (2) the *Information Exchange Committee Election Procedures* and *Information Exchange Committee Operating Manual* published under clause 11.91.3,(the **New IEC**).
- (b) The following provisions in New Chapter 7 apply to, and in respect of, the establishment and operation of the New IEC during the transitional period:
 - (1) clause 7.17.6, excluding clause 7.17.6(g);
 - (2) clause 7.17.7(e) and (f);
 - (3) clause 7.17.8;
 - (4) clause 7.17.9;
 - (5) clause 7.17.10; and
 - (6) clause 7.17.11(b) and (c).
- (c) The New IEC is deemed to be the *Information Exchange Committee* established by AEMO under clause 7.17.6(a) of New Chapter 7 with effect on the effective date.

Functions and powers of the New IEC

- (d) During the transitional period, the functions and powers of the New IEC are limited to:
 - (1) developing, consulting on and making the B2B Recommendation;

- (2) recommending minor or administrative changes to the New B2B Procedures under clause 11.91.5(d);
- (3) establishing *Information Exchange Committee Working Groups*;
- (4) developing, consulting on and approving the *Information Exchange Committee Works Programme*; and
- (5) reviewing and considering work completed by the *Information Exchange Committee Working Groups*.

Note

The Old IEC was dissolved on the commencement date as a consequence of the amendments to rule 7.2A under Schedule 1 of the Amending Rule.

11.91.5 Amended Procedures

- (a) By 1 May 2017, the New IEC must make an *Information Exchange Committee Recommendation* to change the Existing B2B Procedures with effect on and from the effective date to take into account:
 - (1) the Amending Rule;
 - (2) the National Electricity Amendment (Embedded Networks) Rule 2015; and
 - (3) the National Electricity Amendment (Expanding competition in metering and related services) Rule 2015,(the **B2B Recommendation**).
- (b) Subject to clause 7.17.5(b) of New Chapter 7, AEMO must *publish* the *B2B Procedures* in accordance with the B2B Recommendation within 20 *business days* of the New IEC making the B2B Recommendation.
- (c) The following provisions in New Chapter 7 apply to, and in respect of, the B2B Recommendation:
 - (1) clause 7.17.3;
 - (2) clauses 7.17.4(i) to (r) (inclusive), with such modifications as are necessary to properly apply the consultation requirements to the B2B Recommendation; and
 - (3) clause 7.17.5, subject to the reference to '10 *business days*' in clause 7.17.5(e) being taken to be a reference to '20 *business days*'.
- (d) During the transitional period, if the New IEC considers that a minor or administrative change to the New B2B Procedures is necessary to correct a manifest error, the New IEC may recommend the change to AEMO and need not consult on the change in accordance with the *Rules consultation procedures*. Clauses 7.17.4(a) to (c) and (n) to (q) (inclusive) and clause

7.17.5 apply to any such change to the Existing B2B Procedures (with any necessary modifications).

- (e) *AEMO* must publish its *B2B Decision* in relation to a change under paragraph (d) and notify all *B2B Parties* of the change to the Existing B2B Procedures.

11.91.6 B2B e-Hub Participant accreditation process

By 1 June 2017, *AEMO* must:

- (a) establish and maintain an accreditation process for *B2B e-Hub Participants* (including a process under which accreditation can be revoked by *AEMO*); and
- (b) *publish* information relating to the process by which parties can apply to be accredited as *B2B e-Hub Participants* under clause 7.17.2 of New Chapter 7,

to take into account the Amending Rule.

11.91.7 New IEC Budget and 2016 Annual Report

- (a) The New IEC must prepare an *Information Exchange Committee Annual Report* for the year ending 31 December 2016, which must contain the information required by the *Information Exchange Committee Operating Manual* published under clause 11.91.3(a) (the **2016 Annual Report**). The New IEC must provide the 2016 Annual Report to *AEMO* by 31 March 2017.
- (b) The New IEC must prepare, and provide to *AEMO*, a draft budget and budget for the *financial year* ending 30 June 2018 in accordance with clause 7.17.7(d) of New Chapter 7.
- (c) *AEMO* must:
 - (1) provide all reasonable assistance to the New IEC with respect to the New IEC's preparation of the 2016 Annual Report, including retaining, and making available to the New IEC, all records in *AEMO*'s possession that may be necessary or convenient for the New IEC to prepare the 2016 Annual Report;
 - (2) *publish* the 2016 Annual Report; and
 - (3) when publishing its budget under clause 2.11.3 for the *financial year* ending 30 June 2018, advise the New IEC of the final budget for the New IEC for that *financial year*.

11.91.8 Cost recovery

- (a) Costs incurred, but not recouped, by *AEMO* before the commencement date in accordance with clause 7.2A.6 of Old Chapter 7, may be recouped by *AEMO* as *Participant fees* during the transitional period.
- (b) During the transitional period, costs in respect of:
 - (1) subject to subparagraph (2), the development of the New B2B Procedures, establishment and operation of the New IEC (including the engagement costs of specialist advisers) and the costs of the *AEMO Member*, must be incurred and paid by *AEMO* in the first instance and may be recouped by *AEMO* as *Participant fees*;
 - (2) any *Member's* participation in the New IEC (other than the *AEMO Member*) and the costs of individuals relating to their participation in the *Information Exchange Committee Working Groups*, is to be borne by that *Member* or individual, respectively, and not *AEMO*; and
 - (3) a person's implementation and maintenance of necessary systems and processes to ensure compliance with the New B2B Procedures must be met by that person.

Part ZZT Application of Offsets in the Prudential Margin Calculation

11.92 Rules consequential on the making of the National Electricity Amendment (Application of Offsets in the Prudential Margin Calculation) Rule 2016

11.92.1 Definitions

In this rule 11.92:

Amending Rule means the National Electricity Amendment (Application of Offsets in the Prudential Margin Calculation) Rule 2016.

credit limit procedures has the meaning given in clause 3.1.1A.

reallocation timetable has the meaning given in clause 3.15.11(d)(2).

11.92.2 Amended procedures

- (a) By 1 July 2017, *AEMO* must amend and *publish* the following, as required, to take into account the Amending Rule:
 - (1) credit limit procedures;
 - (2) *reallocation procedures*; and
 - (3) reallocation timetable.

- (b) *AEMO* must comply with the *Rules consultation procedures* when meeting its obligations under paragraph (a).

Part ZZU Rate of Return Guidelines Review

11.93 Rules consequential on the making of the National Electricity Amendment (Rate of Return Guidelines Review) Rule 2016

11.93.1 Definitions

In this rule 11.93:

affected DNSP means each of the following *Distribution Network Service Providers*:

- (a) ActewAGL Distribution, the joint venture between Icon Distribution Investments Limited ACN 073 025 224 and Jemena Networks (ACT) Pty Ltd ACN 008 552 663 providing *distribution services* in the Australian Capital Territory, or any successor to its business;
- (b) Ausgrid, the energy services corporation of that name (formerly known as EnergyAustralia), which is constituted under section 7 of the *Energy Services Corporations Act 1995* (NSW) and specified in Part 2 of Schedule 1 of that Act, or any successor to its business (including any ‘authorised distributor’ of Ausgrid’s ‘network infrastructure assets’ (as those terms are defined in the *Electricity Network Assets (Authorised Transactions) Act 2015* (NSW)) following the transfer of the whole, or part of, those network infrastructure assets to the private sector);
- (c) Endeavour Energy, the energy services corporation of that name (formerly known as Integral Energy), which is constituted under section 7 of the *Energy Services Corporations Act 1995* (NSW) and specified in Part 2 of Schedule 1 to that Act, or any successor to its business (including any ‘authorised distributor’ of Endeavour Energy’s ‘network infrastructure assets’ (as those terms are defined in the *Electricity Network Assets (Authorised Transactions) Act 2015* (NSW)) following the transfer of the whole, or part of, those network infrastructure assets to the private sector);
- (d) Essential Energy, the energy services corporation of that name (formerly known as Country Energy), which is constituted under section 7 of the *Energy Services Corporations Act 1995* (NSW) and specified in Part 2 of Schedule 1 to that Act, or any successor to its business; and
- (e) Power and Water Corporation ABN 15 947 352 360, providing *distribution services* in the Northern Territory, or any successor to its business.

affected TNSP means the *Transmission Network Service Provider*, Tasmanian Networks Pty Ltd ACN 167 357 299, providing *transmission services* in Tasmania, or any successor to its business.

commencement date means 20 October 2016.

current rate of return guidelines means the *Rate of Return Guidelines* as in force on the commencement date.

current regulatory control period means:

- (a) in respect of an affected DNSP or affected TNSP, the *regulatory control period* for that affected DNSP or affected TNSP, which commenced before the commencement date and, as at the commencement date, has not ended; and
- (b) in respect of TasNetworks, the *regulatory control period* which ends on 30 June 2019.

subsequent regulatory control period means:

- (a) in respect of an affected DNSP or affected TNSP, the *regulatory control period* for that affected DNSP or affected TNSP that immediately follows its current regulatory control period; and
- (b) in respect of TasNetworks, the *regulatory control period* that immediately follows its current regulatory control period.

TasNetworks means Tasmanian Networks Pty Ltd ACN 167 357 299, providing *distribution services* in Tasmania, or any successor to its business.

11.93.2 Application of current rate of return guidelines to making of a distribution determination for the subsequent regulatory control period

For the purposes of the application of:

- (a) Chapter 6 to the making, amendment, revocation or substitution of a distribution determination for both an affected DNSP's and TasNetworks subsequent regulatory control period; and
- (b) Chapter 6A to the making, amendment, revocation or substitution of a *transmission determination* for the affected TNSP's subsequent regulatory control period,

a reference to the *Rate of Return Guidelines* is deemed to be a reference to the current rate of return guidelines.

Part ZZV Demand Response Mechanism and Ancillary Services Unbundling

11.94 Rules consequential on the making of the National Electricity Amendment (Demand Response Management and Ancillary Services Unbundling) rule 2016

11.94.1 Definitions

For the purposes of this rule 11.94:

commencement date means 1 July 2017.

11.94.2 Participant fees for Market Ancillary Service Providers

AEMO may charge *Market Ancillary Service Providers Participant fees* from the commencement date without amending the structure of *Participant fees* developed under rule 2.11 prior to the commencement date.

Part ZZW Local Generation Network Credits

11.95 Rules consequential on the making of the National Electricity Amendment (Local Generation Network Credits) Rule 2016

11.95.1 Definitions

(a) In this rule 11.95:

Amending Rule means the National Electricity Amendment (Local Generation Network Credits) Rule 2016.

commencement date means the date of commencement of Schedule 1 of the Amending Rule.

system limitation template has the meaning given to it in the Amending Rule.

11.95.2 System limitation template

(a) The *AER* must develop and *publish* the first system limitation template by the commencement date and in accordance with clause 5.13.3(a) of the Amending Rule.

Part ZZX Retailer-Distributor Credit Support Requirements

11.96 Rules consequent on the making of the National Electricity Amendment (Retailer Distributor Credit Support Requirements) Rule 2017 No. 1

11.96.1 Definitions

for the purposes of this rule 11.96:

Amending Rule means the National Electricity Amendment (Retailer Distributor Credit Support Requirements) Rule 2017 No. 1.

effective date means 9 February 2017.

new Chapter 6B means Chapter 6B of the *Rules* and all related definitions in the *Rules* as in force on and from the effective date.

old chapter 6B means Chapter 6B of the *Rules* and all related definitions in the *Rules* as in force immediately before the effective date.

11.96.2 Continued operation of old Chapter 6B

The *credit support* rules in old Chapter 6B continue to apply to any *credit support* held by a *Distribution Network Service Provider* immediately before the effective date.

11.96.3 Interaction with Chapter 6

- (a) For the purposes of subclause 6.6.1(6)(iii)(A) of the *Rules*, *credit support* means where the context requires:
 - (1) any *credit support* held by a *Distribution Network Service Provider* under the old Chapter 6B; and/or
 - (2) any *credit support* held by a *Distribution Network Service Provider* under new Chapter 6B.
- (b) For the purposes of subclause 6.6.1(6)(iii)(B) of the *Rules*, a reference to the *credit support* rules means where the context requires:
 - (1) the *credit support* rules under the old Chapter 6B; and/or
 - (2) the *credit support* rules under new Chapter 6B.

11.96.4 Application of new Chapter 6B

For the avoidance of doubt, “the previous 12 *months*” referred to in subclause 6B.B2.1(a) of new Chapter 6B may include *months* prior to the effective date.

Part ZZY Emergency Frequency Control Schemes

11.97 Rules consequent on the making of the National Electricity Amendment (Emergency frequency control schemes) Rule 2017

11.97.1 Definitions

For the purposes of this rule 11.97:

Amending Rule means the National Electricity Amendment (Emergency frequency control schemes) Rule 2017.

Commencement Date means 6 April 2017.

Interim frequency operating standards for protected events means the *frequency operating standards for protected events* as set out in clause 11.97.2(b).

new clause 4.3.2(h)(1) means clause 4.3.2(h)(1) of the *Rules* as in force on and from the Commencement Date.

new clause 4.3.2(h)(2) means clause 4.3.2(h)(2) of the *Rules* as in force on and from the Commencement Date.

old clause 4.3.2(h) means clause 4.3.2(h) of the *Rules* as in force immediately before the Commencement Date.

11.97.2 Interim frequency operating standards for protected events

- (a) On and from the Commencement Date, until the such time as the *Reliability Panel* determines the *NEM frequency operating standards for protected events* in the *power system security standards* under clause 8.8.1(a)(2), the *frequency operating standards for protected events* are taken to be the interim frequency operating standards for protected events in paragraph (b).
- (b) The interim frequency operating standards for protected events are:

Tasmania

For a *protected event*, system *frequency* should not exceed the applicable *extreme frequency excursion tolerance limits* and should not exceed the applicable load change band for more than two minutes while there is no *contingency event* or the applicable *normal operating frequency band* for more than 10 minutes while there is no *contingency event* as summarised in the table below:

CONDITION	CONTAINMENT	STABILISATION	RECOVERY
protected event	47.0 to 55.0 Hz	48.0 to 52.0 Hz within 2 minutes	49.0 to 51.0 Hz within 10 minutes

This standard applies for both an *interconnected* and an *islanded* system.

NEM Mainland

For a *protected event*, system *frequency* should not exceed the applicable *extreme frequency excursion tolerance limits* and should not exceed the applicable load change band for more than two minutes while there is no *contingency event* or the applicable *normal operating frequency band* for more than 10 minutes while there is no *contingency event* as summarised in the tables below:

NEM Mainland Frequency Operating Standards – interconnected system

CONDITION	CONTAINMENT	STABILISATION	RECOVERY
protected event	47.0 to 52.0 Hz	49.5 to 50.5Hz within 2 minutes	49.85 to 50.15 Hz within 10 minutes

NEM Mainland Frequency Operating Standards – for an islanded system

CONDITION	CONTAINMENT	STABILISATION	RECOVERY
protected event	47.0 to 52.0 Hz	49.0 to 51.0 Hz within 2 minutes	49.5 to 50.5 Hz within 10 minutes

NEM Mainland Frequency Operating Standards – during periods of supply scarcity

CONDITION	CONTAINMENT	STABILISATION	RECOVERY
protected event	47.0 to 52.0 Hz	49.0 to 51.0 Hz within 2 minutes	49.5 to 50.5 Hz within 10 minutes

11.97.3 First power system frequency risk review

Despite clause 5.20A.2(a), *AEMO* must complete the first *power system frequency risk review* within 12 months of the Commencement Date.

11.97.4 AEMO must review existing load shedding procedures

As soon as reasonably practicable after the Commencement Date, *AEMO* must review, and if necessary amend, the *load shedding procedures* developed under old clause 4.3.2(h) to take into account the Amending Rule.

11.97.5 Load shedding procedures

On and from the Commencement Date any *load shedding procedures* developed by *AEMO* under old clause 4.3.2(h) will be taken to be:

- (a) *load shedding procedures* for the purposes of new clause 4.3.2(h)(1) if they are procedures under which *load* will be shed by means other than an *emergency frequency control scheme*; or
- (b) *EFCS settings schedules* for the purposes of new clause 4.3.2(h)(2) if they specify, for an *emergency frequency control scheme*, settings for operation of the scheme.

Part ZZZ Transmission Connection and Planning Arrangements

11.98 Rules consequential on the making of the National Electricity Amendment (Transmission Connection and Planning Arrangements) Rule 2017

11.98.1 Definitions

- (a) For the purposes of this rule 11.98:

Amending Rule means the National Electricity Amendment (Transmission Connections and Planning Arrangements) Rule 2017.

commencement date means the date of commencement of Schedules 1, 2, 4, 5 and 6 of the Amending Rule.

Existing Connection Agreement means a *connection agreement* entered into before the commencement date other than in relation to a *declared transmission system*.

Existing DCA means a *dedicated connection asset* which, before the commencement date:

- (1) exists; or
- (2) is contracted to be constructed under an Existing Connection Agreement; or
- (3) a *Transmission Network Service Provider* has agreed to *connect* to a *transmission network* under an Existing Connection Agreement.

Existing DCA Owner means an owner, operator or controller of an Existing DCA.

former Chapter 5 means Chapter 5 of the *Rules* as in force immediately prior to the commencement date.

former Chapter 6A means Chapter 6A of the *Rules* as in force immediately prior to the commencement date.

New Chapter 10 means Chapter 10 of the *Rules* as it will be in force immediately after the commencement date.

new clause 5.3.AA(e)(2) means clause 5.3AA(e)(2) of the *Rules* as in force immediately after the commencement date (being the same as clause 5.5(e)(2) of the *Rules* immediately prior to the commencement date).

old rule 5.4A means rule 5.4A of the *Rules* (and all definitions in, and related definitions and provisions of, the *Rules* amended by the Amending Rule) as in force immediately prior to the commencement date.

old clause 5.3.6(i) means clause 5.3.6(i) as in force immediately prior to the commencement date.

- (b) Italicised terms used in this rule have the same meaning as in new Chapter 10.

11.98.2 Grandfathering of existing dedicated connection assets

- (a) By 1 May 2018, an Existing DCA Owner who is already registered or is exempt from registration (as applicable) under chapter 2 of the *Rules* for its Existing DCA must notify the *AER* of the following information:
- (1) the identity of each owner, controller or operator of the Existing DCA;
 - (2) the category of *Registered Participant* for which the owner, controller or operator of the Existing DCA is registered (or for which it has an exemption) for the Existing DCA;
 - (3) whether the Existing DCA would be classified as a *large dedicated connection asset* or *small dedicated connection asset* if the Existing DCA Owner was to register as a *Network Service Provider* for that asset; and
 - (4) the location and route of the Existing DCA.
- (b) By the commencement date, the *AER* must establish and publish a register of Existing DCA Owners who are already registered or exempt (as the case may be) for the Existing DCA and have notified their Existing DCAs under paragraph (b). The register must include the information in paragraph (a).
- (c) If an Existing DCA Owner is recorded in the register by the *AER* under paragraph (b) that Existing DCA Owner:
- (1) if recorded in a registration category other than *Network Service Provider* or as having an exemption (as applicable) for the Existing DCA, is not required to register as a *Network Service Provider* for that Existing DCA under clause 2.5.1;
 - (2) if recorded in the registration category of *Network Service Provider* for the Existing DCA, is not required to classify that Existing DCA as a *large dedicated connection asset* or *small dedicated connection asset* under clause 2.5.1A;

- (3) is not taken to be a *Dedicated Connection Asset Service Provider* in respect of that Existing DCA; and
 - (4) will continue to be registered in the category of *Registered Participant* or be exempted (as applicable) for the Existing DCA as applied immediately before the commencement date and recorded in the register by the *AER* and must, in relation to the Existing DCA, comply with all the obligations under the *Rules* that apply from time to time to that category of *Registered Participant* or the conditions of the exemption (as applicable).
- (d) If an existing DCA Owner is not recorded in the register by the *AER* under paragraph (b), that Existing DCA Owner must, by the commencement date, register or apply for an exemption from registration as a *Network Service Provider* under clause 2.5.1 of the *Rules* for its Existing DCA.

11.98.3 Preparatory steps for registration changes under the Amending Rule

- (a) By 1 March 2018, the *AER* must amend and *publish* the guidelines developed under clause 2.5.1(d) to take account of the Amending Rule.
- (b) If prior to the date specified in paragraph (a) and for the purposes of developing changes to the guidelines referred to in paragraph (a) in anticipation of the Amending Rule, the *AER* undertook a consultation or steps equivalent to that as required in the *Rules consultation procedures*, then that consultation or steps is taken to satisfy the equivalent consultation or step under the *Rules consultation procedures*.
- (c) By 1 April 2018, *AEMO* must develop an application form for registration of *Network Service Providers* that takes account of the Amending Rule.

11.98.4 Participant fees for Dedicated Connection Asset Service Providers

AEMO may charge *Dedicated Connection Asset Service Providers* fees from the *Dedicated Connection Asset Service Provider's* date of registration without amending the structure of the *Participant fees* developed under rule 2.11 prior to the commencement date.

11.98.5 Existing Connection Agreements

- (a) Subject to paragraph (b), the Amending Rule is neither intended to have, nor is it to be read or construed as having, the effect of:
 - (1) altering any of the terms of an Existing Connection Agreement (including the location of a *connection point*);
 - (2) altering the contractual rights or obligations of any of the parties under an Existing Connection Agreement as between those parties; or
 - (3) relieving the parties under any such Existing Connection Agreement of their contractual obligations under such an agreement.

- (b) If a *Transmission Network User* under an Existing Connection Agreement requests an amendment to that Existing Connection Agreement after the commencement date for the purposes of altering a *connection service* provided under that agreement, then the *Rules* as amended by the Amending Rule apply to that request.
- (c) The Amending Rule is neither intended to have, nor is it to be read or construed as having, the effect of changing the application of clause 11.6.11 (if applicable) in relation to *connection services* provided under an Existing Connection Agreement.

11.98.6 Connection process

- (a) If a *connection* enquiry was made to a *Transmission Network Service Provider* by a *Connection Applicant* under clause 5.3.2 before the commencement date, the former Chapter 5 and Chapter 6A continue to apply to the *connection process* and negotiation for a *connection agreement* related to that *connection enquiry*.
- (b) Paragraph (a) does not prevent a *Connection Applicant* making a new *connection enquiry* for that *connection* after the commencement date.

11.98.7 Transmission Annual Planning Report

- (a) The *AER* must develop and publish the first TAPR Guidelines required under rule 5.14B by 31 December 2017 in accordance with the *transmission consultation procedures*.
- (b) A *Transmission Network Service Provider* is not required to comply with Schedule 3 of the Amending Rule for a *Transmission Annual Planning Report* if the date by which that report is required to be *published* is within six months of the publication of the TAPR Guidelines by the *AER* under paragraph (a).

11.98.8 Preservation for adoptive jurisdictions

- (a) Subject to paragraph (b), for a *declared transmission system* of an *adoptive jurisdiction*:
 - (1) former Chapter 6A continues to apply and the amendments made by the Amending Rule to Chapter 6A are of no effect;
 - (2) old rule 5.4A continues to apply and the deletion of rule 5.4A by the Amending Rule is of no effect;
 - (3) old clause 5.3.6(i) continues to apply and the deletion of clause 5.3.6(i) by the Amending Rule is of no effect; and
 - (4) new clause 5.3AA(e)(2) applies as amended below:

- (i) insert the phrase “*transmission network user access or*” before “*distribution network user access*”; and
 - (ii) insert “*transmission networks and*” before “*distribution networks*”.
- (b) If a provision in former Chapter 6A, old rule 5.4A or old clause 5.3.6(i) is amended, the provision as amended continues to apply in accordance with paragraph (a).

Part ZZZA Replacement expenditure planning arrangements

11.99 Rules consequential on the making of the National Electricity Amendment (Replacement expenditure planning arrangements) Rule 2017

11.99.1 Definitions

For the purposes of this rule 11.99:

affected DNSP means each of the following *Distribution Network Service Providers*:

- (a) Energex Limited ACN 078 849 055 or any successor business; and
- (b) Ergon Energy Corporation Limited ACN 087 646 062 or any successor business.

Amending Rule means the National Electricity Amendment (Replacement expenditure planning arrangements) Rule 2017.

excluded project means, in respect of a *Network Service Provider*, a project for the refurbishment or replacement of *network* assets which satisfies, on or prior to 30 January 2018, the criteria which a project needs to satisfy to be a “committed project” under:

- (a) in the case of a RIT-D project, the *regulatory investment test for distribution* as in force on the first commencement date; or
- (b) in the case of a RIT-T project, the *regulatory investment test for transmission* as in force on the first commencement date.

first commencement date means the date of commencement of Schedule 1 of the Amending Rule.

old clause 5.16.3 means clause 5.16.3 of the *Rules* (and all related definitions and provisions of the *Rules* amended by the Amending Rule), the *regulatory investment test for transmission* and RIT-T application guidelines made by the AER, each as in force immediately prior to the first commencement date.

old clause 5.17.3 means clause 5.17.3 of the *Rules* (and all related definitions and provisions of the *Rules* amended by the Amending Rule), the *regulatory investment test for distribution* and RIT-D application guidelines made by the AER, each as in force immediately prior to the first commencement date.

old schedule 5.8 means schedule 5.8 of the *Rules* (and all related definitions and provisions of the *Rules* amended by the Amending Rule) as in force immediately prior to the first commencement date.

RIT-D application guidelines means the guidelines developed and *published* by the AER in accordance with clause 5.17.2 as in force from time to time.

RIT-T application guidelines means the guidelines developed and *published* by the AER in accordance with clause 5.16.2 as in force from time to time.

RIT documentation means each of:

- (a) the *regulatory investment test for transmission*;
- (b) the *regulatory investment test for distribution*;
- (c) the RIT-T application guidelines; and
- (d) the RIT-D application guidelines.

second commencement date means the date of commencement of Schedule 2 of the Amending Rule.

Victorian bushfire mitigation project means a RIT-D project for the refurbishment or replacement of *network* assets by a Victorian DNSP in order to meet its obligations under clause 7(1)(ha)(i) and (3)(a)(ii) of the *Electricity Safety (Bushfire Mitigation) Regulations 2013 (VIC)*, as in force immediately prior to the first commencement date.

Victorian DNSP means a DNSP for a *distribution network* situated wholly or partly within Victoria.

11.99.2 Interpretation

- (a) Terms defined in clause 5.10.2 have the same meaning when used in this Part ZZZA unless a contrary intention appears.
- (b) Italicised terms used in this part ZZZA have the same meaning as in Chapter 10.

11.99.3 Transitional arrangements for affected DNSPs

On and from the first commencement date until, but not including, 1 January 2018, old schedule 5.8 continues to apply to affected DNSPs.

11.99.4 Amendments to RIT documentation

- (a) By no later than 18 September 2017, the *AER* must amend and *publish* the RIT documentation to take into account the Amending Rule.
- (b) In making the amendments to the RIT documentation required under paragraph (a), the *AER*:
 - (1) must only make amendments to the RIT Documentation to the extent required to take into account the Amending Rule;
 - (2) is not required to comply with the *transmission consultation procedures* or the *distribution consultation procedures* (as the case may be); and
 - (3) must consult with *Network Service Providers* and any other persons that the *AER* considers appropriate.

11.99.5 Transitional arrangements relating to excluded projects

- (a) Each *Network Service Provider* must publish and maintain on its website a list of its excluded projects, which must include:
 - (1) the project name;
 - (2) a brief description of the project; and
 - (3) the scheduled completion date,on and from the second commencement date until completion of its excluded projects.
- (b) In respect of each *Network Service Provider*:
 - (1) old clause 5.16.3 continues to apply to excluded projects that are RIT-T projects for a replacement of *network* assets (and are not intended to *augment* the *transmission network*); and
 - (2) old clause 5.17.3 continues to apply to excluded projects that are RIT-D projects for refurbishment or replacement of *network* assets (and are not intended to *augment* a *network*).

11.99.6 Transitional arrangements relating to Victorian bushfire mitigation projects

- (a) Where a Victorian DNSP has Victorian bushfire mitigation projects, it must publish and maintain on its website a list of Victorian bushfire mitigation projects, which must include:
 - (1) the project name;
 - (2) a brief description of the project; and

(3) the scheduled completion date,

on and from the second commencement date until completion of its Victorian bushfire mitigation projects.

(b) In respect of each Victorian DNSP old clause 5.17.3 continues to apply to each Victorian Bushfire mitigation project.

11.99.7 Transitional arrangements relating to review of costs thresholds

(a) Clause 5.15.3(a)(1) of Chapter 5 applies for the purposes of clause 5.15.3(b)(1A) as if the words “July 2009” were omitted and substituted with the words “18 July 2017”.

(b) Clause 5.15.3(c)(3) of Chapter 5 applies for the purposes of clause 5.15.3(d)(4A) as if the words “1 January 2013” were omitted and substituted with the words “18 July 2017”.

Part ZZZB Managing the rate of change of power system frequency

11.100 Rules consequential on the making of the National Electricity Amendment (Managing the rate of change of power system frequency) Rule 2017

11.100.1 Definitions

(a) In this rule 11.100:

Amending Rule means the *National Electricity Amendment (Managing the rate of change of power system frequency) Rule 2017*.

commencement date means the date of commencement of Schedules 1 to 7 of the Amending Rule.

inertia-related NSCAS gap means an *NSCAS gap* that is a shortfall in the level of inertia typically provided in a *region* (having regard to typical patterns of *dispatched generation* in *central dispatch*) compared to the minimum level of inertia required to operate the *region* in a *secure operating state* when it is *islanded*.

new Chapter 10 means Chapter 10 as amended by the Amending Rule.

new clause 3.9.7 means clause 3.9.7 of the *Rules* as will be in force immediately after the commencement date.

new clause 4.4.4 means clause 4.4.4 of the *Rules* as will be in force immediately after the commencement date.

new clause 4.4.9C means clause 4.4.9C of the *Rules* as will be in force immediately after the commencement date.

new clause 5.16.3 means clause 5.16.3 of the *Rules* as will be in force immediately after the commencement date.

new clause 5.20.1(a)(3) means clause 5.20.1(a)(3) of the *Rules* as will be in force immediately after the commencement date.

new clause 5.20.7(a) means clause 5.20.7(a) of the *Rules* as will be in force immediately after the commencement date.

new clause 5.20B.2(a) means clause 5.20B.2(a) of the *Rules* as will be in force immediately after the commencement date.

new clause 5.20B.3(a) means clause 5.20B.3(a) of the *Rules* as will be in force immediately after the commencement date.

new clause 5.20B.3(c) means clause 5.20B.3(c) of the *Rules* as will be in force immediately after the commencement date.

new clause 5.20B.4(b) means clause 5.20B.4(a) of the *Rules* as will be in force immediately after the commencement date.

new clause 5.20B.4(h) means clause 5.20B.4(h) of the *Rules* as will be in force immediately after the commencement date.

new clause 5.20B.4(i) means clause 5.20B.4(i) of the *Rules* as will be in force immediately after the commencement date.

new clause 6A.7.3(a1) means clause 6A.7.3(a1) of the *Rules* as will be in force immediately after the commencement date.

new rule 5.20B means rule 5.20B of the *Rules* as will be in force immediately after the commencement date.

NSCAS transition period means the period after the date this schedule commences and before the commencement date.

- (b) Italicised terms used in this rule 11.100 (other than *NSCAS gap* and *NSCAS need*) have the same meaning as in new Chapter 10.

11.100.2 Inertia sub-networks

On the date this schedule commences, *AEMO* is taken to have determined *inertia sub-networks* having the same boundaries as the boundaries of each *region* on that date.

11.100.3 Inertia requirements methodology

- (a) By 30 June 2018, *AEMO* must develop and *publish* a methodology setting out the process *AEMO* will use to determine the *inertia requirements* for each *inertia sub-network*. The methodology must provide for *AEMO* to take into account the matters listed in new clause 5.20.7(a) in determining the *inertia requirements* for each *inertia sub-network*.

- (b) *AEMO* must include an explanation of the differences between the methodology determined under paragraph (a) and the first *inertia requirements methodology* published in accordance with new clause 5.20.1(a)(3).

11.100.4 Inertia requirements

- (a) *AEMO* must make a determination of the *inertia requirements* for all *inertia sub-networks* under new clause 5.20B.2(a) and make the assessments required under new clause 5.20B.3(a) by 30 June 2018, applying the methodology determined under clause 11.100.3(a) as if it were an *inertia requirements methodology*.
- (b) If *AEMO* assesses that there is or is likely to be an *inertia shortfall* in any *inertia sub-network* in its assessment carried out in accordance with paragraph (a), *AEMO* must as soon as practicable after making that assessment *publish* and give to the *Inertia Service Provider* for the *inertia sub-network* a notice of that assessment that includes *AEMO's* specification of the date by which the *Inertia Service Provider* must ensure the availability of *inertia network services* in accordance with new clause 5.20B.4(b), which must not be earlier than 1 July 2019 unless an earlier date is agreed with the *Inertia Service Provider*.
- (c) An *Inertia Service Provider* given a notice under paragraph (b) must make *inertia network services* available in accordance with new clause 5.20B.4(b) and otherwise comply with new rule 5.20B as if the notice had been given under new clause 5.20B.3(c).
- (d) If an *Inertia Service Provider* is given a notice under paragraph (b) later than 30 April 2017, it is not required to include the information referred to in new clauses 5.20B.4(h) and (i) in its *Transmission Annual Planning Report* due to be published by 30 June 2018, but the information must be included in its next *Transmission Annual Planning Report*.
- (e) where an *Inertia Service Provider* is given a notice under paragraph (b), clause 5.16.3 regarding the *regulatory investment test for transmission*, clause 6A.7.3(a1) regarding *pass through events* and the related definitions apply in relation to *inertia network services* and *inertia support activities* made available in response to the notice as if they were new clause 5.16.3, new clause 6A.7.3(a1) and the related definitions in new Chapter 10.

11.100.5 NSCAS not to be used to meet an inertia shortfall after 1 July 2019

- (a) Paragraphs (b) and (c) do not apply in respect of a *inertia-related NSCAS gap* declared on or before 19 September 2017.
- (b) In the *NSCAS transition period*, *AEMO* must not, in respect of any period after 1 July 2019, acquire *NSCAS* to meet an *NSCAS gap* in relation to a requirement for a service that is both an *NSCAS need* and is also capable of being made available as an *inertia network service* to address an *inertia shortfall* through the arrangements in new rule 5.20B.

- (c) In the NSCAS transition period, a *Transmission Network Service Provider* must not, in respect of any period after 1 July 2019, put in place arrangements referred to in rule 3.11.3(b) to meet an *NSCAS gap* referred to in paragraph (a).

11.100.6 Inertia network services may be used to meet an NSCAS gap declared in the NSCAS transition period

- (a) If, in the NSCAS transition period, *AEMO* declares an inertia-related NSCAS gap in respect of a period starting within 12 months of the declaration being made, a *Transmission Network Service Provider* given a request under clause 3.11.3 in relation to the inertia-related NSCAS gap may by notice to *AEMO* elect to treat the declaration of that inertia-related NSCAS gap as if it were a notice of an *inertia shortfall* under new clause 5.20B.3(c).
- (b) If, in the NSCAS transition period, *AEMO* declares an inertia-related NSCAS gap in respect of a period starting 12 months or more after the declaration is made, a *Transmission Network Service Provider* given a request under clause 3.11.3 in relation to the inertia-related NSCAS gap must treat the declaration of that inertia-related NSCAS gap as if it were a notice of an *inertia shortfall* under new clause 5.20B.3(c).
- (c) Where in accordance with paragraph (a) or (b) a *Transmission Network Service Provider* elects or is required to treat a declaration of an inertia-related NSCAS gap as if it were notice of an *inertia shortfall* under new clause 5.20B.3(c):
 - (1) the *Transmission Network Service Provider* must make *inertia network services* available in accordance with new clause 5.20B.4(b);
 - (2) *AEMO* and the *Transmission Network Service Provider* must otherwise comply with new rule 5.20B as if the notice had been given under new clause 5.20B.3(c); and
 - (3) clause 5.16.3 regarding the *regulatory investment test for transmission*, clause 6A.7.3(a1) regarding *pass through events* and the related definitions apply in relation to *inertia network services* made available in response to the notice as if they were new clause 5.16.3, new clause 6A.7.3(a1) and the related definitions in new Chapter 10.

11.100.7 Inertia network services made available before the commencement date

If a *Transmission Network Service Provider* makes *inertia network services* available under this rule 11.100 in the NSCAS transition period, new clause 3.9.7, new clause 4.4.4, new clause 4.4.9C and the related definitions in new Chapter 10 apply in respect of those *inertia network services* as if those provisions had commenced on the date the *inertia network services* were first made available and (in the case of *inertia network services* provided under clause 11.100.6) as if *AEMO* had determined a *secure operating level of inertia* for the *region* equal to

the minimum level of *inertia* determined in the declaration of the inertia-related NSCAS gap.

Part ZZZC Managing power system fault levels

11.101 Rules consequential on the making of the National Electricity Amendment (Managing power system fault levels) Rule 2017

11.101.1 Definitions

(a) In this rule 11.101:

Amending Rule means the *National Electricity Amendment (Managing power system fault levels) Rule 2017*.

commencement date means the date of commencement of Schedules 4,5,6,7,8 and 9 of the Amending Rule.

new Chapter 10 means Chapter 10 as amended by the Amending Rule.

new clause 3.9.7 means clause 3.9.7 of the *Rules* as will be in force immediately after the commencement date.

new clause 4.4.4 means clause 4.4.4 of the *Rules* as will be in force immediately after the commencement date.

new clause 4.4.9C means clause 4.4.9C of the *Rules* as will be in force immediately after the commencement date.

new clause 4.6.6 means clause 4.6.6 of the *Rules* as will be in force immediately after the Schedule 1 to 3 commencement date.

new clause 5.16.3 means clause 5.16.3 of the *Rules* as will be in force immediately after the commencement date.

new clause 5.20.1(a)(3) means clause 5.20.1(a)(3) of the *Rules* as will be in force immediately after the commencement date.

new clause 5.20.7(b) means clause 5.20.7(b) of the *Rules* as will be in force immediately after the commencement date.

new clause 5.20C.1(a) means clause 5.20C.1(a) of the *Rules* as will be in force immediately after the commencement date.

new clause 5.20C.2(a) means clause 5.20C.2(a) of the *Rules* as will be in force immediately after the commencement date.

new clause 5.20C.2(c) means clause 5.20C.2(c) of the *Rules* as will be in force immediately after the commencement date.

new clause 5.20C.3(b) means clause 5.20C.3(b) of the *Rules* as will be in force immediately after the commencement date.

new clause 5.20C.3(f) means clause 5.20C.3(f) of the *Rules* as will be in force immediately after the commencement date.

new clause 5.20C.3(g) means clause 5.20C.3(g) of the *Rules* as will be in force immediately after the commencement date.

new clause 6A.7.3(a1) means clause 6A.7.3(a1) of the *Rules* as will be in force immediately after the commencement date.

new rule 5.20C means rule 5.20C of the *Rules* as will be in force immediately after the commencement date.

Schedule 1 to 3 commencement date means the date of commencement of Schedules 1 to 3 of the Amending Rule.

system strength-related NSCAS gap means an *NSCAS gap* that is a shortfall in the *three phase fault level* typically provided at a *fault level node* in a *region* (having regard to typical patterns of *dispatched generation* in *central dispatch*) compared to the minimum *three phase fault level* that *AEMO* reasonably considers is required to maintain the *power system* in a *secure operating state*.

NSCAS transition period means the period after the date this schedule commences and before the commencement date.

- (b) Italicised terms used in this rule 11.101 (other than *NSCAS gap* and *NSCAS need*) have the same meaning as in new Chapter 10.

11.101.2 System strength impact assessment guidelines

- (a) *AEMO* must make and *publish* interim *system strength impact assessment guidelines* by 17 November 2017 to apply until the *system strength impact assessment guidelines* are made and published under paragraph (c).
- (b) *AEMO* is not required to comply with the *Rules consultation procedure* when making the interim guidelines under paragraph (a).
- (c) *AEMO* must make and *publish system strength impact assessment guidelines* under new clause 4.6.6 by 1 July 2018 and in doing so must comply with the *Rules consultation procedures*.

11.101.3 System strength requirements methodology

- (a) By 30 June 2018, *AEMO* must determine and *publish* a methodology setting out the process *AEMO* will use to determine the *system strength requirements* for each *region*. The methodology must provide for *AEMO* to take into account the matters listed in new clause 5.20.7(b) in determining the *system strength requirements*.
- (b) *AEMO* must include an explanation of the differences between the methodology determined under paragraph (a) and the first *system strength*

requirements methodology published in accordance with new clause 5.20.1(a)(3).

11.101.4 System strength requirements

- (a) *AEMO* must make a determination of the *system strength requirements* for each *region* under new clause 5.20C.1(a) and make the assessments required under new clause 5.20C.2(a) by 30 June 2018 applying the methodology determined under clause 11.101.3(a) as if it were a *system strength requirements methodology*.
- (b) If *AEMO* assesses that there is or is likely to be a *fault level shortfall* in a *region* in its assessment carried out in accordance with paragraph (a), *AEMO* must as soon as practicable after making that assessment *publish* and give to the *System Strength Service Provider* for the *region* a notice of that assessment that includes *AEMO's* specification of:
 - (1) the extent of the *fault level shortfall*; and
 - (2) the date by which the *System Strength Service Provider* must ensure the availability of *system strength services* in accordance with clause 5.20C.3(b), which must not be earlier than 1 July 2019 unless an earlier date is agreed with the *System Strength Service Provider*.
- (c) A *System Strength Service Provider* given a notice under paragraph (b) must make *system strength services* available in accordance with new clause 5.20C.3(b) and otherwise comply with new rule 5.20C as if the notice had been given under new clause 5.20C.2(c).
- (d) If a *System Strength Service Provider* is given notice under paragraph (b) later than 30 April 2017, it is not required to include the information referred to in new clauses 5.20C.3(f) and (g) in its *Transmission Annual Planning Report* due to be published by 30 June 2018, but the information must be included in its next *Transmission Annual Planning Report*.
- (e) Where a *System Strength Service Provider* is given a notice under paragraph (b), clause 5.16.3 regarding the *regulatory investment test for transmission*, clause 6A.7.3(a1) regarding *pass through events* and the related definitions apply in relation to *system strength services* made available in response to the notice as if they were new clause 5.16.3, new clause 6A.7.3(a1) and the related definitions in new Chapter 10.

11.101.5 NSCAS not to be used to meet a fault level shortfall after 1 July 2019

- (a) Paragraphs (b) and (c) do not apply in respect of a system strength-related NSCAS gap declared on or before 19 September 2017.
- (b) In the NSCAS transition period, *AEMO* must not, in respect of any period after 1 July 2019, acquire NSCAS to meet an NSCAS gap in relation to a requirement for a service that is both an NSCAS need and is also capable of

being made available as a *system strength service* to address a *fault level shortfall* through the arrangements in new rule 5.20C.

- (c) In the NSCAS transition period, a *Transmission Network Service Provider* must not, in respect of any period after 1 July 2019, put in place arrangements referred to in rule 3.11.3(b) to meet an *NSCAS gap* referred to in paragraph (a).

11.101.6 System strength services may be used to meet an NSCAS gap declared in the NSCAS transition period

- (a) If, in the NSCAS transition period, *AEMO* declares a system strength-related NSCAS gap in respect of a period starting within 12 months of the declaration being made, a *Transmission Network Service Provider* given a request under clause 3.11.3 in relation to the system strength-related NSCAS gap may by notice to *AEMO* elect to treat the declaration of that system strength-related NSCAS gap as if it were a notice of a *fault level shortfall* under new clause 5.20C.2(c).
- (b) If, in the NSCAS transition period, *AEMO* declares a system strength-related NSCAS gap in respect of a period starting 12 months or more after the declaration is made, a *Transmission Network Service Provider* given a request under clause 3.11.3 in relation to the system strength-related NSCAS gap must treat the declaration of that system strength-related NSCAS gap as if it were a notice of a *fault level shortfall* under new clause 5.20C.2(c).
- (c) Where in accordance with paragraph (a) or (b) a *Transmission Network Service Provider* elects or is required to treat a declaration of a system strength-related NSCAS gap as if it were notice of a *fault level shortfall* under new clause 5.20C.2(c):
 - (1) the *Transmission Network Service Provider* must make *system strength services* available in accordance with new clause 5.20C.3(b);
 - (2) *AEMO* and *Transmission Network Service Provider* must otherwise comply with new rule 5.20C as if the notice had been given under new clause 5.20C.2(c); and
 - (3) clause 5.16.3 regarding the *regulatory investment test for transmission*, clause 6A.7.3(a1) regarding *pass through events* and the related definitions apply in relation to *system strength services* made available in response to the notice as if they were new clause 5.16.3, new clause 6A.7.3(a1) and the related definitions in new Chapter 10.

11.101.7 Withdrawal of a system strength-related NSCAS gap already declared

- (a) This clause applies if, on or before 19 September 2017, *AEMO* has declared a system strength-related NSCAS gap.

- (b) If this clause applies, *AEMO* may by notice *published* under this clause withdraw the declaration of the system strength-related NSCAS gap referred to in paragraph (a).
- (c) If *AEMO* withdraws a declaration under paragraph (b), *AEMO* may make a new declaration of the system strength-related NSCAS gap by notice *published* under this clause and clause 11.101.6 will apply to that new declaration.

11.101.8 System strength services made available before the commencement date

If a *Transmission Network Service Provider* makes *system strength services* available under this rule 11.101 in the NSCAS transition period, new clause 3.9.7, new clause 4.4.4, new clause 4.4.9C and the related definitions in new Chapter 10 apply in respect of those *system strength services* as if those provisions had commenced on the date the *system strength services* were first made available and (in the case of *system strength services* provided under clause 11.101.6) as if *AEMO* had determined a *fault level shortfall* in the system strength-related NSCAS gap.

Part ZZD Generating System Model Guidelines

11.102 Making of Power System Model Guidelines

- (a) By 1 July 2018, *AEMO* must develop and *publish* the *Power System Model Guidelines*, the *Power System Design Data Sheet*, and the *Power System Setting Data Sheet* to take account of the National Electricity Amendment (Generating system model guidelines) Rule 2017 No. 11.

Part ZZE Five Minute Settlement

11.103 Rules consequential on the making of the National Electricity Amendment (Five Minute Settlement) Rule 2017

11.103.1 Definitions

For the purposes of this rule 11.103:

Amending Rule means the National Electricity Amendment (Five Minute Settlement) Rule 2017.

commencement date means 1 July 2021.

Excluded metering installations means:

- (a) types 1,2,3 and 7 *metering installations*; and
- (b) the *metering installations* referred to in new clause 7.8.2(b1).

new Chapter 7 means Chapter 7 of the *Rules* as in force immediately after the commencement date.

new clause 7.8.2(b1) means clause 7.8.2(b1) as in force immediately after the commencement date.

new Chapter 10 means Chapter 10 of the *Rules* as in force immediately after the commencement date.

new clause 3.8.9 means clause 3.8.9 of the *Rules* as in force immediately after the commencement date.

new clause 7.8.2(a2) means clause 7.8.2(a2) of the *Rules* as in force immediately after the commencement date.

new clause 7.8.2(b1) means clause 7.8.2(b1) of the *Rules* as in force immediately after the commencement date.

new clause 7.8.2A means clause 7.8.2A of the *Rules* as in force immediately after the commencement date.

old clause 3.8.9 means clause 3.8.9 of the *Rules* as in force immediately prior to the commencement date.

11.103.2 Amendments to procedures

- (a) By 1 December 2019, *AEMO* must review and where necessary amend and *publish* the following documents to apply from the commencement date to take into account the Amending Rule:
- (1) the credit limit procedures in accordance with clause 3.3.8;
 - (2) the *spot market* operations timetable in accordance with clause 3.4.3;
 - (3) the automated procedures relating to *dispatch intervals* subject to review in accordance with clause 3.9.2B;
 - (4) the methodology for determining *dispatch prices* and *ancillary services prices* in the event of intervention by *AEMO* in accordance with clause 3.9.3;
 - (5) the *reliability standards and settings guidelines*;
 - (6) the estimated price methodology and estimated price schedules for periods of *market suspension* in accordance with clause 3.14.5;
 - (7) the *reallocation procedures*;
 - (8) the *settlement residue* auction rules in accordance with clause 3.18.3;
 - (9) the methodology relating to *dispatch* pricing for *unscheduled reserve contracts* in accordance with clause 3.20.4;

- (10) the procedures relating to the exercise of the *RERT* in accordance with clause 3.20.7;
 - (11) the procedures maintained under clause 7.8.3(b) in respect of the *minimum services specification*;
 - (12) the *meter churn procedures* in accordance with clause 7.8.9;
 - (13) the *metering data provision procedures*;
 - (14) the *Market Settlement and Transfer Solution Procedures*;
 - (15) the *metrology procedure*; and
 - (16) the *service level procedures*.
- (b) The *Information Exchange Committee* must make an *Information Exchange Committee Recommendation* to change the *B2B Procedures* (**B2B Recommendation**) to take into account the Amending Rule by 1 July 2019.
- (c) Subject to clause 7.17.5(b), *AEMO* must *publish* the *B2B Procedures* in accordance with the *B2B Recommendation* within 10 *business days* of the *Information Exchange Committee* making the *B2B Recommendation*.
- (d) By 1 December 2019, the *AER* must amend and *publish* the following documents to apply from the commencement date to take into account the Amending Rule:
- (1) the methodology relating to the *distribution loss factor* in accordance with clause 3.6.3;
 - (2) guidelines maintained under clause 3.8.22 in respect of *rebidding*; and
 - (3) criteria that the *AER* will use to determine whether there is a significant variation between the *spot price forecast* and the actual *spot price* in accordance with clause 3.13.7.

11.103.3. Exemption for certain metering installations

From the commencement date:

- (a) all *metering installations* (other than Excluded metering installations and type 4A *metering installations*) that were installed prior to 1 December 2018; and
 - (b) type 4A *metering installations* that were installed prior to 1 December 2019,
- do not have to be capable of recording and providing, or configured to record and provide, *trading interval energy data* (as defined under new Chapter 10) until they are replaced in accordance with new clause 7.8.2A.

11.103.4 New or replacement meters

The *Metering Coordinator* at a *connection point* must ensure that:

- (a) all new or replacement *metering installations* (other than type 4A *metering installations*) installed between 1 December 2018 and the commencement date; and
- (b) all new or replacement type 4A *metering installations* installed between 1 December 2019 and the commencement date,

are capable of recording and providing *trading interval energy data* as defined under new Chapter 10.

11.103.5 Metering installations exempt from metering data provision requirements

Metering installations (other than Excluded metering installations) do not have to be configured to record and provide *trading interval energy data* (as defined under new Chapter 10) prior to 1 December 2022.

11.103.6 Exemption from meter data storage requirements

By 1 December 2019, AEMO must *establish* and *publish* the procedure required by new clause 7.8.2(a2) in respect of exemptions from data storage requirements.

11.103.7 Default offers and bids submitted prior to the commencement date

Any *dispatch offer* or *dispatch bid* submitted pursuant to old clause 3.8.9 for a *trading interval* prior to the commencement date will, from the commencement date, be deemed to be 6 equal *dispatch offers* or *dispatch bids* submitted in respect of the 6 consecutive *trading intervals* within the relevant *30-minute period* until such time as that *dispatch offer* or *dispatch bid* is resubmitted under new clause 3.8.9.

Part ZZZF Contestability of energy services

11.104 Rules consequential on the making of the National Electricity Amendment (Contestability of energy services) Rule 2017

11.104.1 Definitions

For the purposes of this rule 11.104:

affected DNSP means each of the following *Distribution Network Service Providers*:

- (a) ActewAGL Distribution, the joint venture between Icon Distribution Investments Limited ACN 073 025 224 and Jemena Networks (ACT) Pty Ltd ACN 008 552 663, which is registered by AEMO as a *Network Service Provider* in accordance with section 12(1) of the *National Electricity Law*

and clause 2.5.1 of the *Rules* to own, control and operate the *distribution system* in the Australian Capital Territory, or any successor to its business;

- (b) Ausgrid Operator Partnership (ABN 78 508 211 731), which comprises of:
 - (1) Blue Op Partner Pty Ltd (ACN 615 217 500) as trustee for the Blue Op Partner Trust;
 - (2) ERIC Alpha Operator Corporation 1 Pty Ltd (ACN 612 975 096) as trustee for ERIC Alpha Operator Trust 1;
 - (3) ERIC Alpha Operator Corporation 2 Pty Ltd (ACN 612 975 121) as trustee for ERIC Alpha Operator Trust 2;
 - (4) ERIC Alpha Operator Corporation 3 Pty Ltd (ACN 612 975 185) as trustee for ERIC Alpha Operator Trust 3; and
 - (5) ERIC Alpha Operator Corporation 4 Pty Ltd (ACN 612 975 210) as trustee for ERIC Alpha Operator Trust 4;
- (c) Endeavour Energy Network Operator Partnership (ABN 11 247 365 823), which comprises of:
 - (1) Edwards O Pty Limited (ACN 618 643 486) as trustee for the Edwards O Trust;
 - (2) ERIC Epsilon Operator Corporation 1 Pty Ltd (ACN 617 221 735) as trustee for ERIC Epsilon Operator Trust 1;
 - (3) ERIC Epsilon Operator Corporation 2 Pty Ltd (ACN 617 221 744) as trustee for ERIC Epsilon Operator Trust 2;
 - (4) ERIC Epsilon Operator Corporation 3 Pty Ltd (ACN 617 221 753) as trustee for ERIC Epsilon Operator Trust 3; and
 - (5) ERIC Epsilon Operator Corporation 4 Pty Ltd (ACN 617 221 771) as trustee for ERIC Epsilon Operator Trust 4;
- (d) Essential Energy, the energy services corporation of that name (formerly known as Country Energy), which is constituted under section 7 of the *Energy Services Corporations Act 1995* (NSW) and specified in Part 2 of Schedule 1 of that Act, or any successor to its business;
- (e) Power and Water Corporation ABN 15 947 352 360, providing *distribution services* in the Northern Territory, or any successor to its business; and
- (f) Tasmanian Networks Pty Ltd ACN 167 357 299, in its capacity as a *Distribution Network Service Provider*.

Amending rule means the National Electricity Amendment (Contestability of energy services) Rule 2017.

commencement date means the date of commencement of the Amending rule.

current regulatory control period in respect of a *Distribution Network Service Provider*, means the *regulatory control period* for that *Distribution Network Service Provider* that commenced before the commencement date and, as at the commencement date, has not ended.

Old clauses 6.2.1(d) and 6.2.2(d) means 6.2.1(d) and clause 6.2.2(d), each as in force immediately before the commencement date.

statement of amendment in respect of an affected DNSP, means a written statement setting out any amendments to the affected DNSP's *building block proposal* that are necessary to remove, and make substitutions for, any *expenditure for a restricted asset* included in the affected DNSP's:

- (a) forecast of required capital expenditure; and
- (b) *proposed contingent capital expenditure* (if any),

for which the affected DNSP has not submitted an *exemption application* under clause 11.104.4(d)(1).

subsequent distribution determination means a distribution determination for the subsequent regulatory control period.

subsequent regulatory control period in respect of a *Distribution Network Service Provider*, means the *regulatory control period* for that *Distribution Network Service Provider* that immediately follows the current *regulatory control period*.

11.104.2 New guidelines

- (a) By 30 September 2018, the AER must develop and *publish* the first:
 - (1) *Distribution Service Classification Guidelines*; and
 - (2) *Asset Exemption Guidelines*,to take into account the Amending rule.
- (b) The AER must comply with the *distribution consultation procedures* when meeting its obligations under paragraph (a).

11.104.3 Transitional arrangements for application of Distribution Service Classification Guidelines and service classification provisions

- (a) Clause 6.2.8(c)(1) does not apply to, or in respect of, the *Distribution Service Classification Guidelines* for the purposes of the making of a subsequent distribution determination for an affected DNSP.
- (b) Old clauses 6.2.1(d) and 6.2.2(d) continue to apply to, and in respect of, the making of a subsequent distribution determination for an affected DNSP.

11.104.4 Transitional arrangements for application of Asset Exemption Guidelines, exemption applications and asset exemption decisions

- (a) Clause 6.2.8(c)(1) does not apply to, or in respect of, the *Asset Exemption Guidelines* for the purposes of the making of a subsequent distribution determination for an affected DNSP.
- (b) In the case of *Distribution Network Services Providers* other than affected DNPs, clauses 6.5.7(b)(5) and 6.5.7(c)(2) do not apply to, or in respect of, *expenditure for a restricted asset* that is included in a *building block proposal* for the subsequent regulatory control period, to the extent that:
 - (1) the expenditure constitutes unspent capital expenditure for a *contingent project* under clause 6.5.7(g) and the completion date for that *contingent project* is a date that occurs during the subsequent regulatory control period; or
 - (2) the expenditure relates to an *approved pass through amount* to be recovered during the subsequent regulatory control period.
- (c) In the case of affected DNSPs, clauses 6.5.7(b)(5) and 6.6A.1(a1) do not apply to, or in respect of, *expenditure for a restricted asset* that is included in a *building block proposal* for the subsequent regulatory control period.
- (d) Subject to paragraph (e), if the forecast of required capital expenditure and *proposed contingent capital expenditure* (if any) included in an affected DNSP's *building block proposal* and *regulatory proposal*, respectively, for the subsequent regulatory control period includes *expenditure for a restricted asset*, the affected DNSP must:
 - (1) submit an *exemption application* to the AER by 31 March 2018, which requests an *asset exemption* under clause 6.4B.1(a)(1), 6.4B.1(a)(2) or 6.4B.1(a)(3) in respect of the relevant asset or class of asset on which that *expenditure for a restricted asset* is to be incurred; or
 - (2) to the extent that an *exemption application* is not submitted under subparagraph (d)(1) in respect of the relevant *expenditure for a restricted asset*, submit a statement of amendment to the AER by 31 March 2018 for that *expenditure for a restricted asset*.
- (e) Paragraph (d) does not apply in respect of an affected DNSP to the extent the *expenditure for a restricted asset*:
 - (1) constitutes unspent capital expenditure for a *contingent project* under clause 6.5.7(g) and the completion date for that *contingent project* is a date that occurs during the subsequent regulatory control period; or
 - (2) relates to an *approved pass through amount* to be recovered during the subsequent regulatory control period.
- (f) A statement of amendment submitted by an affected DNSP under subparagraph (d)(2) is taken to form part of the *regulatory proposal*

submitted by that affected DNSP under clause 6.8.2(b) for the subsequent regulatory control period.

- (g) Subject to the provisions of the Law and the *Rules* about disclosure of *confidential information*, the *AER* must *publish* a statement of amendment as soon as practicable after receiving it.
- (h) In the case of affected DNSPs:
 - (1) Clause 6.5.7(c)(2) does not apply to, or in respect of, *expenditure for a restricted asset* that is included in a *building block proposal* for the subsequent regulatory control period, to the extent that:
 - (i) the expenditure constitutes unspent capital expenditure for a *contingent project* under clause 6.5.7(g) and the completion date for that *contingent project* is a date that occurs during the subsequent regulatory control period; or
 - (ii) the expenditure relates to an *approved pass through amount* to be recovered during the subsequent regulatory control period.
 - (2) An *asset exemption* requested under subparagraph (d)(1) is taken to be an *asset exemption* requested under clause 6.5.7(b)(5) for the purposes of clause 6.5.7(c)(2)(iii)(A).
- (i) Clauses 6.4B.1(b)(2), 6.4B.2(b), 6.4B.2(c)(5) and 6.8.2(a1) do not apply to, or in respect of, an *exemption application* submitted by an affected DNSP in respect of a *regulatory proposal* for the subsequent regulatory control period.
- (j) Clause 6.12.1(3A) does not apply to, or in respect of, *expenditure for a restricted asset* that is included in a *building block proposal* for the subsequent regulatory control period, to the extent that expenditure constitutes unspent capital expenditure for a *contingent project* under clause 6.5.7(g) and the completion date for that *contingent project* is a date that occurs during the subsequent regulatory control period.

11.104.5 Transitional arrangements for adjustment in value of regulatory asset base

Clause S6.2.1(e)(9) does not apply to, or in respect of, *expenditure for a restricted asset* to the extent that expenditure:

- (a) is incurred during the current regulatory control period;
- (b) constitutes unspent capital expenditure for a *contingent project* under clause 6.5.7(g) and the completion date for that *contingent project* is a date that occurs during the subsequent regulatory control period; or
- (c) relates to an *approved pass through amount* to be recovered during the subsequent regulatory control period.

Part ZZZG Declaration of lack of reserve conditions

11.105 Making of lack of reserve declaration guidelines

11.105.1 Definitions

- (a) In this rule 11.105:

Amending Rule means the National Electricity Amendment (Declaration of lack of reserve conditions) Rule 2017.

11.105.2 Making of lack of reserve declaration guidelines

- (a) By 9 January 2018, *AEMO* must develop and *publish* the *reserve level declaration guidelines* to take account of the Amending Rule.
- (b) *AEMO* is not required to comply with clause 4.8.4A(e) when making the *reserve level declaration guidelines* for the first time.

Part ZZZH Implementation of demand management incentive scheme

11.106 Implementation of demand management incentive scheme

11.106.1 Definitions

In this rule 11.106:

Amending Rule means the National Electricity Amendment (Implementation of demand management incentive scheme) Rule 2018.

commencement date means the day on which the Amending Rule commences operation.

existing demand management incentive scheme means a scheme developed and published by the *AER* under clause 6.6.3 of the *Rules* prior to 1 December 2016.

current regulatory control period means, for a *Distribution Network Service Provider*, a *regulatory control period* that commenced before the commencement date and, as at the commencement date, has not ended.

revised demand management incentive scheme means the Demand Management Incentive Scheme developed and published by the *AER* under clause 6.6.3 of the *Rules* on 14 December 2017.

11.106.2 Purpose

The purpose of this rule 11.106 is to allow a *Distribution Network Service Provider* to apply to the *AER* for the application of the revised demand management incentive scheme during its current regulatory control period.

11.106.3 Early application of revised demand management incentive scheme

- (a) A *Distribution Network Service Provider* may seek application of the revised demand management incentive scheme notwithstanding that the current regulatory control period may have commenced before 14 December 2017.

Submission of proposal

- (b) If a *Distribution Network Service Provider* wishes the revised demand management incentive scheme to apply during the current regulatory control period, the *Distribution Network Service Provider* must submit a proposal to the *AER* setting out:
 - (1) the proposed start date for the application of the revised demand management incentive scheme, which must not be earlier than the later of:
 - (i) 60 *business days* after the proposal is submitted; or
 - (ii) 24 months prior to the end of the current regulatory control period;
 - (2) a description of how the proposed early application of the revised demand management incentive scheme will assist the *Distribution Network Service Provider* in undertaking efficient expenditure on relevant *non-network options* relating to demand management; and
 - (3) such other information that the *Distribution Network Service Provider* considers relevant to its application for early application of the revised demand management incentive scheme.

Publication and consultation on proposal

- (c) The *AER* must as soon as practicable, *publish*:
 - (1) a proposal submitted under paragraph (b); and
 - (2) an invitation for written submissions from any person on the proposal within a period specified by the *AER*, being a period not less than 20 *business days* from the date of publication of the invitation for submissions.
- (d) Any person may make a written submission to the *AER* on the proposal, within the period specified in the invitation referred to in paragraph (c)(2).

Making of final decision

- (e) The *AER* must make a final decision on whether and how to apply the revised demand management incentive scheme to a *Distribution Network Service Provider* during its current regulatory control period.
- (f) The *AER*'s final decision must:

- (1) include a decision on the start date;
 - (2) set out reasons for the decision; and
 - (3) set out any amendments to the revised demand management incentive scheme necessary to give effect to the application of the revised demand management incentive scheme under paragraph (i).
- (g) The *AER* may make a decision on a start date which is different to the proposed start date, provided that the start date is not earlier than 24 months prior to the end of the current regulatory control period.
- (h) In making its final decision, the *AER* must consider the proposal submitted under paragraph (b) and any written submissions made on the proposal, and must have regard to the factors in clause 6.6.3(c).
- (i) If the *AER* makes a final decision that the revised demand management incentive scheme will apply then it will apply to the relevant *Distribution Network Service Provider* from the start date set out in the final decision, notwithstanding anything to the contrary in the revised demand management incentive scheme.
- (j) The revised demand management incentive scheme, as applicable to the *Distribution Network Service Provider*, is taken to be amended in accordance with the *AER*'s final decision under paragraph (f)(3).

Notice of final decision

- (k) The *AER* must, at least one *business day* before the start date determined under paragraph (f) *publish*:
 - (1) notice of the making of the final decision; and
 - (2) the final decision, including its reasons.

Application of existing scheme

- (l) Nothing in this Part ZZZH affects the application of an existing demand management incentive scheme to a *Distribution Network Service Provider* in respect of the current regulatory control period.

Part ZZZI Reinstatement of long notice Reliability and Emergency Reserve Trader

11.107 Rules consequential on the making of the National Electricity Amendment (Reinstatement of long notice Reliability and Emergency Reserve Trader) Rule 2018

11.107.1 Definitions

For the purposes of this rule 11.107:

Amending rule means the National Electricity Amendment (Reinstatement of long notice Reliability and Emergency Reserve Trader) Rule 2018.

commencement date means 13 July 2018.

Guidelines means the *RERT guidelines* as in force immediately before the commencement date.

RERT procedures means the procedures made under clause 3.20.7(e).

11.107.2 New RERT guidelines

- (a) With effect on the commencement date, the Guidelines are amended as set out in the following table:

Description of amendments to Guidelines
In section 1 of the Guidelines, omit “under clause 3.20.8 of the National Electricity Rules (<i>Rules</i>) and commence on 1 November 2017” and substitute “under clause 11.107.2 of the National Electricity Rules (<i>Rules</i>) and commence on 13 July 2018”.
Omit section 4.1 of the Guidelines, including the heading, and substitute:
4.1 During Stage 1 of the RERT process
(a) Long-notice situations where <i>AEMO</i> determines it has more than ten weeks of notice of a projected shortfall in <i>reserves</i>;
When it is considering whether to enter into <i>reserve contracts</i> during Stage 1 of the <i>RERT</i> process for long-notice situations, <i>AEMO</i> may take into account:
• the details of the outcome of the <i>medium term PASA</i>; • the outcome of the <i>energy adequacy assessment projection (EAAP)</i>; and • any other information that <i>AEMO</i> considers relevant.
(b) Medium-notice situations where <i>AEMO</i> has between ten weeks and seven days of notice of a projected shortfall in <i>reserves</i>.
When it is considering whether to enter into <i>reserve contracts</i> during Stage 1 of the <i>RERT</i> process for medium-notice situations, <i>AEMO</i> may take into account the information identified in paragraph (a) above;
(c) Short-notice situations where <i>AEMO</i> has between three hours and seven days of notice of a projected shortfall in <i>reserves</i>.
When it is considering whether to enter into <i>reserve contracts</i> during

Description of amendments to Guidelines
Stage 1 of the <i>RERT</i> process for short-notice situations, <i>AEMO</i> may take into account: - the details of the outcome of the <i>short term PASA</i> and <i>pre-dispatch</i> processes; and - any other information that <i>AEMO</i> considers relevant.
In section 5.2 of the Guidelines, omit the paragraph starting “Under some circumstances” and substitute: Under some circumstances <i>AEMO</i> will be required to <i>dispatch</i> or <i>activate reserves</i> that are contracted under the long-notice or medium-notice situations as well as contracting for additional <i>reserves</i> under the short-notice situations. Under these circumstances, <i>AEMO</i> should aim to maximise the effectiveness of <i>reserve contracts</i> at the least cost to end use consumers of electricity by selecting the least cost combination of <i>reserves</i> contracted under the long, medium and short-notice situations. However, where <i>AEMO</i> has only a few hours' notice of a <i>reserve</i> shortfall it may have insufficient time to determine the least cost combination of <i>reserves</i>. In which case <i>AEMO</i> should <i>dispatch</i> or <i>activate</i> its long-notice and medium-notice <i>reserve contracts</i> ahead of contracting for further <i>reserves</i> using the short-notice <i>RERT</i>. Nevertheless, where <i>AEMO</i> has sufficient time to perform the necessary analysis it should aim to maximise the cost effectiveness of the <i>RERT</i> by selecting the combination of <i>reserve contracts</i> that has the lowest incremental cost.
In section 6.1 of the Guidelines, omit “sections 6.2 and 6.3” and substitute “sections 6.3 and 6.4”.
In section 6.1 of the Guidelines, omit “section 8.1 or 8.2” and substitute “section 8.1, 8.2 or 8.3”.
Re-number sections 6.2 and 6.3 to section 6.3 and 6.4, respectively.
After section 6.1, insert: 6.2 Operation of the RERT panel for long-notice situations (more than ten weeks of notice) <i>AEMO</i> should not rely exclusively on the <i>RERT</i> panel when it has more than ten weeks' notice of a projected shortfall in <i>reserves</i>. Under these circumstances, <i>AEMO</i> is expected use a full tender process, which should include requesting tender responses from both members of the <i>RERT</i> panel and other potential <i>reserve</i> providers.
In section 6.4, omit “sections 6.1 to 6.2” and substitute “sections 6.1 to 6.3”.
In the heading of section 7.1, omit “Medium-notice situations of more than

Description of amendments to Guidelines
seven days of notice” and substitute “Long-notice and medium-notice situations”.
Renumber section 8.2 to section 8.3.
Renumber section 8.1 to section 8.2.
After the heading for section 8, insert:
8.1 Process for contracting for reserve contracts in long-notice situations (more than ten weeks of notice) The relevant actions that <i>AEMO</i> may take in relation to the exercise of the <i>RERT</i> with more than ten weeks of notice of a projected shortfall in <i>reserves</i> include: • establishing arrangements for contracting reserves in situations where there is more than ten weeks of notice of a projected shortfall in reserves; • continually monitoring the <i>medium term PASA</i> and the <i>EAAP</i>, and any other information <i>AEMO</i> considers is relevant, to inform itself of any periods of <i>low reserves</i>; • determining whether to enter into <i>reserve contracts</i>; • consulting with persons nominated by the relevant <i>participating jurisdictions</i> which <i>AEMO</i> is determining whether to contract for <i>reserves</i> in those <i>participating jurisdictions</i>; • calling for tenders in relation to providing <i>reserves</i> in the respective <i>regions</i> or in some circumstances, combined <i>regions</i>; • evaluating the tenders and dispensing with any tenders that do not provide an undertaking that the <i>reserves</i> are not available to the <i>market</i> through any other arrangements except on terms agreed with <i>AEMO</i>, taking into account: — whether the commercial requirements are met; — whether the tender is credible, that is, whether it is likely that the tenderer can deliver the offered <i>reserves</i>; and — the optimal combination of contracts to deliver the <i>reserves</i> necessary to meet the shortfall; • selecting the tenders that <i>AEMO</i> considers to be the optimal portfolio of <i>reserve contracts</i>; and • giving consideration to including an early termination clause in the

Description of amendments to Guidelines
event that the capacity is not needed. Following contracting of <i>reserves</i>, the actions that <i>AEMO</i> may take includes: • monitoring the <i>medium term PASA</i> and the <i>EAAP</i> to determine if there have been any changes since the tenders were prepared and evaluated; and • within one month after entering into a contract for <i>reserves</i>, publish the name of the counterparty to the contract and the volume and timing of <i>reserves</i> procured under the contract.
In section 8.2, omit the dot point starting “giving consideration to including an early termination”.
In section 8.2, omit the dot point starting “selecting the reserve offers that <i>AEMO</i>” and substitute: • selecting the <i>reserve</i> offers that <i>AEMO</i> considers to be the optimal portfolio of <i>reserve contracts</i>; and • giving consideration to including an early termination clause in the event that the capacity is not needed.
In section 9, omit “under the <i>RERT</i> for medium or short-notice situations” and substitute “under the <i>RERT</i> for long, medium and short-notice situations”.

- (b) By the commencement date, the *Reliability Panel* must *publish* the *RERT guidelines* in the form amended by paragraph (a).
- (c) For the purposes of paragraph (b), the *Reliability Panel* is not required to *publish* the *RERT guidelines* in accordance with the *Rules consultation procedures*.

11.107.3 Amendments to RERT procedures

- (a) By the commencement date, *AEMO* must amend and *publish* the RERT procedures to take into account:
- (1) the Amending rule; and
 - (2) the *RERT guidelines* as amended under clause 11.107.2.
- (b) In amending the RERT procedures under paragraph (a), *AEMO* must consult with *Registered Participants* and other interested parties on *AEMO's* proposed changes to the RERT procedures for a period of not less than two weeks.

11.107.4 Reserve contracts entered into before the commencement date

Nothing in the Amending rule affects any *reserve contract* entered into prior to the commencement date.

Part ZZZJ Register of distributed energy resources

11.108 Rules consequential on the making of the National Electricity Amendment (Register of distributed energy resources) Rule 2018

11.108.1 Definitions

For the purposes of this rule 11.108:

Amending Rule means the *National Electricity Amendment (Register of distributed energy resources) Rule 2018*.

commencement date means 1 December 2019.

New clause 3.7E means clause 3.7E of the *Rules* as will be in force immediately after the commencement date.

11.108.2 AEMO to develop and publish DER register information guidelines

- (a) By 1 June 2019 *AEMO* must make and *publish* the first *DER register information guidelines* under new clause 3.7E and in doing so must comply with the *Rules consultation procedures*.

11.108.3 NSPs to provide AEMO with existing DER generation information

- (a) No later than the commencement date, *Network Service Providers* must provide *AEMO* with all information that they hold which would be *DER generation information* under the Amending Rule.
- (b) *DER generation information* provided to *AEMO* under paragraph (a) must be provided in the form and manner specified in the *DER register information guidelines*.
- (c) Despite paragraph (a), a *Network Service Provider* is not required to provide to *AEMO* *DER generation information* under paragraph (a) where the collection, use or disclosure of that information by *Network Service Providers* would breach applicable privacy laws.