

National Electricity Rules Version 43

Historical Information

This version of the National Electricity Rules was current from 21 April 2011 to 30 June 2011.

National Electricity Rules Version 43

Status Information

This is the latest electronically available version of the National Electricity Rules as at 21 April 2011.

This consolidated version of the National Electricity Rules was last updated on 24 March 2011 as a result of the commencement of the following amendments:

National Electricity Amendment (Business Day Definition) Rule 2011 No.3

Provisions in force

The provisions displayed in this consolidated version of the Rules have all commenced.

National Electricity Amendment (Cost Recovery for Other Services Directions) Rule 2010 No. 5 has not commenced operation and all provisions will commence operation on 1 July 2011.

National Electricity Amendment (Network Support and Control Ancillary Services) Rule 2011 No. 2 has not commenced operation and all provisions will commence operation on 5 April 2012.

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
2.4	Market Participant	25
2.4.1	Registration as a category of Market Participant.....	25
2.4.2	Eligibility	25
2.5	Network Service Provider	26
2.5.1	Registration as a Network Service Provider	26
2.5.2	Market Network Service	27
2.5.3	Scheduled Network Service	28
2.5A	Trader	29
2.5B	Reallocator	30
2.6	Special Participant	30
2.7	Intention to Commence Activities or Functions.....	31
2.8	Registered Participant Rights and Obligations.....	31
2.8.1	Rights and obligations.....	31
2.9	Application to be Registered as a Registered Participant.....	32
2.9.1	Applications for Registration.....	32
2.9.2	Registration as a Registered Participant	32
2.9.3	Registration as an Intermediary	33
2.9A	Transfer of Registration	34
2.9A.1	Definitions.....	34
2.9A.2	Applications for Transfer of Registration	34
2.9A.3	Approval for Transfer of Registration	35
2.10	Ceasing to be a Registered Participant	36
2.10.1	Notification of intention.....	36
2.10.2	Ceasing Participation	37
2.10.3	Liability after cessation.....	37
2.11	Participant Fees.....	37
2.11.1	Development of Participant fee structure	37
2.11.2	Payment of Participant fees	40
2.11.3	Budgeted revenue requirements.....	40
2.12	Interpretation of References to Various Registered Participants	42
2A.	Regional Structure.....	47
Part A	Region change applications and region determinations by AEMC	47
2A.1	Introduction to Chapter 2A	47
2A.1.1	Definitions.....	47
2A.1.2	AEMC determination of regions.....	47
2A.1.3	Publication of regions by AEMO	47
2A.2	Region change applications.....	47
2A.2.1	A complete region change application.....	47
2A.2.2	Identifying a congestion problem	48

2A.2.3	Explanation of economic efficiency of proposed region solution	48
2A.2.4	Region change application must be technically competent	49
2A.2.5	Alternative congestion management options	49
2A.2.6	Previous application relating to congestion problem.....	50
2A.2.7	AEMO to provide information to intending applicants	50
2A.2.8	AEMC may refuse to accept incomplete applications.....	51
2A.3	Acceptance of region change application by AEMC	51
2A.3.1	Acceptance of a region change application by AEMC.....	51
2A.3.2	Preliminary consultation prior to acceptance of a region change application.....	52
2A.4	First round consultation on region change application.....	53
2A.4.1	Notice of first round consultation	53
2A.4.2	Right to make written submissions during first round consultation period	53
2A.4.3	Alternative region solution put forward by third parties	53
2A.4.4	Acceptance as a formal alternative region solution by AEMC.....	54
2A.5	Provision of supplementary economic analysis.....	55
2A.5.1	AEMC may direct provision of supplementary analysis	55
2A.5.2	AEMC may direct AEMO to provide information	55
2A.6	Region determinations.....	56
2A.6.1	AEMC powers to make a region determination	56
2A.6.2	Matters for consideration in making region determination.....	56
2A.7	Draft region determination and second round consultation.....	57
2A.7.1	Publishing of draft region determination	57
2A.7.2	Second round consultation.....	57
2A.7.3	Right to make written submissions during second round consultation	58
2A.8	Final region determination.....	58
2A.8.1	Final determination for region change	58
2A.8.2	Formal publication of region determination	58
2A.9	Miscellaneous matters for region change process.....	58
2A.9.1	AEMC may extend periods of time specified in Chapter 2A	58
2A.9.2	Consultation meeting in relation to region change application	59
Part B	Implementation of region determination.....	59
2A.10	Purpose and application of Part B	59
2A.10.1	Purpose of Part B	59
2A.10.2	Application of Part B	60
2A.11	Region Change Implementation Procedure	60
2A.11.1	Submission of draft Region Change Implementation Procedure.....	60
2A.11.2	Approved Region Change Implementation Procedure	60
2A.12	AEMO region change implementation functions.....	61
2A.12.1	General implementation functions.....	61
2A.12.2	Implementation functions referable to published implementation procedure.....	61

2A.12.3	Amendment of current or subsequent Regions and Loss Factors Publication	61
2A.13	Continuity of regions	61
Schedule 2A.1	Glossary for Chapter 2A	62
3.	Market Rules	67
3.1	Introduction to Market Rules	67
3.1.1	Purpose.....	67
3.1.2	[Deleted]	67
3.1.3	[Deleted]	67
3.1.4	Market design principles.....	67
3.1.5	Time for undertaking action.....	69
3.2	AEMO's Market Responsibilities	69
3.2.1	Market functions of AEMO	69
3.2.2	Spot market	70
3.2.3	Power system operations.....	70
3.2.4	Ancillary services function	70
3.2.5	[Deleted]	71
3.2.6	Settlements.....	71
3.3	Prudential Requirements	71
3.3.1	Market Participant criteria	71
3.3.2	Credit support.....	71
3.3.3	Acceptable credit criteria	72
3.3.4	Acceptable credit rating	73
3.3.5	Amount of credit support	73
3.3.6	Changes to credit support.....	73
3.3.7	Drawings on credit support.....	74
3.3.8	Maximum credit limit and prudential margin.....	75
3.3.8A	Security Deposits	75
3.3.9	Outstandings	76
3.3.10	Trading limit	76
3.3.11	Call notices.....	77
3.3.12	Typical accrual.....	78
3.3.13	Response to Call Notices	78
3.3.13A	Application of monies in the security deposit fund	79
3.3.14	Potential value of a transaction	80
3.3.15	Trading margin.....	81
3.3.16	Limitation on entry of transactions	81
3.3.17	Scheduled prices	81
3.3.18	Additional credit support	81
3.3.19	Consideration of other Market Participant transactions.....	82
3.4	Spot Market.....	82
3.4.1	Establishment of spot market.....	82
3.4.2	Trading day and trading interval.....	83
3.4.3	Spot market operations timetable.....	83
3.5	Regions	83
3.5.1	[Deleted]	83

3.5.2	[Deleted]	83
3.5.3	[Deleted]	83
3.5.4	[Deleted]	83
3.5.5	[Deleted]	83
3.5.6	Abolition of Snowy region.....	83
3.6	Network Losses and Constraints	84
3.6.1	Inter-regional losses	84
3.6.2	Intra-regional losses	86
3.6.2A	Load and generation data used to determine inter-regional loss factor equations and intra-regional loss factors	89
3.6.3	Distribution losses.....	90
3.6.4	Network constraints	95
3.6.5	Settlements residue due to network losses and constraints.....	96
3.7	Projected Assessment of System Adequacy	98
3.7.1	Administration of PASA.....	98
3.7.2	Medium term PASA	99
3.7.3	Short term PASA	102
3.7A	Congestion information resource	105
3.7B	Unconstrained intermittent generation forecast	107
3.7C	Energy Adequacy Assessment Projection.....	109
3.8	Central Dispatch and Spot Market Operation.....	112
3.8.1	Central Dispatch.....	112
3.8.2	Participation in central dispatch.....	114
3.8.3	Bid and offer aggregation guidelines	115
3.8.3A	Ramp rates	117
3.8.4	Notification of scheduled capacity.....	119
3.8.5	Submission timing	120
3.8.6	Generating unit offers for dispatch	121
3.8.6A	Scheduled network service offers for dispatch	123
3.8.7	Bids for scheduled load.....	124
3.8.7A	Market ancillary services offers.....	126
3.8.8	Validation of dispatch bids and offers	127
3.8.9	Default offers and bids.....	128
3.8.10	Network constraints	129
3.8.11	Ancillary services constraints	131
3.8.12	System scheduled reserve constraints.....	131
3.8.13	Notification of constraints.....	131
3.8.14	Dispatch under conditions of supply scarcity	131
3.8.15	[Deleted]	132
3.8.16	Equal priced dispatch bids and dispatch offers.....	132
3.8.17	Self-commitment.....	132
3.8.18	Self-decommitment.....	133
3.8.19	Dispatch inflexibilities	133
3.8.20	Pre-dispatch schedule.....	136
3.8.21	On-line dispatch process	138
3.8.22	Rebidding	139
3.8.22A	Variation of offer, bid or rebid.....	141
3.8.23	Failure to conform to dispatch instructions	142

3.8.24	Scheduling errors	144
3.9	Price Determination.....	144
3.9.1	Principles applicable to spot price determination	144
3.9.2	Determination of spot prices.....	146
3.9.2A	Determination of ancillary services prices.....	147
3.9.2B	Pricing where AEMO determines a manifestly incorrect input.....	148
3.9.3	Pricing in the event of intervention by AEMO.....	149
3.9.3A	Reliability standard and reliability settings review.....	150
3.9.4	Market Price Cap	151
3.9.5	Application of the Market Price Cap	152
3.9.6	Market Floor Price	152
3.9.6A	Application of the Market Floor Price	153
3.9.7	Pricing for constrained-on scheduled generating units.....	153
3.10	[Deleted]	154
3.11	Ancillary Services.....	154
3.11.1	Introduction.....	154
3.11.2	Market ancillary services	154
3.11.3	Acquisition of non-market ancillary services	155
3.11.4	Procedure for determining quantities of network control ancillary services.....	156
3.11.4A	Guidelines and objectives for acquisition of system restart ancillary services.....	157
3.11.4B	Determination of electrical sub-network boundaries.....	158
3.11.5	Tender process for non-market ancillary services	158
3.11.6	Procedures for the dispatch of non-market ancillary services by AEMO.....	161
3.11.7	Performance and testing.....	162
3.12	Market Intervention by AEMO.....	163
3.12.1	Intervention settlement timetable.....	163
3.12.2	Affected Participants and Market Customers entitlements to compensation in relation to AEMO intervention.....	163
3.12.3	Role of the Independent Expert in calculating payments in relation to intervention by AEMO	168
3.12A	Mandatory restrictions.....	170
3.12A.1	Restriction offers.....	170
3.12A.2	Mandatory restrictions schedule	172
3.12A.3	Acquisition of capacity	173
3.12A.4	Rebid of capacity under restriction offers.....	173
3.12A.5	Dispatch of restriction offers	173
3.12A.6	Pricing during a restriction price trading interval	174
3.12A.7	Determination of funding restriction shortfalls.....	174
3.12A.8	Cancellation of a mandatory restriction period.....	179
3.12A.9	Review by AEMC.....	179
3.13	Market Information.....	180
3.13.1	Provision of information	180
3.13.2	Systems and procedures.....	180
3.13.3	Standing data.....	182
3.13.4	Spot market	188

3.13.4A	Market ancillary services	193
3.13.5	Ancillary services contracting by AEMO.....	193
3.13.5A	Settlement residue auctions.....	194
3.13.6	[Deleted]	194
3.13.6A	Report by AEMO.....	194
3.13.7	Monitoring of significant variation between forecast and actual prices by AER.....	195
3.13.8	Public information	197
3.13.9	[Deleted]	197
3.13.10	Market auditor.....	197
3.13.11	[Deleted]	198
3.13.12	NMI Standing Data	198
3.13.13	Inter-network tests	202
3.13.14	Carbon Dioxide Equivalent Intensity Index	202
3.14	Administered Price Cap and Market Suspension.....	205
3.14.1	Cumulative Price Threshold and Administered Price Cap	205
3.14.2	Application of Administered Price Cap.....	206
3.14.3	Conditions for suspension of the spot market.....	207
3.14.4	Declaration of market suspension.....	208
3.14.5	Pricing during market suspension.....	209
3.14.6	Compensation due to the application of an administered price, market price cap or market floor price.....	212
3.15	Settlements.....	215
3.15.1	Settlements management by AEMO.....	215
3.15.2	Electronic funds transfer	216
3.15.3	Connection point and virtual transmission node responsibility	216
3.15.4	Adjusted energy amounts connection points	216
3.15.5	Adjusted energy - transmission network connection points	217
3.15.5A	Adjusted energy – virtual transmission nodes	217
3.15.6	Spot market transactions	218
3.15.6A	Ancillary service transactions	218
3.15.7	Payment to Directed Participants.....	228
3.15.7A	Payment to Directed Participants for services other than energy and market ancillary services.....	229
3.15.7B	Claim for additional compensation by Directed Participants	232
3.15.8	Funding of Compensation for directions	234
3.15.9	Reserve settlements.....	237
3.15.10	Administered price, market price cap or market floor price compensation payments	239
3.15.10A	Goods and services tax.....	240
3.15.10B	Restriction contract amounts.....	241
3.15.10C	Intervention Settlements	242
3.15.11	Reallocation transactions	245
3.15.11A	Reallocation procedures.....	247
3.15.12	Settlement amount	247
3.15.13	Payment of settlement amount.....	248
3.15.14	Preliminary statements.....	248
3.15.15	Final statements	249
3.15.15A	Use of estimated settlement amounts by AEMO.....	249

3.15.16	Payment by market participants.....	249
3.15.17	Payment to market participants.....	250
3.15.18	Disputes.....	250
3.15.19	Revised Statements and Adjustments	250
3.15.20	Payment of adjustments	252
3.15.21	Default procedure.....	253
3.15.22	Maximum total payment in respect of a billing period.....	256
3.15.23	Maximum total payment in respect of a financial year.....	257
3.15.24	Compensation for reductions under clause 3.15.23.....	258
3.15.25	Interest on overdue amounts	259
3.16	Participant compensation fund.....	259
3.16.1	Establishment of Participant compensation fund.....	259
3.16.2	Dispute resolution panel to determine compensation	260
3.17	AEMO Software.....	262
3.17.1	Acceptance of software.....	262
3.17.2	[Deleted]	262
3.18	Settlement Residue Auctions.....	262
3.18.1	Settlement residue concepts	262
3.18.2	Auctions and eligible persons	263
3.18.3	Auction rules	264
3.18.4	Proceeds and fees	265
3.18.5	Settlement residue committee	266
3.19	Market Management Systems Access Procedures.....	268
3.20	Reliability and Emergency Reserve Trader	268
3.20.1	Expiry of reserve and emergency reliability trader.....	268
3.20.2	Reliability and emergency reserve trader	269
3.20.3	Reserve contracts	269
3.20.4	Dispatch pricing methodology for unscheduled reserve contracts	270
3.20.5	AEMO's risk management and accounts relating to the reliability safety net	271
3.20.6	Reporting on RERT by AEMO.....	271
3.20.7	AEMO's exercise of the RERT	272
3.20.8	RERT Guidelines	273
3.20.9	Review of reserve and emergency reliability trader	274
Schedule 3.1	Bid and Offer Validation Data.....	274
	Scheduled Generating Unit Data:.....	275
	Semi-Scheduled Generating Unit Data:	276
	Scheduled Load Data:	276
	Scheduled Network Service Data:.....	277
	Ancillary Service Generating Unit and Ancillary Service Load Data:	277
	Dispatch Inflexibility Profile:.....	278
	Aggregation Data:	278
Schedule 3.2	[Deleted].....	278
Schedule 3.3	Principles for Determination of Maximum Credit Limits & Prudential Margins.....	278
S3.3.1	Principles for determining maximum credit limits	278
S3.3.2	Principles for determining prudential margins	280

4.	Power System Security	283
4.1	Introduction.....	283
4.1.1	Purpose.....	283
4.2	Definitions and Principles	283
4.2.1	[Deleted]	283
4.2.2	Satisfactory Operating State	283
4.2.3	Credible and non-credible contingency events	284
4.2.3A	Re-classifying contingency events.....	285
4.2.3B	Criteria for re-classifying contingency events	287
4.2.4	Secure operating state and power system security.....	287
4.2.5	Technical envelope	287
4.2.6	General principles for maintaining power system security.....	288
4.2.7	Reliable Operating State	289
4.2.8	Time for undertaking action.....	289
4.3	Power System Security Responsibilities and Obligations	289
4.3.1	Responsibility of AEMO for power system security	289
4.3.2	System security	292
4.3.3	The role of System Operators	294
4.3.4	Network Service Providers	296
4.3.5	Market Customer obligations.....	297
4.4	Power System Frequency Control.....	298
4.4.1	Power system frequency control responsibilities.....	298
4.4.2	Operational frequency control requirements	298
4.4.3	Generator protection requirements	299
4.5	Control of Power System Voltage.....	299
4.5.1	Power system voltage control	299
4.5.2	Reactive power reserve requirements	300
4.5.3	Audit and testing.....	300
4.6	Protection of Power System Equipment	300
4.6.1	Power system fault levels.....	300
4.6.2	Power system protection co-ordination	301
4.6.3	Audit and testing.....	301
4.6.4	Short-term thermal ratings of power system.....	301
4.6.5	Partial outage of power protection systems	301
4.7	Power System Stability Co-ordination.....	302
4.7.1	Stability analysis co-ordination.....	302
4.7.2	Audit and testing.....	302
4.8	Power System Security Operations	302
4.8.1	Registered Participants' advice	302
4.8.2	Protection or control system abnormality	303
4.8.3	AEMO's advice on power system emergency conditions	303
4.8.4	Declaration of conditions.....	304
4.8.5	Managing declarations of conditions	304
4.8.5A	Determination of the latest time for AEMO intervention.....	305
4.8.5B	Notifications of last time of AEMO intervention	306
4.8.6	[Deleted]	306
4.8.7	Managing a power system contingency event	306

4.8.8	[Deleted]	307
4.8.9	Power to issue directions and clause 4.8.9 instructions	307
4.8.9A	System security directions	309
4.8.10	Disconnection of generating units and market network services.....	309
4.8.11	[Deleted]	309
4.8.12	System restart plan and local black system procedures	309
4.8.13	[Deleted]	311
4.8.14	Power system restoration	311
4.8.15	Review of operating incidents	312
4.9	Power System Security Related Market Operations	313
4.9.1	Load forecasting.....	313
4.9.2	Instructions to Scheduled Generators and Semi-Scheduled Generators	315
4.9.2A	Dispatch Instructions to Scheduled Network Service Providers	316
4.9.3	Instructions to Registered Participants.....	316
4.9.3A	Ancillary services instructions.....	317
4.9.3B	Compliance with dispatch instructions	317
4.9.4	Dispatch related limitations on Scheduled Generators and Semi- Scheduled Generators	318
4.9.4A	Dispatch related limitations on Scheduled Network Service Providers	319
4.9.5	Form of dispatch instructions.....	320
4.9.6	Commitment of scheduled generating units	321
4.9.7	De-commitment, or output reduction, by Scheduled Generators	322
4.9.8	General responsibilities of Registered Participants	323
4.9.9	Scheduled Generator plant changes	324
4.9.9A	Scheduled Network Service Provider plant changes	324
4.9.9B	Ancillary service plant changes	325
4.10	Power System Operating Procedures.....	325
4.10.1	Power system operating procedures.....	325
4.10.2	Transmission network operations	326
4.10.3	Operating interaction with distribution networks	326
4.10.4	Switching of a Distributor's high voltage networks.....	327
4.10.5	Switching of reactive power facilities.....	327
4.10.6	Automatic reclose	327
4.10.7	Inspection of facilities by AEMO	328
4.11	Power System Security Support	328
4.11.1	Remote control and monitoring devices	328
4.11.2	Operational control and indication communication facilities.....	329
4.11.3	Power system voice/data operational communication facilities	330
4.11.4	Records of power system operational communication	332
4.11.5	Agent communications	333
4.12	Nomenclature Standards.....	333
4.13	[Deleted]	334
4.14	Acceptance of Performance Standards.....	334
4.15	Compliance with Performance Standards.....	336

4.16	Transitioning arrangements for establishment of performance standards.....	340
4.16.1	Definitions.....	340
4.16.2	Exclusions	342
4.16.3	Notification and acceptance of performance standards	342
4.16.4	Actual capability	347
4.16.5	Criteria for, and negotiation of, performance standards	348
4.16.6	Consultation with and assistance by Network Service Providers.....	351
4.16.7	Referral to expert determination	352
4.16.8	Prior actions	352
4.16.9	Deemed performance standards.....	353
4.16.10	Modification of connection agreements.....	353
4.17	Expert determination.....	353
4.17.1	Performance standards committee and appointment of performance standards experts.....	353
4.17.2	Referral to performance standards expert.....	355
4.17.3	Determinations of performance standards experts.....	356
4.17.4	Other matters.....	357
5.	Network Connection	361
5.1	Statement of Purpose.....	361
5.1.1	[Deleted]	361
5.1.2	Purpose.....	361
5.1.3	Principles.....	362
5.2	Obligations.....	363
5.2.1	Obligations of Registered Participants.....	363
5.2.2	Connection agreements.....	364
5.2.3	Obligations of network service providers.....	365
5.2.4	Obligations of customers	369
5.2.5	Obligations of Generators	370
5.3	Establishing or Modifying Connection	371
5.3.1	Process and procedures	371
5.3.2	Connection enquiry	371
5.3.3	Response to connection enquiry	372
5.3.4	Application for connection	375
5.3.4A	Negotiated access standards.....	376
5.3.5	Preparation of offer to connect	378
5.3.6	Offer to connect	379
5.3.7	Finalisation of connection agreements.....	381
5.3.7A	Application for connection to declared shared network	383
5.3.8	Provision and use of information.....	383
5.3.9	Procedure to be followed by a Generator proposing to alter a generating system.....	384
5.3.10	Acceptance of performance standards for generating plant that is altered.....	386
5.4	Design of Connected Equipment	387
5.4.1	Application.....	387
5.4.2	Advice of inconsistencies	387

5.4.3	Additional information.....	388
5.4.4	Advice on possible non-compliance	388
5.4A	Access arrangements relating to Transmission Networks	388
5.5	Access arrangements relating to Distribution Networks	391
5.6	Planning and Development of Network	395
5.6.1	Forecasts for connection points to transmission network.....	395
5.6.2	Network Development	395
5.6.2A	Annual Planning Report.....	401
5.6.3	AEMO's obligation to publish information and guidelines and provide advice.....	403
5.6.4	Last Resort Planning Power.....	404
5.6.5	[Deleted]	408
5.6.5A	Investments subject to the regulatory test.....	408
5.6.5B	Regulatory investment test for transmission.....	410
5.6.5C	Investments subject to the regulatory investment test for transmission	414
5.6.5D	Identification of a credible option.....	416
5.6.5E	Review of Costs Thresholds	417
5.6.6	Regulatory investment test for transmission procedures	418
5.6.6A	Disputes in relation to application of regulatory investment test for transmission	424
5.6.6AA	Determination that proposed transmission investment satisfies the regulatory investment test for transmission	426
5.6.6B	Construction of Funded Augmentations	428
5.6.6C	[Deleted]	428
5.6A	National Transmission Planning	428
5.6A.1	Preliminary consultation	428
5.6A.2	Publication of NTNDP.....	429
5.6A.3	Development strategies for national transmission flow paths	431
5.6A.4	NTNDP database	432
5.6A.5	Jurisdictional planning bodies and jurisdictional planning representatives.....	432
5.7	Inspection and Testing.....	433
5.7.1	Right of entry and inspection.....	433
5.7.2	Right of testing.....	435
5.7.3	Tests to demonstrate compliance with connection requirements for generators.....	436
5.7.4	Routine testing of protection equipment.....	438
5.7.5	Testing by Registered Participants of their own plant requiring changes to normal operation	439
5.7.6	Tests of generating units requiring changes to normal operation.....	441
5.7.7	Inter-network power system tests	443
5.8	Commissioning	450
5.8.1	Requirement to inspect and test equipment	450
5.8.2	Co-ordination during commissioning	450
5.8.3	Control and protection settings for equipment.....	450
5.8.4	Commissioning program.....	451
5.8.5	Commissioning tests	452

5.9	Disconnection and Reconnection	453
5.9.1	Voluntary disconnection	453
5.9.2	Decommissioning procedures	453
5.9.3	Involuntary disconnection	454
5.9.4	Direction to disconnect	454
5.9.4A	Notification of disconnection	455
5.9.5	Disconnection during an emergency	455
5.9.6	Obligation to reconnect	456
Schedule 5.1a	System standards	457
S5.1a.1	Purpose	457
S5.1a.2	Frequency	457
S5.1a.3	System stability	457
S5.1a.4	Power frequency voltage	458
S5.1a.5	Voltage fluctuations	459
S5.1a.6	Voltage waveform distortion	459
S5.1a.7	Voltage unbalance	460
S5.1a.8	Fault clearance times	461
Schedule 5.1	Network Performance Requirements to be Provided or Co-ordinated by Network Service Providers	462
S5.1.1	Introduction	462
S5.1.2	Network reliability	463
S5.1.2.1	Credible contingency events	463
S5.1.2.2	Network service within a region	464
S5.1.2.3	Network service between regions	465
S5.1.3	Frequency variations	466
S5.1.4	Magnitude of power frequency voltage	466
S5.1.5	Voltage fluctuations	467
S5.1.6	Voltage harmonic or voltage notching distortion	468
S5.1.7	Voltage unbalance	469
S5.1.8	Stability	470
S5.1.9	Protection systems and fault clearance times	471
S5.1.10	Load and network control facilities	475
S5.1.10.1	General	475
S5.1.10.2	Distribution Network Service Providers	475
S5.1.10.3	Transmission Network Service Providers	476
S5.1.11	Automatic reclosure of transmission or distribution lines	476
S5.1.12	Rating of transmission lines and equipment	476
S5.1.13	Information to be provided	477
Schedule 5.2	Conditions for Connection of Generators	477
S5.2.1	Outline of requirements	477
S5.2.2	Application of Settings	478
S5.2.3	Technical matters to be coordinated	479
S5.2.4	Provision of information	480
S5.2.5	Technical requirements	482
S5.2.5.1	Reactive power capability	482
S5.2.5.2	Quality of electricity generated	484
S5.2.5.3	Generating unit response to frequency disturbances	485
S5.2.5.4	Generating system response to voltage disturbances	488

S5.2.5.5	Generating system response to disturbances following contingency events	490
S5.2.5.6	Quality of electricity generated and continuous uninterrupted operation	493
S5.2.5.7	Partial load rejection	493
S5.2.5.8	Protection of generating systems from power system disturbances	494
S5.2.5.9	Protection systems that impact on power system security	496
S5.2.5.10	Protection to trip plant for unstable operation	497
S5.2.5.11	Frequency control	498
S5.2.5.12	Impact on network capability	501
S5.2.5.13	Voltage and reactive power control	502
S5.2.5.14	Active power control	508
S5.2.6	Monitoring and control requirements	510
S5.2.6.1	Remote Monitoring	510
S5.2.6.2	Communications equipment	512
S5.2.7	Power station auxiliary supplies	513
S5.2.8	Fault current	513
Schedule 5.3	Conditions for Connection of Customers	515
S5.3.1a	Introduction to the schedule	515
S5.3.1	Information	516
S5.3.2	Design standards	517
S5.3.3	Protection systems and settings	517
S5.3.4	Settings of protection and control systems	518
S5.3.5	Power factor requirements	519
S5.3.6	Balancing of load currents	520
S5.3.7	Voltage fluctuations	521
S5.3.8	Harmonics and voltage notching	521
S5.3.9	Design requirements for Network Users' substations	522
S5.3.10	Load shedding facilities	522
Schedule 5.3a	Conditions for connection of Market Network Services	523
S5.3a.1a	Introduction to the schedule	523
S5.3a.1	Provision of Information	524
S5.3a.2	Application of settings	525
S5.3a.3	Technical matters to be co-ordinated	526
S5.3a.4	Monitoring and control requirements	526
S5.3a.4.1	Remote Monitoring	526
S5.3a.4.2	[Deleted]	527
S5.3a.4.3	Communications equipment	527
S5.3a.5	Design standards	528
S5.3a.6	Protection systems and settings	528
S5.3a.7	[Deleted]	530
S5.3a.8	Reactive power capability	530
S5.3a.9	Balancing of load currents	530
S5.3a.10	Voltage fluctuations	531
S5.3a.11	Harmonics and voltage notching	531
S5.3a.12	Design requirements for Market Network Service Providers' substations	532
S5.3a.13	Market network service response to disturbances in the power system	532

S5.3a.14	Protection of market network services from power system disturbances.....	533
Schedule 5.4	Information to be Provided with Preliminary Enquiry	534
Schedule 5.5	Technical Details to Support Application for Connection and Connection Agreement	534
S5.5.1	Introduction to the schedule.....	534
S5.5.2	Categories of data	535
S5.5.3	Review, change and supply of data.....	535
S5.5.4	Data Requirements.....	536
S5.5.5	Asynchronous generating unit data.....	536
S5.5.6	Generating units equal to or smaller than 30MW data	536
S5.5.7	Generating System Design Data Sheet, Generating System Setting Data Sheet and Generating System Model Guidelines	537
Schedule 5.5.1	[Deleted]	538
Schedule 5.5.2	[Deleted]	538
Schedule 5.5.3	Network and plant technical data of equipment at or near connection point.....	538
Schedule 5.5.4	Network Plant and Apparatus Setting Data	541
Schedule 5.5.5	Load Characteristics at Connection Point.....	543
Schedule 5.6	Terms and Conditions of Connection agreements.....	544
Schedule 5.7	Annual Forecast Information for Planning Purposes	545
6	Economic Regulation of Distribution Services	551
Part A	Introduction.....	551
6.1	Introduction to Chapter 6	551
6.1.1	AER's regulatory responsibility	551
6.1.2	Structure of this Chapter	551
6.1.3	Access to direct control services and negotiated distribution services.....	552
6.1.4	Prohibition of DUOS charges for the export of energy	552
Part B	Classification of Distribution Services and Distribution Determinations	552
6.2	Classification	552
6.2.1	Classification of distribution services.....	552
6.2.2	Classification of direct control services as standard control services or alternative control services	553
6.2.3	Term for which classification operates	554
6.2.4	Duty of AER to make distribution determinations	555
6.2.5	Control mechanisms for direct control services.....	555
6.2.6	Basis of control mechanisms for direct control services	556
6.2.7	Negotiated distribution services.....	556
6.2.8	Guidelines	556
Part C	Building Block Determinations for standard control services.....	557
6.3	Building block determinations.....	557
6.3.1	Introduction.....	557

6.3.2	Contents of building block determination.....	558
6.4	Post-tax revenue model.....	558
6.4.1	Preparation, publication and amendment of post-tax revenue model.....	558
6.4.2	Contents of post-tax revenue model	558
6.4.3	Building block approach.....	559
6.5	Matters relevant to the making of building block determinations.....	560
6.5.1	Regulatory asset base	560
6.5.2	Return on capital	561
6.5.3	Estimated cost of corporate income tax	563
6.5.4	Review of rate of return	564
6.5.5	Depreciation.....	565
6.5.6	Forecast operating expenditure	566
6.5.7	Forecast capital expenditure	568
6.5.8	Efficiency benefit sharing scheme	570
6.5.9	The X factor	571
6.6	Adjustments after making of building block determination.....	572
6.6.1	Cost pass through.....	572
6.6.1A	Reporting on jurisdictional schemes.....	575
6.6.2	Service target performance incentive scheme.....	576
6.6.3	Demand management incentive scheme	578
Part D	Negotiated distribution services.....	578
6.7	Negotiated distribution services.....	578
6.7.1	Principles relating to access to negotiated distribution services.....	578
6.7.2	Determination of terms and conditions of access for negotiated distribution services	580
6.7.3	Negotiating framework determination.....	581
6.7.4	Negotiated Distribution Service Criteria determination	581
6.7.5	Preparation of and requirements for negotiating framework for negotiated distribution services.....	582
6.7.6	Confidential information.....	584
Part E	Regulatory proposal.....	584
6.8	Regulatory proposal.....	584
6.8.1	AER's framework and approach paper	584
6.8.2	Submission of regulatory proposal	586
6.9	Preliminary examination and consultation	587
6.9.1	Preliminary examination.....	587
6.9.2	Resubmission of proposal	587
6.9.3	Consultation	587
6.10	Draft distribution determination and further consultation.....	588
6.10.1	Making of draft distribution determination.....	588
6.10.2	Publication of draft determination and consultation.....	588
6.10.3	Submission of revised proposal	588
6.11	Distribution determination	589
6.11.1	Making of distribution determination	589
6.11.2	Notice of distribution determination.....	589

6.11.3	Commencement of distribution determination	589
6.12	Requirements relating to draft and final distribution determinations.....	590
6.12.1	Constituent decisions	590
6.12.2	Reasons for decisions.....	592
6.12.3	Extent of AER's discretion in making distribution determinations	593
6.13	Revocation and substitution of distribution determination for wrong information or error	594
6.14	Miscellaneous.....	594
Part F	Cost Allocation	595
6.15	Cost allocation	595
6.15.1	Duty to comply with Cost Allocation Method.....	595
6.15.2	Cost Allocation Principles	595
6.15.3	Cost Allocation Guidelines.....	596
6.15.4	Cost Allocation Method.....	597
Part G	Distribution consultation procedures.....	598
6.16	Distribution consultation procedures.....	598
Part H	Ring-Fencing Arrangements for Distribution Network Service Providers.....	599
6.17	Distribution Ring-Fencing Guidelines	599
6.17.1	Compliance with Distribution Ring-Fencing Guidelines	599
6.17.2	Development of Distribution Ring-Fencing Guidelines.....	599
Part I	Distribution Pricing Rules.....	601
6.18	Distribution Pricing Rules.....	601
6.18.1	Application of this Part	601
6.18.2	Pricing proposals.....	601
6.18.3	Tariff classes	602
6.18.4	Principles governing assignment or re-assignment of customers to tariff classes and assessment and review of basis of charging.....	602
6.18.5	Pricing principles	603
6.18.6	Side constraints on tariffs for standard control services	604
6.18.7	Recovery of designated pricing proposal charges	604
6.18.7A	Recovery of jurisdictional scheme amounts	605
6.18.8	Approval of pricing proposal	609
6.18.9	Publication of information about tariffs and tariff classes.....	610
6.19.	Data Required for Distribution Service Pricing	610
6.19.1	Forecast use of networks by Distribution Customers and Embedded Generators	610
6.19.2	Confidentiality of distribution network pricing information	610
Part J	Billing and Settlements.....	611
6.20	Billing and Settlements Process	611
6.20.1	Billing for distribution services	611
6.20.2	Minimum information to be provided in distribution network service bills	613

6.20.3	Settlement between Distribution Network Service Providers	613
6.20.4	Obligation to pay.....	613
Part K	Prudential requirements, capital contributions and prepayments	614
6.21	Distribution Network Service Provider Prudential Requirements.....	614
6.21.1	Prudential requirements for distribution network service.....	614
6.21.2	Capital contributions, prepayments and financial guarantees.....	615
6.21.3	Treatment of past prepayments and capital contributions	615
Part L	Dispute resolution	615
6.22	Dispute Resolution	615
6.22.1	Dispute Resolution by the AER.....	615
6.22.2	Determination of dispute.....	616
6.22.3	Termination of access dispute without access determination.....	617
Part M	Separate disclosure of transmission and distribution charges	618
6.23	Separate disclosure of transmission and distribution charges	618
Part N	Dual Function Assets	619
6.24	Dual Function Assets	619
6.24.1	Application of this Part	619
6.24.2	Dual Function Assets	619
6.25	AER determination of applicable pricing regime for Dual Function Assets.....	619
6.26	Division of Distribution Network Service Provider's revenue.....	620
Schedule 6.1	Contents of building block proposals.....	622
S6.1.1	Information and matters relating to capital expenditure	622
S6.1.2	Information and matters relating to operating expenditure.....	623
S6.1.3	Additional information and matters	623
Schedule 6.2	Regulatory Asset Base	625
S6.2.1	Establishment of opening regulatory asset base for a regulatory control period.....	625
S6.2.2	Prudency and efficiency of capital expenditure.....	629
S6.2.3	Roll forward of regulatory asset base within the same regulatory control period.....	630
6A.	Economic Regulation of Transmission Services	635
Part A	Introduction.....	635
6A.1	Introduction to Chapter 6A	635
6A.1.1	Economic regulation of transmission services generally.....	635
6A.1.2	Meaning of terms and conditions of access for transmission services.....	636
6A.1.3	Access to prescribed and negotiated transmission services.....	636
6A.1.4	National regulatory arrangements.....	637
6A.1.5	Application of Chapter 6A to Market Network Service Providers.....	637

6A.1.6	Application of Chapter 6A to AEMO and declared transmission system operators.....	638
Part B	Transmission Determinations Generally	638
6A.2	Transmission determinations.....	638
6A.2.1	Duty of AER to make transmission determinations	638
6A.2.2	Components of transmission determinations	638
Part C	Regulation of Revenue - Prescribed Transmission Services	639
6A.3	Allowed revenue from prescribed transmission services	639
6A.3.1	Allowed revenue for regulatory year	639
6A.3.2	Adjustment of maximum allowed revenue	639
6A.4	Revenue determinations	639
6A.4.1	Introduction.....	639
6A.4.2	Contents of revenue determination	639
6A.5	Post-tax revenue model.....	640
6A.5.1	Introduction.....	640
6A.5.2	Preparation, publication and amendment of post-tax revenue model.....	641
6A.5.3	Contents of post-tax revenue model	641
6A.5.4	Building blocks approach	642
6A.6	Matters relevant to the making of revenue determinations.....	643
6A.6.1	Regulatory asset base	643
6A.6.2	Return on capital	644
6A.6.3	Depreciation.....	647
6A.6.4	Estimated cost of corporate income tax	649
6A.6.5	Efficiency benefit sharing scheme	650
6A.6.6	Forecast operating expenditure	651
6A.6.7	Forecast capital expenditure	654
6A.6.8	The X factor	658
6A.7	Matters relevant to the adjustment of revenue cap after making of revenue determination	658
6A.7.1	Reopening of revenue determination for capital expenditure.....	658
6A.7.2	Network support pass through	660
6A.7.3	Cost pass through.....	662
6A.7.4	Service target performance incentive scheme.....	665
6A.8	Contingent Projects	667
6A.8.1	Acceptance of a Contingent Project in a revenue determination.....	667
6A.8.2	Amendment of revenue determination for contingent project.....	668
Part D	Negotiated Transmission Services	672
6A.9	Negotiated transmission services	672
6A.9.1	Principles relating to access to negotiated transmission services	672
6A.9.2	Determination of terms and conditions of access for negotiated transmission services	673
6A.9.3	Negotiating framework determination.....	674
6A.9.4	Negotiated transmission criteria determination	674
6A.9.5	Preparation of and requirements for negotiating framework.....	675
6A.9.6	Confidential information.....	676

6A.9.7	Commercial arbitration for negotiated transmission services.....	677
Part E	Procedure – Revenue determinations, negotiating frameworks and pricing methodologies	677
6A.10	Revenue Proposal, proposed negotiating framework and proposed pricing methodology.....	677
6A.10.1	Submission of proposal, framework, pricing methodology and information.....	677
6A.10.2	Submission guidelines	678
6A.11	Preliminary examination and consultation	679
6A.11.1	Preliminary examination and determination of non-compliance with relevant requirements.....	679
6A.11.2	Resubmission of proposal, framework, pricing methodology or information.....	680
6A.11.3	Resubmission of proposal, framework, pricing methodology or information.....	681
6A.12	Draft decision and further consultation.....	681
6A.12.1	Making of draft decision.....	681
6A.12.2	Publication of draft decision and consultation.....	682
6A.12.3	Submission of revised proposal, framework or pricing methodology	682
6A.13	Final decision.....	683
6A.13.1	Making of final decision	683
6A.13.2	Refusal to approve amounts, values, framework or pricing methodology	684
6A.13.3	Notice of final decision.....	685
6A.13.4	Making of transmission determination	685
6A.14	Requirements relating to draft and final decisions.....	685
6A.14.1	Contents of decisions	685
6A.14.2	Reasons for decisions.....	687
6A.14.3	Circumstances in which matters must be approved or accepted.....	687
6A.15	Revocation of revenue determination or amendment of pricing methodology for wrong information or error	690
6A.16	Miscellaneous.....	691
Part F	Information Disclosure.....	691
6A.17	Information disclosure by Transmission Network Service Providers.....	691
6A.17.1	Information to be provided to AER	691
6A.17.2	Information Guidelines	692
6A.18	[Deleted]	694
Part G	Cost Allocation	694
6A.19	Cost allocation	694
6A.19.1	Duty to comply with Cost Allocation Methodology.....	694
6A.19.2	Cost Allocation Principles	694
6A.19.3	Cost Allocation Guidelines	695
6A.19.4	Cost Allocation Methodology.....	696

Part H	Transmission Consultation Procedures	697
6A.20	Transmission consultation procedures	697
Part I	Ring-Fencing Arrangements for Transmission Network Service Providers.....	699
6A.21	Transmission Ring-Fencing Guidelines	699
6A.21.1	Compliance with Transmission Ring-Fencing Guidelines	699
6A.21.2	Development of Transmission Ring-Fencing Guidelines.....	699
Part J	Prescribed Transmission Services - Regulation of Pricing	700
6A.22	Terms used in Part J.....	700
6A.22.1	Aggregate annual revenue requirement (AARR)	700
6A.22.2	Annual service revenue requirement (ASRR)	700
6A.22.3	Meaning of attributable cost share.....	701
6A.22.4	Meaning of attributable connection point cost share	701
6A.23	Pricing Principles for Prescribed Transmission Services	701
6A.23.1	Introduction.....	701
6A.23.2	Principles for the allocation of the AARR to categories of prescribed transmission services.....	702
6A.23.3	Principles for the allocation of the ASRR to transmission network connection points	702
6A.23.4	Price structure principles.....	704
6A.24	Pricing methodology	705
6A.24.1	Pricing methodologies generally.....	705
6A.24.2	Publication of pricing methodology and transmission network prices	706
6A.24.3	Basis for setting prices pending approval of pricing methodology	706
6A.24.4	Basis for setting prices pending approval of maximum allowed revenue.....	707
6A.25	Pricing methodology guidelines for prescribed transmission services	708
6A.25.1	Making and amending of pricing methodology guidelines	708
6A.25.2	Contents of pricing methodology guidelines	708
6A.26	Prudent discounts	709
6A.26.1	Agreements for prudent discounts for prescribed transmission services.....	709
6A.26.2	Application to AER for approval of proposed prudent discount amounts	710
6A.27	Billing Process	712
6A.27.1	Billing for prescribed transmission services.....	712
6A.27.2	Minimum information to be provided in network service bills	712
6A.27.3	Obligation to pay charges for prescribed transmission services.....	713
6A.27.4	Payments between Transmission Network Service Providers.....	713
6A.27.5	Calculation of financial transfers between Transmission Network Service Providers	713
6A.28	Prudential Requirements	714
6A.28.1	Prudential Requirements for prescribed transmission services	714

6A.28.2	Capital contribution or prepayment for a specific asset.....	714
6A.28.3	Treatment of past capital contributions.....	714
6A.29	Multiple Transmission Network Service Providers.....	715
6A.29.1	Multiple Transmission Network Service Providers within a region.....	715
6A.29.2	Single Transmission Network Service Provider within a region.....	715
6A.29.3	Allocation over several regions	715
Part K	Commercial arbitration for disputes about terms and conditions of access for prescribed and negotiated transmission services	716
6A.30	Commercial arbitration for prescribed and negotiated transmission services	716
6A.30.1	Notification of transmission services dispute	716
6A.30.2	Appointment of commercial arbitrator	716
6A.30.3	Procedures of commercial arbitrator.....	717
6A.30.4	Powers of commercial arbitrator in determining transmission services access disputes	718
6A.30.5	Determination of transmission services access disputes.....	719
6A.30.6	Costs of dispute.....	720
6A.30.7	Enforcement of agreement or determination and requirement for reasons.....	720
6A.30.8	Miscellaneous	721
Schedule 6A.1	Contents of Revenue Proposals.....	721
S6A.1.1	Information and matters relating to capital expenditure	721
S6A.1.2	Information and matters relating to operating expenditure.....	722
S6A.1.3	Additional information and matters	723
Schedule 6A.2	Regulatory Asset Base	725
S6A.2.1	Establishment of opening regulatory asset base for a regulatory control period	725
S6A.2.2	Prudency and efficiency of capital expenditure.....	730
S6A.2.3	Removal of assets from regulatory asset base	730
S6A.2.4	Roll forward of regulatory asset base within the same regulatory control period	731
Schedule 6A.3	CRNP methodology and modified CRNP methodology.....	732
S6A.3.1	Meaning of optimised replacement cost	732
S6A.3.2	CRNP methodology	733
S6A.3.3	Modified CRNP methodology	734
Schedule 6A.4	Application of this Chapter to AEMO and declared transmission system operators.....	734
S6A.4.1	Application of this Chapter to AEMO etc	734
S6A.4.2	Exclusions, qualifications and modifications	734
7.	Metering.....	745
7.1	Introduction to the Metering Chapter	745
7.1.1	Purpose.....	745
7.1.2	Obligations of Market Participants to establish metering installations	745

7.1.3	Obligation to establish, maintain and publish procedures	746
7.1.4	Amendment of procedures in the Metering Chapter.....	746
7.2	Responsibility for Metering Installation, Metering Data and Market Settlement and Transfer Solution Procedures	747
7.2.1	Responsibility of the responsible person	747
7.2.1A	Responsibility of AEMO for the collection, processing and delivery of metering data	748
7.2.1B	Responsibility for interconnectors	749
7.2.2	Responsibility of the Market Participant	749
7.2.3	Responsibility of the Local Network Service Provider	749
7.2.4	Joint metering installations	751
7.2.4A	Special site or technology related conditions.....	751
7.2.5	Role of the responsible person.....	753
7.2.6	[Deleted]	755
7.2.7	Registration of metering installations	755
7.2.8	Market Settlement and Transfer Solution Procedures	756
7.2A	B2B Arrangements.....	756
7.2A.1	B2B e-Hub	756
7.2A.2	Information Exchange Committee.....	757
7.2A.3	Method of making and changing B2B Procedures	760
7.2A.4	Content of the B2B Procedures.....	763
7.2A.5	Transition of B2B Communications from the Market Settlement and Transfer Solution Procedures.....	764
7.2A.6	Cost Recovery	765
7.3	Metering Installation Arrangements.....	766
7.3.1A	Metering Installation Requirements.....	766
7.3.1	Metering installation components.....	766
7.3.2	Connection and metering point.....	770
7.3.3	[Deleted]	771
7.3.4	Metering installation types, accuracy and meter churn	771
7.3.5	[Deleted]	772
7.3.6	[Deleted]	772
7.3.7	Meter installation malfunctions.....	772
7.3A	Payment for Metering Provision and Metering Data Services.....	773
7.4	Metering Providers and Metering Data Providers	774
7.4.1	Role of Metering Providers.....	774
7.4.1A	Role of Metering Data Providers	774
7.4.2	Qualifications and registration of Metering Providers.....	774
7.4.2A	Qualifications and registration of Metering Data Providers	776
7.4.3	Deregistration of Metering Providers and Metering Data Providers	776
7.5	Register of Metering Information	777
7.5.1	Metering register	777
7.5.2	Metering register discrepancy.....	777
7.6	Inspection, Testing and Audit of Metering Installations.....	778
7.6.1	Responsibility for testing	778
7.6.2	Actions in event of non-compliance	780
7.6.3	Audits of information held in metering installations	780

7.6.4	Retention of test records and documents	781
7.7	Entitlement to metering data and access to metering installation	782
7.8	Security of Metering Installations and Data	783
7.8.1	Security of metering installations	783
7.8.2	Security controls	784
7.8.3	Changes to metering equipment, parameters and settings within a metering installation.....	786
7.8.4	Changes to energy data or to metering data.....	786
7.9	Processing of Metering Data for Settlements Purposes.....	787
7.9.1	Metering databases.....	787
7.9.2	[Deleted]	788
7.9.3	[Deleted]	788
7.9.4	Data validation, substitution and estimation.....	788
7.9.5	Errors found in metering tests, inspections or audits.....	789
7.10	Confidentiality.....	789
7.11	Metering Data Arrangements.....	789
7.11.1	Metering data performance standards.....	789
7.11.2	Metering Data Services.....	790
7.11.3	Data management and storage	792
7.11.4	Use of check metering data.....	793
7.11.5	Periodic energy metering	793
7.12	Time settings.....	794
7.13	Evolving Technologies and Processes and Development of the Market.....	795
7.14	Metrology and service level procedures.....	796
7.14.1	Requirements of the metrology procedure.....	796
7.14.1A	Requirements of the service level procedures	798
7.14.2	Jurisdictional metrology material in metrology procedure.....	799
7.14.3	Additional metrology procedure matters	800
7.14.4	[Deleted]	802
7.15	Miscellaneous.....	802
Schedule 7.1	Responsibility for metering installation and metering data	802
Schedule 7.2	Types and Accuracy of Metering Installations	802
S7.2.1	General requirements	802
S7.2.2	Metering installations commissioned prior to 13 December 1998	803
S7.2.3	Accuracy requirements for metering installations	803
S7.2.4.	Check metering	809
S7.2.5.	Resolution and accuracy of displayed or captured data.....	810
S7.2.6.	General design standards	810
S7.2.6.1	Design requirements	810
S7.2.6.2	Design guidelines.....	811
Schedule 7.3	Inspection and Testing Requirements.....	812
S7.3.1.	General.....	812
S7.3.2.	Technical Guidelines	814

Schedule 7.4	Metering Provider.....	815
S7.4.1	General.....	815
S7.4.2	Categories of registration.....	815
S7.4.3	Capabilities of Metering Providers for metering installations types 1, 2, 3 and 4.....	817
S7.4.4	Capabilities of Metering Providers for metering installations types 5 and 6.....	819
S7.4.5	Capabilities of the Accredited Service Provider category	819
Schedule 7.5	Metering Register.....	820
S7.5.1.	General.....	820
S7.5.2.	Metering register information	820
Schedule 7.6	Metering Data Provider	822
S7.6.1	General.....	822
S7.6.2	Categories of registration.....	822
S7.6.3	Capabilities of Metering Data Providers.....	822
8.	Administrative Functions.....	827
8.1	Administrative functions	827
8.1.1	[Deleted]	827
8.1.2	[Deleted]	827
Part A	Introductory	827
8.1.3	Structure of this Chapter	827
Part B	Disputes.....	828
8.2	Dispute Resolution	828
8.2.1	Application and guiding principles.....	828
8.2.2	The Dispute Resolution Adviser.....	830
8.2.3	Dispute management systems of Registered Participants and AEMO.....	832
8.2.4	Stage 1 - dispute resolution through Registered Participants' DMS	832
8.2.5	Stage 2 - dispute resolution process.....	834
8.2.6A	Establishment of Dispute Resolution Panel	835
8.2.6B	Parties to DRP Proceedings	837
8.2.6C	Proceedings of the DRP	837
8.2.6D	Decisions of the DRP	838
8.2.6	[Deleted]	839
8.2.7	Legal representation.....	839
8.2.8	Cost of dispute resolution	839
8.2.9	Effect of resolution	840
8.2.10	Recording and publication	840
8.2.11	Appeals on questions of law	841
8.2.12	[Deleted]	841
8.2A	B2B Determination Disputes.....	841
8.2A.1	Application of rule 8.2	841
8.2A.2	How rule 8.2 applies	841
8.3	[Deleted]	844
8.4	[Deleted]	844

8.5	[Deleted]	844
Part C	Registered Participants' confidentiality obligations	844
8.6	Confidentiality	844
8.6.1	Confidentiality	844
8.6.2	Exceptions	845
8.6.3	Conditions	846
8.6.4	[Deleted]	847
8.6.5	Indemnity to AER, AEMC and AEMO	847
8.6.6	AEMO information	847
8.6.7	Information on Rules Bodies	847
Part D	Monitoring and reporting	848
8.7	Monitoring and Reporting	848
8.7.1	Monitoring	848
8.7.2	Reporting requirements and monitoring standards for Registered Participants and AEMO	848
8.7.3	Consultation required for making general regulatory information order (Section 28H of the NEL)	850
8.7.4	Preparation of network service provider performance report (Section 28V of the NEL)	851
8.7.5	[Deleted]	852
8.7.6	Recovery of reporting costs	852
Part E	Reliability panel	852
8.8	Reliability Panel	852
8.8.1	Purpose of Reliability Panel	852
8.8.2	Constitution of the Reliability Panel	854
8.8.3	Reliability review process	856
Part F	Rules consultation procedures	858
8.9	Rules Consultation Procedures	858
Part G	Consumer Advocacy Panel	861
8.10	Consumer advocacy funding obligation	861
Part H	Augmentations	861
8.11.1	Application	861
8.11.2	Object	861
8.11.3	Definitions	862
8.11.4	Planning criteria	862
8.11.5	Construction of augmentation that is not a contestable augmentation	863
8.11.6	Contestable augmentations	863
8.11.7	Construction and operation of contestable augmentation	864
8.11.8	Funded augmentations that are not subject to the tender process	866
8.11.9	Contractual requirements and principles	867
8.11.10	Annual planning review	867
Schedule 8.11	Principles to be reflected in agreements relating to contestable augmentations	867
S8.11.1	Risk allocation	867

S8.11.2	Minimum requirements for agreements relating to contestable augmentation.....	869
S8.11.3	Matters to be dealt with in relevant agreements	869
8A.	Participant Derogations	873
Part 1	Derogations Granted to TransGrid.....	873
8A.1	Derogation for the Treatment of Contingent Projects under Revenue Determination.....	873
8A.1.1	Expiry date.....	873
8A.1.2	Definitions.....	873
8A.1.3	Treatment of contingent projects	873
Part 2	Derogations Granted to EnergyAustralia.....	875
8A.2	Derogation from clause 3.18.2(g)(2) - Auctions and eligible persons	875
8A.2.1	Definitions.....	875
8A.2.2	Expiry date.....	875
8A.2.3	Derogation.....	875
8A.2A	Derogation from inspection and testing of metering installations.....	876
8A.2A.1	Definitions.....	876
8A.2A.2	Derogation.....	876
Part 3	[Deleted]	877
Part 4	[Deleted]	877
Part 5	[Deleted]	877
Part 6	Derogations Granted to Victorian Market Participants	877
Part 7	[Deleted]	877
Part 8	[Deleted]	877
Part 9	[Deleted]	877
Part 10	[Deleted]	877
Part 11	[Deleted]	877
Part 12	Ancillary Services Provisions.....	877
1.	Transitional Arrangements.....	877
2.	[Deleted]	878
Part 13	Derogation granted to Aurora Energy (Tamar Valley) Pty Ltd	878
8A.13	Derogation from clause S5.2.5.3 – Generating unit response to frequency disturbances.....	878
8A.13.1	Definitions.....	878
8A.13.2	Expiry date.....	878
8A.13.3	Derogation.....	879

9.	Jurisdictional Derogations and Transitional Arrangements	883
9.1	Purpose and Application	883
9.1.1	Purpose.....	883
9.1.2	Jurisdictional Derogations	883
Part A	Jurisdictional Derogations for Victoria	883
9.2	[Deleted]	883
9.3	Definitions	883
9.3.1	General Definitions	883
9.3.2	[Deleted]	885
9.3A	Fault levels	885
9.4	Transitional Arrangements for Chapter 2 - Registered Participants, Registration and Cross Border Networks.....	886
9.4.1	[Deleted]	886
9.4.2	Smelter Trader	886
9.4.3	Smelter Trader: compliance.....	887
9.4.4	Report from AER.....	890
9.4.5	Cross Border Networks.....	890
9.5	[Deleted]	891
9.6	Transitional Arrangements for Chapter 4 - System Security.....	891
9.6.1	Operating Procedures (clause 4.10.1)	891
9.6.2	Nomenclature Standards (clause 4.12)	891
9.7	Transitional Arrangements for Chapter 5 - Network Connection	891
9.7.1	[Deleted]	891
9.7.2	[Deleted]	891
9.7.3	[Deleted]	891
9.7.4	Regulation of Distribution Network Connection.....	891
9.7.5	[Deleted]	893
9.7.6	[Deleted]	893
9.7.7	[Deleted]	893
9.8	Transitional Arrangements for Chapter 6 - Network Pricing.....	893
9.8.1	[Deleted]	893
9.8.2	[Deleted]	893
9.8.3	[Deleted]	893
9.8.4	Transmission Network Pricing	893
9.8.4A	[Deleted]	894
9.8.4B	[Deleted]	894
9.8.4C	[Deleted]	894
9.8.4D	[Deleted]	894
9.8.4E	[Deleted]	894
9.8.4F	[Deleted]	894
9.8.4G	[Deleted]	894
9.8.5	Distribution Network Pricing – Victorian Jurisdictional Regulator	894
9.8.6	[Deleted]	894

9.8.7	Distribution network pricing – transitional application of former Chapter 6.....	894
9.8.8	Exclusion of AER's power to aggregate distribution systems and parts of distribution systems	896
9.9	Transitional Arrangements for Chapter 7 - Metering	896
9.9.1	Metering Installations To Which This Schedule Applies	896
9.9.2	[Deleted]	897
9.9.3	[Deleted]	897
9.9.4	[Deleted]	897
9.9.5	[Deleted]	897
9.9.6	[Deleted]	897
9.9.7	[Deleted]	897
9.9.8	[Deleted]	897
9.9.9	Periodic Energy Metering (clause 7.9.3)	897
9.9.10	Use of Alternate Technologies (clause 7.13).....	897
9.9A	[Deleted].....	898
9.9B	Advanced Interval Meter Roll Out	898
9.9B.1	Definitions.....	898
9.9B.2	Expiry date	898
9.9B.3	Designation as responsible person	899
9.9B.4	Classification of relevant metering installations.....	899
9.9B.5	Cost recovery of AMI roll out	899
9.9B.6	[Deleted]	899
9.9B.7	[Deleted]	899
9.9B.8	Capability for remote acquisition of metering data	899
Schedule 9A1.1	[Deleted].....	900
Schedule 9A1.2	[Deleted]	900
Schedule 9A1.3	[Deleted]	900
Schedule 9A2	[Deleted].....	900
Schedule 9A3	Jurisdictional Derogations Granted to Generators	900
1.	Interpretation of tables	900
2.	Continuing effect	900
3.	Subsequent agreement	901
4.	[Deleted]	901
5.	Reactive Power Capability (clause S5.2.5.1 of schedule 5.2)	901
6.	[Deleted]	902
7.	[Deleted]	902
8.	[Deleted]	902
9.	[Deleted]	902
10.	[Deleted]	902
11.	[Deleted].....	902
12.	[Deleted]	902
13.	Governor Systems (load control) (clause S5.2.5.11 of schedule 5.2).....	902
14.	[Deleted]	902
15.	[Deleted]	902
16.	Excitation Control System (clause S5.2.5.13 of schedule 5.2).....	902

Part B	Jurisdictional Derogations for New South Wales	903
9.10	[Deleted]	903
9.11	Definitions.....	903
9.11.1	Definitions used in this Part B	903
9.12	Transitional Arrangements for Chapter 2 - Generators, Registered Participants, Registration and Cross Border Networks	905
9.12.1	Registration as a Generator.....	905
9.12.2	Customers	905
9.12.3	Power Traders	905
9.12.4	Cross Border Networks.....	908
9.13	[Deleted]	909
9.14	Transitional Arrangements for Chapter 4 - System Security.....	909
9.14.1	Power System Operating Procedures.....	909
9.15	Transitional Arrangements for Chapter 5 - Network Connection	909
9.15.1	[Deleted]	909
9.15.2	Disputes Relating to a NSW Distribution Network.....	909
9.16	Transitional Arrangements for Chapter 6 - Network Pricing.....	910
9.16.1	[Deleted]	910
9.16.2	[Deleted]	910
9.16.3	Jurisdictional Regulator	910
9.16.4	Deemed Regulated Interconnector.....	911
9.16.5	Revenue Cap	911
9.17	Transitional Arrangements for Chapter 7 - Metering	912
9.17.1	Extent of Derogations	912
9.17.2	Initial Registration (clause 7.1.2).....	912
9.17.3	Amendments to Schedule 9G1.....	913
9.17.4	Compliance with AS/NZ ISO 9002 (clause S7.4.3(f) of schedule 7.4)	913
9.17A	[Deleted]	914
9.18	[Deleted]	914
Part C	Jurisdictional Derogations for the Australian Capital Territory.....	914
9.19	[Deleted]	914
9.20	Definitions and Transitional Arrangements for Cross-Border Networks	914
9.20.1	Definitions.....	914
9.20.2	Cross Border Networks.....	914
9.21	[Deleted]	915
9.22	[Deleted]	915
9.23	Transitional Arrangements for Chapter 6 - Network Pricing.....	915
9.23.1	[Deleted]	915
9.23.2	[Deleted]	915

9.23.3	[Deleted].....	915
9.23.4	[Deleted]	915
9.24	Transitional Arrangements.....	915
9.24.1	Chapter 7 - Metering.....	915
9.24.2	[Deleted]	915
9.24A	[Deleted].....	915
Part D	Jurisdictional Derogations for South Australia	915
9.25	Definitions.....	915
9.25.1	[Deleted]	915
9.25.2	Definitions.....	915
9.26	Transitional Arrangements for Chapter 2 - Registered Participants, Registration And Cross Border Networks.....	918
9.26.1	Registration as a Generator.....	918
9.26.2	Registration as a Customer	919
9.26.3	Cross Border Networks.....	919
9.26.4	[Deleted]	920
9.26.5	Registration as a Network Service Provider	920
9.27	[Deleted]	920
9.28	Transitional Arrangements for Chapter 5 - Network Connection	920
9.28.1	Application of clause 5.2	920
9.28.2	[Deleted]	921
9.28.3	Regulation of connections and augmentations	921
9.29	Transitional Arrangements for Chapter 6 - Economic Regulation of Distribution Services.....	923
9.29.1	Jurisdictional Regulator	923
9.29.2	[Deleted]	923
9.29.3	[Deleted]	923
9.29.4	[Deleted]	923
9.29.5	Distribution Network Pricing – South Australia.....	923
9.29.6	Capital contributions, prepayments and financial guarantees.....	924
9.29.7	Ring fencing.....	925
9.29A	Monitoring and reporting	925
9.30	Transitional Provisions.....	926
9.30.1	Chapter 7 - Metering.....	926
9.30.2	Participant fees related to additional advisory functions	926
Schedule 9D1	- [Deleted].....	927
Part E	Jurisdictional Derogations for Queensland	927
9.31	[Deleted]	927
9.32	Definitions and Interpretation.....	927
9.32.1	Definitions.....	927
9.32.2	Interpretation.....	929
9.33	Transitional Arrangements for Chapter 1	930
9.33.1	[Deleted]	930

9.34	Transitional Arrangements for Chapter 2 - Registered Participants and Registration	930
9.34.1	Application of the Rules in Queensland (clauses 2.2 and 2.5)	930
9.34.2	Stanwell Cross Border Leases (clause 2.2).....	930
9.34.3	[Deleted]	930
9.34.4	Registration as a Customer (clause 2.3.1).....	930
9.34.5	There is no clause 9.34.5.....	931
9.34.6	Exempted generation agreements (clause 2.2).....	931
9.35	[Deleted]	936
9.36	[Deleted]	936
9.37	Transitional Arrangements for Chapter 5 - Network Connection	936
9.37.1	[Deleted]	936
9.37.2	Existing connection and access agreements (clause 5.2).....	936
9.37.3	[Deleted]	937
9.37.4	Regulation of distribution network connection (clause 5.3).....	937
9.37.5	Forecasts for connection points to transmission network (clause 5.6.1)	937
9.37.6	There is no clause 9.37.6.....	937
9.37.7	Cross Border Networks.....	937
9.37.8	[Deleted]	938
9.37.9	Credible contingency events (clause S5.1.2.1 of schedule 5.1).....	938
9.37.10	Reactive power capability (clause S5.2.5.1 of schedule 5.2).....	938
9.37.11	[Deleted]	939
9.37.12	Voltage fluctuations (clause S5.1.5 of schedule 5.1).....	939
9.37.13	[Deleted]	941
9.37.14	[Deleted]	941
9.37.15	[Deleted]	941
9.37.16	[Deleted]	941
9.37.17	[Deleted]	941
9.37.18	[Deleted]	941
9.37.19	Generating unit response to disturbances (clause S5.2.5.3 of schedule 5.2)	941
9.37.20	[Deleted]	941
9.37.21	Excitation control system (clause S.5.2.5.13 of schedule 5.2)	941
9.37.22	[Deleted]	942
9.37.23	Annual forecast information for planning purposes (schedule 5.7).....	942
9.38	Transitional Arrangements for Chapter 6 - Network Pricing.....	942
9.38.1	[Deleted]	942
9.38.2	[Deleted]	942
9.38.3	Arrangements for regulation of distribution pricing.....	942
9.38.4	Interconnectors between regions.....	943
9.38.5	Transmission pricing for exempted generation agreements	943
9.39	Transitional Arrangements for Chapter 7 - Metering	944
9.39.1	Metering installations to which this clause applies.....	944
9.39.2	[Deleted]	944
9.39.3	[Deleted]	944
9.39.4	[Deleted]	944

9.39.5	[Deleted]	944
9.40	Transitional Arrangements for Chapter 8 - Administration Functions.....	944
9.40.1	[Deleted]	944
9.40.2	[Deleted]	944
9.40.3	[Deleted]	944
9.41	[Deleted]	944
Schedule 9E1	Exempted Generation Agreements	944
Part F	Jurisdictional Derogations for Tasmania	946
9.41A	[Deleted]	946
9.42	Definitions and interpretation	946
9.42.1	Definitions.....	946
9.42.2	Interpretation.....	948
9.42.3	National grid, power system and related expressions.....	948
9.43	Transitional arrangements for Chapter 1 - Introduction - Validity of certain actions taken prior to Transition Date.....	948
9.44	Transitional arrangements for Chapter 2 – Registered Participants and Registration - Customers (clause 2.3.1(e)).....	949
9.45	Transitional arrangements for Chapter 3 - Market Rules.....	949
9.45.1	Tasmanian Region (clause 3.5).....	949
9.45.2	Administered Price Cap (clause 3.14.1)	949
9.45.3	Settlement Residue Auctions (clause 3.18.1)	950
9.46	Transitional arrangements for Chapter 4 - Power System Security	950
9.46.1	Satisfactory Operating State (clause 4.2.2).....	950
9.46.2	Secure operating state and power system security (clause 4.2.6(c)).....	950
9.46.3	Market Customer obligations (clause 4.3.5(b))	950
9.46.4	Power System Frequency Control Responsibilities (clause 4.4.1)	950
9.47	Transitional arrangements for Chapter 5- Network Connection.....	951
9.47.1	Existing Connection Agreements	951
9.47.2	[Deleted]	951
9.47.3	Frequency variations (clauses S5.1.3 and S5.1.10)	951
9.47.4	Fault clearance times (clauses S5.1.9 and S5.1a.8 and table S5.1a.2)	951
9.48	Transitional arrangements for Chapter 6 - Transmission and Distribution Pricing	952
9.48.1	[Deleted]	952
9.48.2	Transmission Service Pricing	952
9.48.3	Distribution Service Pricing – Jurisdictional Regulator	953
9.48.4	Distribution Service Pricing.....	953
9.48.4A	Ring fencing.....	954
9.48.4B	Uniformity of tariffs for small customers	954
9.48.5	Transmission network.....	954
9.48.6	Deemed regulated interconnector	954

9.49	Transitional arrangements for Chapter 8 - Administrative Functions.....	954
9.49.1	Frequency Standards (clause 8.8.1)	954
9.49.2	Termination of frequency derogations	955
9.49.3	Reliability Panel.....	955
9.49.4	Principles to be applied by Reliability Panel	955
Part G	Schedules to Chapter 9	956
Schedule 9G1	Metering Transitional Arrangements	956
1.	Introduction.....	956
2.	[Deleted]	956
3.	General Principle	956
4.	[Deleted]	956
5.	Accuracy Requirements	956
6.	[Deleted]	957
7.	[Deleted]	957
8.	[Deleted]	957
9.	[Deleted]	957
10.	[Deleted]	957
10.	Glossary	961
11.	Savings and Transitional Rules	1067
Part A	Negative Inter-regional Settlements Residue (2009 amendments)	1067
11.1	Rules consequent on making of the National Electricity Amendment (Negative Inter-regional Settlements Residue Amounts) Rule 2009.....	1067
11.1.1	Definitions.....	1067
11.1.2	Recovery of accrued negative settlements residue	1067
11.1.3	Recovery of interest costs associated with accrued negative settlements residue	1067
11.1.4	Actions taken by AEMO or a Transmission Network Service Provider.....	1067
Part B	System Restart Ancillary Services (2006 amendments)	1068
11.2	Rules consequent on making of the National Electricity Amendment (System Restart Ancillary Services and pricing under market suspension) Rule 2006	1068
11.2.1	Transitional provision for acquisition of non-market ancillary services.....	1068
11.3	[Deleted]	1069
Part C	Dispute Resolution for Regulatory Test (2006 amendments)	1069
11.4	Rules consequent on making of the National Electricity Amendment (Dispute Resolution for Regulatory Test) Rule 2006.....	1069
11.4.1	Continuation of things done under old clause 5.6.6.....	1069

Part D	Metrology (2006 amendments)	1069
11.5	Rules consequential on the making of the National Electricity Amendment (Metrology) Rule 2006	1069
11.5.1	Definitions.....	1069
11.5.2	Metrology procedures continues to apply until 31 December 2006	1070
11.5.3	Responsible person	1070
11.5.4	NEMMCO's responsibility to develop a metrology procedure	1070
11.5.5	Jurisdictional metrology material in the metrology procedure	1070
Part E	Economic Regulation of Transmission Services (2006 amendments)	1071
11.6	Rules consequent on making of the National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006.....	1071
11.6.1	Definitions.....	1071
11.6.2	New Chapter 6A does not affect existing revenue determinations.....	1073
11.6.3	Old Part C and Schedules 6.2, 6.3, 6.4, 6.7 and 6.8 of old Chapter 6.....	1073
11.6.4	Old Part F of Chapter 6.....	1073
11.6.5	Application of new Chapter 6A to Transmission Network Service Providers	1073
11.6.6	Application of Chapter 6 to old distribution matters	1073
11.6.7	References to the old Chapter 6	1074
11.6.8	References to provisions of the old Chapter 6.....	1074
11.6.9	Roll forward of regulatory asset base for first regulatory control period	1074
11.6.10	Other adjustment carry-over mechanisms from current to first regulatory control period.....	1074
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	1075
11.6.12	Powerlink transitional provisions	1078
11.6.13	ElectraNet easements transitional provisions	1081
11.6.14	TransGrid contingent projects.....	1082
11.6.15	Transmission determination includes existing revenue determinations.....	1082
11.6.16	References to regulatory control period.....	1082
11.6.17	Consultation procedure for first proposed guidelines.....	1082
11.6.18	Reliance on proposed guidelines for SP AusNet, VENCORP and ElectraNet	1083
11.6.19	EnergyAustralia transitional provisions.....	1084
11.6.20	Basslink transitional provisions	1086
11.6.21	SPI Powernet savings and transitional provision.....	1088
11.6.22	Interim arrangements pricing-related information.....	1089
Part F	Reform of Regulatory Test Principles (2006 amendments)	1090
11.7	Rules consequent on making of the National Electricity Amendment (Reform of the Regulatory Test Principles) Rule 2006.....	1090
11.7.1	Definitions.....	1090

11.7.2	Amending Rule does not affect old clause 5.6.5A.....	1090
Part G	Pricing of Prescribed Transmission Services (2006 amendments)	1091
11.8	Rules consequent on making the National Electricity Amendment (Pricing of Prescribed Transmission Services) Rule 2006.....	1091
11.8.1	Definitions.....	1091
11.8.2	Regulated interconnectors.....	1092
11.8.3	Application of new Part J of Chapter 6A to Transmission Network Service Providers	1092
11.8.4	Reliance on agreed interim guideline for ElectraNet, SPAusNet, and VenCorp	1092
11.8.5	Prudent discounts under existing agreements	1092
11.8.6	Application of prudent discounts regime under rule 6A.26.....	1093
11.8.7	Prudent discounts pending approval of pricing methodology	1093
Part H	Reallocations (2007 amendments)	1094
11.9	Rules consequent on the making of the National Electricity Amendment (Reallocations) Rule 2007	1094
11.9.1	Definitions.....	1094
11.9.2	Existing and transitional reallocations	1094
Part I	Technical Standards for Wind Generation (2007 amendments).....	1095
11.10	Rules consequent on making of the National Electricity Amendment (Technical Standards for Wind Generation and other Generator Connections) Rule 2007	1095
11.10.1	Definitions.....	1095
11.10.2	Provision of information under S5.2.4 in registration application.....	1095
11.10.3	Access standards made under the old Chapter 5.....	1096
11.10.4	Modifications to plant by Generators	1096
11.10.5	Technical Details to Support Application for Connection and Connection Agreement	1096
11.10.6	Transitional arrangements for establishment of performance standards	1096
11.10.7	Jurisdictional Derogations for Queensland.....	1097
11.10A	Rules consequent on the making of the National Electricity Amendment (Central Dispatch and Integration of Wind and Other Intermittent Generation) Rule 2008.....	1097
11.10A.1	Definitions.....	1097
11.10A.2	Registration and reclassification of classified generating units.....	1098
11.10A.3	Registered generating unit	1098
11.10A.4	Classification of potential semi-scheduled generating unit	1099
11.10A.5	Participant fees.....	1099
11.10A.6	Timetable	1099
11.10A.7	Procedure for contribution factors for ancillary service transactions	1099
11.10A.8	Guidelines for energy conversion model information	1100
11.11	Rules consequent on making of the National Electricity Amendment (Cost Recovery of Localised Regulation Services) Rule 2007.....	1100

11.11.1	Definitions.....	1100
11.11.2	Action taken by NEMMCO for the purposes of Amending Rule	1100
11.12	Rules consequent on making of the National Electricity Amendment (Efficient Dispatch of Regulation Services) Rule 2007.....	1101
11.12.1	Definitions.....	1101
11.12.2	Action taken by NEMMCO for the purposes of Amending Rule	1101
Part L	Abolition of Snowy Region (2007 amendments)	1101
11.13	Rules consequent on making the National Electricity Amendment (Abolition of Snowy Region) Rule 2007	1101
11.13.1	Definitions.....	1101
11.13.2	Purpose of rule 11.13	1102
11.13.3	Application of rule 11.13	1102
11.13.4	Implementation period	1102
11.13.5	Publishing of implementation plan by NEMMCO	1103
11.13.6	NEMMCO implementation functions.....	1103
11.13.7	Software modifications to implement abolition of Snowy region	1103
11.13.8	Allocation of transmission connection points as a result of abolition of Snowy region.....	1103
11.13.9	Location of region boundaries	1105
11.13.10	2008/09 Regions Publication and Loss Factors Publication.....	1105
11.13.11	Reserve margin calculations	1106
11.13.12	Re-calculation of network constraints and transmission loss factors	1106
11.13.13	Transition of settlements residue auction arrangements.....	1106
11.13.14	Continuity of regions	1107
Part M	Economic Regulation of Distribution Services (2007 amendments)	1107
Division 1	General Provisions.....	1107
11.14	General provisions	1107
Division 2	Special provisions applying to New South Wales and the Australian Capital Territory for the Regulatory Control Period 2009-2014	1111
11.15	Special provisions applying to New South Wales and the Australian Capital Territory	1111
Division 3	Transitional arrangements for first distribution determination for Queensland Distribution Network Service Providers	1112
11.16	Transitional arrangements for first distribution determination for Queensland Distribution Network Service Providers.....	1112
Division 4	Transitional provisions of specific application to Victoria	1115
11.17	Transitional provisions of specific application to Victoria.....	1115
Part N	Registration of Foreign Based Persons and Corporations as Trader Class Participants (2007 amendments).....	1118
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.....	1118
11.18.1	Definitions.....	1118

11.18.2	Auction rules	1118
Part O	Process for Region Change (2007 amendments)	1119
11.19	Rules consequent on making of the National Electricity Amendment (Process for Region Change) Rule 2007	1119
11.19.1	Definitions	1119
11.19.2	Regions Publication	1119
Part P	Integration of NEM Metrology Requirements	1119
11.20	Rules consequential on the making of the National Electricity Amendment (Integration of NEM Metrology Requirements) Rule 2008	1119
11.20.1	Definitions	1119
11.20.2	Metering installations for non-market generating units immediately prior to 30 June 2008	1120
11.20.3	First-tier load metering installations	1120
11.20.4	First-tier load metering installations in Victoria	1120
11.20.5	Minimalist Transitioning Approach in Queensland	1120
11.20.6	First-tier jurisdictional requirements publication	1121
11.20.7	Metrology procedure	1121
Part PA	Reliability Settings: Information Safety Net and Directions	1121
11.21	Rules consequential on the making of the National Electricity Amendment (NEM Reliability Settings: Information Safety Net and Directions) Rule 2008	1121
Part Q	Regulatory Test Thresholds and Information Disclosure on Network Replacements	1123
11.22	Rules consequential on the making of the National Electricity Amendment (Regulatory Test Thresholds and Information Disclosure on Network Replacements) Rule 2008	1123
11.22.1	Definitions	1123
11.22.2	Amending Rule does not affect existing regulatory test	1123
Part R	Performance Standard Compliance of Generators	1124
11.23	Rules consequential on the making of the National Electricity Amendment (Performance Standards Compliance of Generators) Rule 2008	1124
11.23.1	Definitions	1124
11.23.2	Application of rule 11.23 for compliance programs implemented immediately after the commencement of the Amending Rule	1124
11.23.3	Application of rule 11.23 for compliance programs implemented immediately prior to the commencement of the Amending Rule	1124
11.23.4	Application of rule 11.23 for compliance programs not implemented immediately prior to the commencement of the Amending Rule	1124
Part S	Compensation Arrangements under Administered Pricing	1125
11.24	Rules consequential on the making of National Electricity Amendment (Compensation Arrangements under Administered Pricing) Rule 2008	1125

11.24.1	Definitions.....	1125
11.24.2	Compensation Guidelines	1125
Part U	Confidentiality Arrangements concerning Information required for Power System Studies	1125
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.....	1125
11.25.1	Definitions.....	1125
11.25.2	Transitional arrangements for the provision of information.....	1125
Part V	WACC Reviews: Extension of Time	1127
11.26	Rule consequential on the making of the National Electricity Amendment (WACC Reviews: Extension of Time) Rule 2009.....	1127
11.26.1	Definitions.....	1127
11.26.2	Extension of time to submit a regulatory proposal for the regulatory control period 2010-2015.....	1127
Part W	National Transmission Statement	1127
11.27	Rules consequent on the making of the National Electricity Amendment (National Transmission Statement) Rule 2009.....	1127
11.27.1	Definitions.....	1127
11.27.2	Purpose.....	1128
11.27.3	Application of rule 11.27	1128
11.27.4	National Transmission Statement	1128
11.27.5	Scope and Content of National Transmission Network Development Plan.....	1130
11.27.6	Energy Adequacy Assessment Projection	1130
11.27.7	Amendment to Last Resort Power	1131
11.27.8	Actions taken prior to commencement of Rule	1131
Part X	National Transmission Planning	1131
11.28	Rules consequential on the making of the National Electricity (Australian Energy Market Operator) Amendment Rules 2009.....	1131
11.28.1	Definitions.....	1131
11.28.2	Jurisdictional planning bodies and representatives.....	1131
11.28.3	Criteria and guidelines published by Inter-regional Planning Committee.....	1132
11.28.4	Augmentation technical reports	1132
11.28.5	Last Resort Planning Power	1132
11.28.6	Inter-network power system tests	1133
11.28.7	Control and protection settings for equipment.....	1133
11.28.8	Revenue Proposals	1133
Part Y	Regulatory Investment Test for Transmission.....	1133
11.29	Rules consequent on making of the National Electricity Amendment (Regulatory Investment Test for Transmission) Rule 2009.....	1133
11.29.1	Definitions.....	1133
11.29.2	Period when Amending Rule applies to transmission investment.....	1134

Part Z	Congestion Information Resource.....	1135
11.30	Rules consequent on the making of the National Electricity Amendment (Congestion Information Resource) Rule 2009	1135
11.30.1	Definitions.....	1135
11.30.2	Interim congestion Information resource.....	1135
Part ZA	Reliability and emergency reserve trader (2009 amendments)	1137
11.31	Rules consequent on the making of the National Electricity Amendment (Improved RERT Flexibility and Short-notice Reserve Contracts) Rule 2009.....	1137
Part ZB	Early Application of Market Impact Parameters.....	1139
11.32	Rules consequent on the making of the National Electricity Amendment (Early Implementation of Market Impact Parameters) Rule 2010	1139
11.32.1	Definitions.....	1139
11.32.2	Purpose.....	1140
11.32.3	Early application of the market impact component of the service target performance incentive scheme.....	1140
Part ZC	Transparency of operating data	1143
11.33	Rules consequential on the making of National Electricity Amendment (Transparency of Operating Data) Rule 2010.....	1143
11.33.1	Definitions.....	1143
11.33.2	Spot market operations timetable	1143
Part ZE	Payments under Feed-in Schemes and Climate Change Funds	1145
11.35	Rules consequential on the making of the National Electricity Amendment (Payments under Feed-in Schemes and Climate Change Funds) Rule 2010	1145
11.35.1	Definitions.....	1145
11.35.2	Application of recovery of jurisdictional scheme Rules.....	1146
11.35.3	Reporting on jurisdictional schemes.....	1147
11.35.4	Revocation and substitution of distribution determination for jurisdictional scheme recovery	1148
Part ZF	Transitional Arrangements for Ministerial Smart Meter Roll Out Determinations	1149
11.36	Ministerial Smart Meter Roll Out Determinations	1149
11.36.1	Definitions.....	1149
11.36.2	Meaning of relevant metering installation	1149
11.36.3	Period of application of rule to relevant metering installation	1150
11.36.4	Designation of responsible person.....	1150
11.36.5	[Deleted]	1150
11.36.6	[Deleted]	1150
Part ZG	Provision of Metering Data Services and Clarification of Existing Metrology Requirements.....	1150

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	1150
11.37.1	Definitions.....	1150
11.37.2	Commencement of special site or technology related conditions.....	1150
11.37.3	Initial service level procedures	1151
Part ZH	Spot Market Operations Timetable	1151
11.38	Rules consequential on the making of National Electricity Amendment (Amendments to PASA-related Rules) Rule 2010	1151
11.38.1	Definitions.....	1151
11.38.2	Spot market operations timetable.....	1152
Part ZI	DNSP Recovery of Transmission-related Charges	1152
11.39	Rules consequential on the making of the National Electricity Amendment (DNSP Recovery of Transmission-related Charges) Rule 2011	1152
11.39.1	Definitions.....	1152
11.39.2	Recovery by Victorian distribution network service providers during current regulatory control period.....	1153
11.39.3	Recovery by Victorian distribution network service providers for shared network augmentations.....	1154
11.39.4	Bairnsdale network support agreement.....	1154
11.39.5	Approval of pricing proposal	1154
11.39.6	Ergon Energy transitional charges	1154
11.39.7	Energex transitional charges	1154
Appendix 1	Form in which Chapter 6 applies to New South Wales and the Australian Capital Territory for the Regulatory Control Period 2009-2014	1154
Chapter 6	Economic Regulation of Distribution Services	1155
Part A	Introduction.....	1155
6.1	Introduction to Chapter 6	1155
6.1.1	AER's regulatory responsibility	1155
6.1.2	Structure of this Chapter	1155
6.1.3	Access to direct control services and negotiated distribution services.....	1156
6.1.4	Prohibition of DUOS charges for the export of energy	1156
6.1.5	Application of this Chapter to certain transmission assets – ActewAGL, Country Energy and Integral Energy Australia.....	1157
6.1.6	Application of this Chapter to the EnergyAustralia transmission support network	1157
6.1.7	Definitions.....	1158
Part B	Classification of Distribution Services and Distribution Determinations.....	1160
6.2	Classification	1160
6.2.1	*****	1160
6.2.2	*****	1160

6.2.3	*****	1160
6.2.3A	Classes and subclasses of distribution services	1160
6.2.3B	Classification for NSW Distribution Network Service Providers	1161
6.2.3C	Classification for ACT Distribution Network Service Provider.....	1163
6.2.4	Duty of AER to make distribution determinations	1164
6.2.5	Control mechanisms for direct control services.....	1164
6.2.6	Basis of control mechanisms for direct control services	1166
6.2.7	EnergyAustralia negotiated distribution services	1166
6.2.7A	Negotiable components of direct control services (NSW and ACT).....	1166
6.2.8	Guidelines	1166
Part C	Building Block Determinations for standard control services.....	1167
6.3	Building block determinations.....	1167
6.3.1	Introduction.....	1167
6.3.2	Contents of building block determination.....	1167
6.4	Post-tax revenue model.....	1168
6.4.1	Preparation, publication and amendment of post-tax revenue model.....	1168
6.4.2	Contents of post-tax revenue model	1168
6.4.3	Building block approach	1169
6.5	Matters relevant to the making of building block determinations.....	1170
6.5.1	Regulatory asset base	1170
6.5.2	Return on capital	1172
6.5.3	Estimated cost of corporate income tax	1174
6.5.4	*****	1174
6.5.5	Depreciation.....	1174
6.5.6	Forecast operating expenditure	1175
6.5.7	Forecast capital expenditure	1177
6.5.8	Efficiency benefit sharing scheme	1179
6.5.9	The X factor	1181
6.6	Adjustments after making of building block determination.....	1182
6.6.1	Cost pass through.....	1182
6.6.1A	*****	1185
6.6.2	Service target performance incentive scheme.....	1185
6.6.3	Demand management incentive scheme	1187
Part D	EnergyAustralia negotiated distribution services.....	1188
6.7	Negotiated distribution services.....	1188
6.7.1	Principles relating to access to negotiated distribution services.....	1188
6.7.2	Determination of terms and conditions of access for negotiated distribution services	1190
6.7.3	Negotiating framework determination.....	1190
6.7.4	Negotiated Distribution Service Criteria determination	1191
6.7.5	Preparation of and requirements for negotiating framework for negotiated distribution services.....	1191
6.7.6	Confidential information.....	1193
Part DA	Negotiable components of direct control services (NSW and ACT).....	1194

6.7A	Negotiable components of direct control services	1194
6.7A.1	Principles relating to access to negotiable components	1194
6.7A.2	Determination of terms and conditions of access for negotiable components	1196
6.7A.3	Negotiating framework determination	1196
6.7A.4	Negotiable component criteria determination	1196
6.7A.5	Preparation of and requirements for negotiating framework	1197
6.7A.6	Confidential information	1199
Part E	Regulatory proposal	1199
6.8	Regulatory proposal	1199
6.8.1	*****	1199
6.8.2	Submission of regulatory proposal	1199
6.9	Preliminary examination and consultation	1201
6.9.1	Preliminary examination	1201
6.9.2	Resubmission of proposal	1201
6.9.3	Consultation	1201
6.10	Draft distribution determination and further consultation	1202
6.10.1	Making of draft distribution determination	1202
6.10.2	Publication of draft determination and consultation	1202
6.10.3	Submission of revised proposal	1203
6.11	Distribution determination	1203
6.11.1	Making of distribution determination	1203
6.11.2	Notice of distribution determination	1203
6.11.3	Commencement of distribution determination	1203
6.12	Requirements relating to draft and final distribution determinations	1204
6.12.1	Constituent decisions	1204
6.12.1A	Division of EnergyAustralia's revenue	1206
6.12.2	Reasons for decisions	1207
6.12.3	Extent of AER's discretion in making distribution determinations	1207
6.13	Revocation and substitution of distribution determination for wrong information or error	1208
6.14	Miscellaneous	1209
Part F	Cost Allocation	1209
6.15	Cost allocation	1209
6.15.1	Duty to comply with Cost Allocation Method	1209
6.15.2	*****	1210
6.15.3	*****	1210
6.15.4	*****	1210
	Provisions applicable to the NSW Distribution Network Service Providers	1210
6.15.5	Cost Allocation Guidelines (NSW)	1210
6.15.6	Cost Allocation Method (NSW)	1210
	Provisions applicable to the ACT Distribution Network Service Provider	1211
6.15.7	Cost Allocation Principles (ACT)	1211
6.15.8	Cost Allocation Method (ACT)	1212

Part G	*****	1213
Part H	Ring-Fencing Arrangements for Distribution Network Service Providers	1213
6.17	Distribution Ring-Fencing Guidelines	1213
6.17.1	Compliance with Distribution Ring-Fencing Guidelines	1213
6.17.2	Development of Distribution Ring-Fencing Guidelines	1214
Part I	Distribution Pricing Rules	1215
6.18	Distribution Pricing Rules	1215
6.18.1	Application of this Part	1215
6.18.2	Pricing proposals.....	1215
6.18.3	Tariff classes	1217
6.18.4	Principles governing assignment or re-assignment of customers to tariff classes and assessment and review of basis of charging.....	1217
6.18.5	Pricing principles	1218
6.18.6	Side constraints on tariffs for standard control services	1218
6.18.7	Recovery of designated pricing proposal charges	1219
6.18.7A	*****	1220
6.18.7B	Recovery of Climate Change Fund payments	1220
6.18.7C	Recovery of jurisdictional scheme amounts	1220
6.18.8	Approval of pricing proposal	1223
6.18.9	Publication of information about tariffs and tariff classes.....	1224
6.19.	Data Required for Distribution Service Pricing	1224
6.19.1	Forecast use of networks by Distribution Customers and Embedded Generators	1224
6.19.2	Confidentiality of distribution network pricing information	1224
Part J	Billing and Settlements	1225
6.20	Billing and Settlements Process	1225
6.20.1	Billing for distribution services	1225
6.20.2	Minimum information to be provided in distribution network service bills	1227
6.20.3	Settlement between Distribution Network Service Providers	1227
6.20.4	Obligation to pay.....	1227
Part K	Prudential requirements, capital contributions and prepayments	1228
6.21	Distribution Network Service Provider Prudential Requirements	1228
6.21.1	Prudential requirements for distribution network service.....	1228
6.21.2	Capital contributions, prepayments and financial guarantees.....	1229
6.21.3	Treatment of past prepayments and capital contributions	1229
6.21.4	Application of IPART and ICRC guidelines regarding capital contribution charges.....	1229
Part L	Dispute resolution	1230
6.22	Dispute Resolution	1230
6.22.1	Dispute Resolution by the AER.....	1230
6.22.2	Determination of dispute.....	1230

6.22.3	Termination of access dispute without access determination	1232
Part M	Separate disclosure of transmission and distribution charges	1232
6.23	Separate disclosure of transmission and distribution charges	1232
Schedule 6.1	Contents of building block proposals	1233
S6.1.1	Information and matters relating to capital expenditure	1233
S6.1.2	Information and matters relating to operating expenditure.....	1234
S6.1.3	Additional information and matters	1235
Schedule 6.2	Regulatory Asset Base	1237
S6.2.1	Establishment of opening regulatory asset base for a regulatory control period	1237
S6.2.2	*****	1240
S6.2.3	Roll forward of regulatory asset base within the same regulatory control period	1240