National Electricity Rules As in force in the Northern Territory Version 19

Historical Information

This version of the National Electricity Rules As in force in the Northern Territory was current from 1 December 2017 to 18 December 2017.

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Status Information

This is the latest electronically available version of the National Electricity Rules as in force in the Northern Territory (**NT NER**) as at 1 December 2017.

This consolidated version of the NT NER reflects the current version of the National Electricity Rules (version 103) as amended by the following regulations made by the Northern Territory under section 13(2)(c) of the *National Electricity (Northern Territory) (National Uniform Legislation) Act*:

> National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations.

Provisions in force

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

As at the date of this consolidation:

> (a) the Australian Energy Market Commission has made certain Rules under Part 7, Division 3 of the National Electricity Law that have not yet commenced. A complete list of these Rules is set out under "Provisions in Force" on the cover sheet of the latest version of the National Electricity Rules.
>
> (b) As at the date of this consolidation, the Northern Territory has adopted (or adopted a modified version of) various provisions of the National Electricity Rules with effect from 1 July 2019 and certain other provisions with effect from the date that the Northern Territory adopts the National Energy Retail Law as a law of the Northern Territory. The provisions to be adopted and the modifications to those provisions (if relevant) are specified in the National Electricity (Northern Territory)(National Uniform Legislation)(Modification) Regulations.

This consolidated version of the NT NER contains drafting notes to indicate the provisions of the National Electricity Rules that have been adopted in the Northern Territory with effect from a later date.

This coversheet was last updated on 2017-12-01

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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*.

1.7.1A Inconsistency with National Measurement Act

If there is an inconsistency between the *Rules* and the *National Measurement Act*, the *National Measurement Act* prevails to the extent of the inconsistency.

1.7.1B Instruments

(a) In an instrument made under the *Rules*:

(1) a reference to the "National Electricity Law" or "Law" must be regarded as a reference to the National Electricity (NT) Law; and

(2) a reference to the "National Electricity Rules" or "Rules" must be regarded as a reference to the National Electricity Rules as defined in section 2(1) of the National Electricity (NT) Law.

(b) Paragraph (a) applies despite any provision to the contrary in an instrument.

(c) For the purposes of the application in this jurisdiction of an instrument made under the *Rules*:

(1) the reference to "the national electricity system" in the national electricity objective stated in section 7 of the Law must be regarded as a reference to one or more, or all, of the local electricity systems, as the case requires;

(2) if the context or subject matter indicates or requires, a reference in the instrument to:

(i) "regulatory control period" must be regarded as including a reference to the *2009-14 NT regulatory control period* and the *2014-19 NT regulatory control period*; and

(ii) "distribution determination" must be regarded as including a reference to the 2009 NT Network Price Determination and the *2014 NT Network Price Determination*; and

(3) the *AER* must interpret the instrument consistently with the objects of the application Act of this jurisdiction and the modifications made to the National Electricity Law and the *Rules* by or under that Act.

(d) In this clause:

2009 NT Network Price Determination means the "Final Determination – Networks Pricing: 2009 Regulatory Reset" made by the *Utilities Commission* under the *Utilities Commission Act (NT)*, *Electricity Reform Act (NT*) and Chapter 6 of the *NT Network Access Code* that applied from 1 July 2009 to 30 June 2014.

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 kept by the *Utilities Commission* under section 37 of the *Electricity Reform Act* (NT);

(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

Note:

This rule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*.

(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

Note:

This Chapter has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this Chapter will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

CHAPTER 2A

2A. Regional Structures

Note:

This Chapter has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this Chapter will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

CHAPTER 3

3. Market Rules

Note:

This Chapter has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this Chapter will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

CHAPTER 4

4. Power System Security

Note:

This Chapter has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this Chapter will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

CHAPTER 5

5. Network Connection, Planning and Expansion

Part A Network Connection

5.0 Principles

Note

This rule has no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*.

This Part A 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*.

5.0A Obligations of Network Service Providers and Connection Applicants

Note

This rule has no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*.

(a) A *Connection Applicant* may submit an *application to connect* to the relevant *Network Service Provider*.

(b) A *Network Service Provider* must review and process *applications to connect* that 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 this Part to the extent that the *connection point* relates to its part of the *national grid*.

(c) Upon submission of an *application to connect*, and so long as the *Connection Applicant* wishes to pursue the application, both the *Network Service Provider* and the *Connection Applicant* must use reasonable endeavours to:

(1) negotiate with each other in respect of the provision of *connection* and any other matters relevant to the provision of *connection*;

(2) negotiate in good faith with any other person with which the *Connection Applicant* must negotiate in respect of the *connection*; and

(3) enter into a *connection agreement*.

(d) The terms and conditions of a *connection agreement* must be reasonable.

5.1 Statement of Purpose

Note

This rule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this rule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

5.1.1 [Deleted]

5.1.2 Purpose and Application

(a) This Part A:

(1) provides the framework for *connection* to a *transmission network* or a *distribution network* and access to the *national grid*; and

(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 A to facilitate management of the *national grid*.

(b) Any person who is not a *Registered Participant* may agree with a *Network Service Provider* to comply with this Part A as part of a *connection agreement*.

(c) Nothing in the *Rules* is to be read or construed as preventing any person from constructing any *network* or *connection assets*.

(d) Subject to paragraphs (e) and (g), the following *Rules* apply in the application of this Part A 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) rule 5.4AA;

(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 5.16.4;

(3) clause 5.16.5;

(4) rule 5.18; and

(5) rule 5.19;

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).

5.1.3 Principles

This Part A 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

Note

This rule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this rule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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 5.4 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 B 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 clause 5.2.3(d)(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* 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 5.4 and schedule 5.3a;

(3) provide forecast information to the relevant *Network Service Provider* in accordance with Part B 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*.

(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*.

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 5.4 and schedule 5.3;

(3) provide *load* forecast information to the relevant *Network Service Provider* in accordance with Part B 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.

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 5.4 and schedule 5.2;

(3) provide *generation* forecast information to the relevant *Network Service Provider* in accordance with Part B 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*.

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*.

5.3 Establishing or Modifying Connection

Note

This rule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this rule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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*.

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 A 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.)

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 10 *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 10 *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) whether any service the *Network Service Provider* proposes to provide is *contestable* in the relevant *participating jurisdiction*; and

(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.

Note

This clause is classified as a 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 20 *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 20 *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.

(c) Within 20 *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 not being more than necessary to:

(i) cover the reasonable costs of all work anticipated to arise from investigating the *application to connect* and preparing the associated 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; 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 the information specified in clause 5.3.3(c) and the relevant application fee to the relevant *Network Service Provider*.

(c) 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; or

(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*.

(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) For the purposes of this clause 5.3.4A:

AEMO advisory matter means 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.

(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 submission of a proposed *negotiated access standard* under clause 5.3.4(e), clause 5.3A.9(f) or paragraph (h)(3), 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 receipt of a proposed *negotiated access standard* in accordance with clause 5.3.4(e), clause 5.3A.9(f) or paragraph (h)(3), accept or reject a proposed *negotiated access 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.)

(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.

(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*.

(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.

(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.

(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), the matter may be dealt with as a dispute under rule 8.2.

(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).

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* and 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 (a1) 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 (a2), 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 schedule 5.6,

and must be capable of acceptance by the *Connection Applicant* so as to constitute a *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.)

(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 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.

(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) An offer to *connect* in respect of a *transmission network* must conform with the access arrangements set out in rule 5.4A.

Note

This clause is classified as a 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) 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 5.5.

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.)

(k) Nothing in the *Rules* is to be read or construed as imposing an obligation on a *Network Service Provider* to effect an extension of a *network* unless that

extension is required to effect or facilitate the *connection* of a *Connection Applicant* and the *connection* is the subject of a *connection agreement*.

5.3.7 Finalisation of connection agreements

(a) If a *Connection Applicant* wishes to accept an offer to *connect*, the *Connection Applicant* must negotiate and enter into 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 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*.

(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.

(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.

5.3.7A 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.

5.3.8 Provision and use of information

(a) The data and information provided under rules 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.

(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 5.3 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

(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 *Generating System Model Guidelines*, *Generating System Design Data Sheet*, or *Generating System Setting Data Sheet*; and

(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
excitation control system	S5.2.5.5, S5.2.5.7, S5.2.5.12, S5.2.5.13
voltage control system	S5.2.5.5, S5.2.5.12, S5.2.5.13
governor *control system*	S5.2.5.7, S5.2.5.11, S5.2.5.14
power *control system*	S5.2.5.11, S5.2.5.14
protection system	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
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

Note

This rule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this rule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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 5.4.5; 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 S5.4A(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.

5.4 Design of Connected Equipment

Note

This rule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this rule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

5.4.1 Application

This rule 5.4 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.

5.4.2 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]**

5.4.3 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.

5.4.4 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 clause 5.4.4(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*.

5.4.5 Register of completed embedded generation projects

(a) For the purposes of this clause 5.4.5:

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.

(b) 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).

(c) 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.

(d) 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.

5.4A Access arrangements relating to Transmission Networks

Note

This rule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this rule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

(a) The *Transmission Network Service Provider* referred to in this rule 5.4A is the *Transmission Network Service Provider* required under clause 5.3.3 to process and respond to a *connection* enquiry or required under clause 5.3.5 to prepare an offer to *connect* for the establishment or modification of a *connection* to the *transmission network* owned, controlled or operated by that *Transmission Network Service Provider* or for the provision of *network service*.

(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 *Transmission Network Service Provider* must negotiate in good faith with the *Connection Applicant* to reach agreement in respect of the *transmission 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 *Transmission Network Service Provider* such information as is reasonably requested relating to the expected operation of:

(i) its *generating units* (in the case of a *Generator*);

(ii) its *network elements* used in the provision of *network service* (in the case of a *Network Service Provider*); or

(iii) its *plant* (in the case of any other kind of *Connection Applicant*); and

(2) the *Transmission 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 *transmission network user access* arrangements sought by the *Connection Applicant* and offered by the *Transmission Network Service Provider*.

(d) A *Connection Applicant* may seek *transmission network user access* arrangements at any level of *power transfer capability* between zero and:

(1) in the case of a *Generator*, the *maximum power input* of the relevant *generating units* or group of *generating units*;

(2) in the case of a *Network Service Provider*, the *power transfer capability* of the relevant *network elements*; and

(3) in the case of any other kind of *Connection Applicant*, the *maximum demand* at the *connection point* for the relevant *plant*.

(e) The *Transmission Network Service Provider* must use reasonable endeavours to provide the *transmission network user access* arrangements being sought by the *Connection Applicant* subject to those arrangements being consistent with *good electricity industry practice* considering:

(1) the *connection assets* to be provided by the *Transmission 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 *transmission network user access* or *distribution network user access* arrangements in respect of all affected *transmission networks* and *distribution networks*.

(f) The *Transmission 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 *connection assets* to be provided by the *Transmission 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 *Transmission 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 *transmission network* as a result of it being *connected* to the *transmission network*;

(*negotiated use of system charges*); and

(4) the amounts (*access charges*) referred to in paragraphs (g)-(j).

(g) The amount to be paid by the *Connection Applicant* to the *Transmission Network Service Provider* in relation to the costs reasonably incurred by the provider in providing *transmission network user access*.

(h) Where the *Connection Applicant* is a *Generator*:

(1) the compensation to be provided by the *Transmission Network Service Provider* to the *Generator* in the event that the *generating units* or group of *generating units* of the *Generator* are *constrained off* or *constrained on* during a *trading interval*; and

(2) the compensation to be provided by the *Generator* to the *Transmission Network Service Provider* in the event that *dispatch* of the *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*.

(i) Where the *Connection Applicant* is a *Market Network Service Provider*:

(1) the compensation to be provided by the *Transmission Network Service Provider* to the *Market Network Service Provider* in the event that the *transmission network user access* is not provided; and

(2) the compensation to be provided by the *Market Network Service Provider* to the *Transmission 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*.

(j) In the case of any other kind of *Connection Applicant*, the compensation to be provided by the *Transmission Network Service Provider* to the *Connection Applicant* in the event that the *transmission network user access* is not provided.

(k) The maximum charge that can be applied by the *Transmission Network Service Provider* in respect of *negotiated use of system charges* for the *transmission network* is a charge that is determined in accordance with Part J of Chapter 6A.

5.4AA Network support payments and functions

Note

This rule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this rule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

(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.

5.5 Access arrangements relating to Distribution Networks

Note

This rule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this rule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

(a) In this rule 5.5:

(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 *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 *transmission network* user access or *distribution network user access* arrangements in respect of all affected *transmission networks* and *distribution networks*.

(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 *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.

(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).

5.5A [Deleted]

5.6 [Deleted]

5.6A [Deleted]

5.7 Inspection and Testing

Note

This rule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this rule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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*.

(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*.

(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.

(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 in an emergency.

Note

This clause is classified as a 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 *Generating 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 *Generating 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	*Proponent*	*Relevant TNSP*
	column 1	column 2	column 3
1.	A new *transmission line* between two *networks*, or within a *transmission network*, that is anticipated to have a *material inter-network impact* is commissioned.	*Network Service Provider* in respect of the new *transmission line*.	*Proponent* and the *Transmission Network Service Provider* in respect of any *network* to which the *transmission line* is *connected*.
2.	An existing *transmission line* between two *networks*, or within a *transmission network*, that is anticipated to have a *material inter-network impact* is *augmented* or substantially modified.	*Network Service Provider* in respect of the *augmentation* or modification of the *transmission line*.	*Proponent* and the *Transmission Network Service Provider* in respect of any *network* to which the *transmission line* is *connected*.
3.	A new *generating unit* or *facility* of a *Customer* or a *network* development is commissioned that is anticipated to have a *material inter-network impact*.	*Generator* in respect of the *generating unit* and associated *connection assets*. *Customer* in respect of the *facility* and associated *connection assets*. *Network Service Provider* in respect of the relevant *network*.	*Transmission Network Service Provider* in respect of any *network* to which the *generating unit*, *facility* or *network* development is *connected* and, if a *network* development, then also the *Proponent*.
4.	Setting changes are made to any *power system* stabilisers as a result of a *generating unit*, *facility* of a *Customer* or *network* development being commissioned, modified or replaced.	*Generator* in respect of the *generating unit*. *Customer* in respect of the *facility*. *Network Service Provider* in respect of the relevant *network*.	*Transmission Network Service Provider* in respect of any *transmission network* to which the *generating unit*, *facility* or *network* development is *connected*.
5.	Setting changes are made to any *power system*	*AEMO*.	None.

No.	Kind of development or activity	*Proponent*	*Relevant TNSP*
	column 1	column 2	column 3
	stabilisers as a result of a decision by *AEMO*, which are not covered by item 4 in this chart.		
6.	*AEMO* determines that a test is required to verify the performance of the *power system* in light of the results of planning studies or simulations or one or more system incidents.	*AEMO*.	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.

5.8 Commissioning

Note

This rule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this rule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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

Note

This rule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations).* The application of this rule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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

Note

Clause 5.10.1 has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of clause 5.10.1 will be revisited as part of the phased implementation of the *Rules* in this jurisdiction..

(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 5.18B 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.

(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

Note

Clause 5.10.2 has no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*.

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 relevant 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

Note

Clause 5.10.3 has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of clause 5.10.3 will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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

Note

Rule 5.11 has no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*.

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* 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*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*.

(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* 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* of these limitations; and

(c) notify any affected *Registered Participants* of the expected time for undertaking proposed corrective action which may consist of:

(1) 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

Note

Rule 5.12 has no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations*).

5.12.1 Transmission annual planning review

Note

Clause 5.12.1(b)(3) has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of clause 5.12.1(b)(3) will be revisited as part of the phased implementation of the *Rules* in this jurisdiction

(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*, 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 via a *transmission or distribution system* in this jurisdiction;

(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

Note

Clause 5.12.2(c)(1), (5)(v), (6) and (8) has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of clause 5.12.2(c)(1), (5)(v), (6) and (8) will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

(a) By 31 December 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) A *Network Service Provider* may publish its *Transmission Annual Planning Report* in the same document 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, *generation* options, demand side 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 an *Transmission Annual Planning Report* under 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;

(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

Note

This rule has no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*.

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 *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 any relevant regulatory investment test; 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 2020.

(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), a *Network Service Provider* may *publish* its *Transmission Annual Planning Report* in the same document 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

Note

Rule 5.13A has no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*.

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 1 July 2019.

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

Note

This rule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this rule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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

Note

This rule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this rule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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)-(7), 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)-(6), 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

Note

This rule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this rule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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.

(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*; or

(8) the proposed expenditure relates to protected event EFCS investment and is not intended to *augment* the *transmission network* or replace *network* assets.

(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 subparagraphs (a)(1)-(7), 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 identity 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

Note

This rule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations*). The application of this rule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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

Note

This rule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this rule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

(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

Note

This rule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this rule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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).

5.19 SENE Design and Costing Study

Note

This rule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this rule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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

Note

This rule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this rule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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.

(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.

(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, 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*.

(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.

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.

5.21 AEMO's obligation to publish information and guidelines and provide advice

Note

This rule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this rule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

(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

Note

This rule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this rule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

(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

Note

This schedule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this schedule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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.

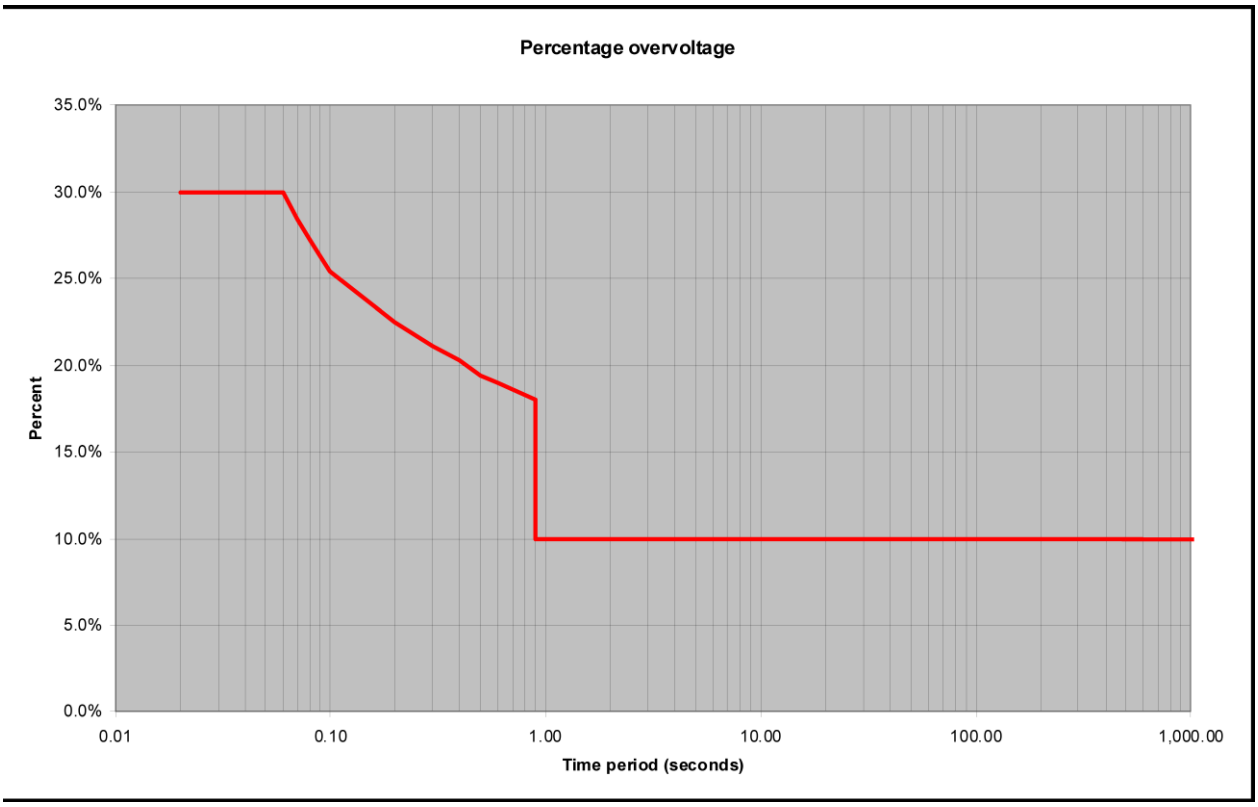
S5.1a.4 Power frequency voltage

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 1	Column 2	Column 3	Column 4	Column 5
	no contingency event	credible contingency event or protected event	general	once per hour
	30 minute average	30 minute average	10 minute average	1 minute average

Nominal supply voltage (kV)	Maximum negative sequence voltage (% of nominal voltage)			
Column 1	Column 2	Column 3	Column 4	Column 5
	no contingency event	credible contingency event or protected event	general	once per hour
	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 *plant* damage and meet stability requirements		

Schedule 5.1 Network Performance Requirements to be Provided or Co-ordinated by Network Service Providers

Note

This schedule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this schedule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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 clause 5.6.2 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/NZS61000.3.7:2001.

(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/NZS61000.3.6:2001.

(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 Participan*t 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

Note

This schedule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this schedule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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 Providers* (including the relevant *Transmission Network Service Provider* in respect of an *embedded generating unit*) the following information about the *control systems* of the *generating system*:

(i) a set of functional block diagrams, including all functions between feedback signals and *generating system* output;

(ii) the parameters of each functional block, including all settings, gains, time constants, delays, deadbands and limits; and

(iii) the characteristics of non-linear elements,

with sufficient detail for *AEMO* and *Network Service Providers* to perform load flow and dynamic simulation studies;

(6) to *AEMO*, model source code associated with the model in subparagraph (5) in an unencrypted form suitable for at least one of the software simulation products nominated by *AEMO* and in a form that would allow conversion for use with other software simulation products by *AEMO*;

(7) **[Deleted]**

(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*.

(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 *Generating 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.

(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 in 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;

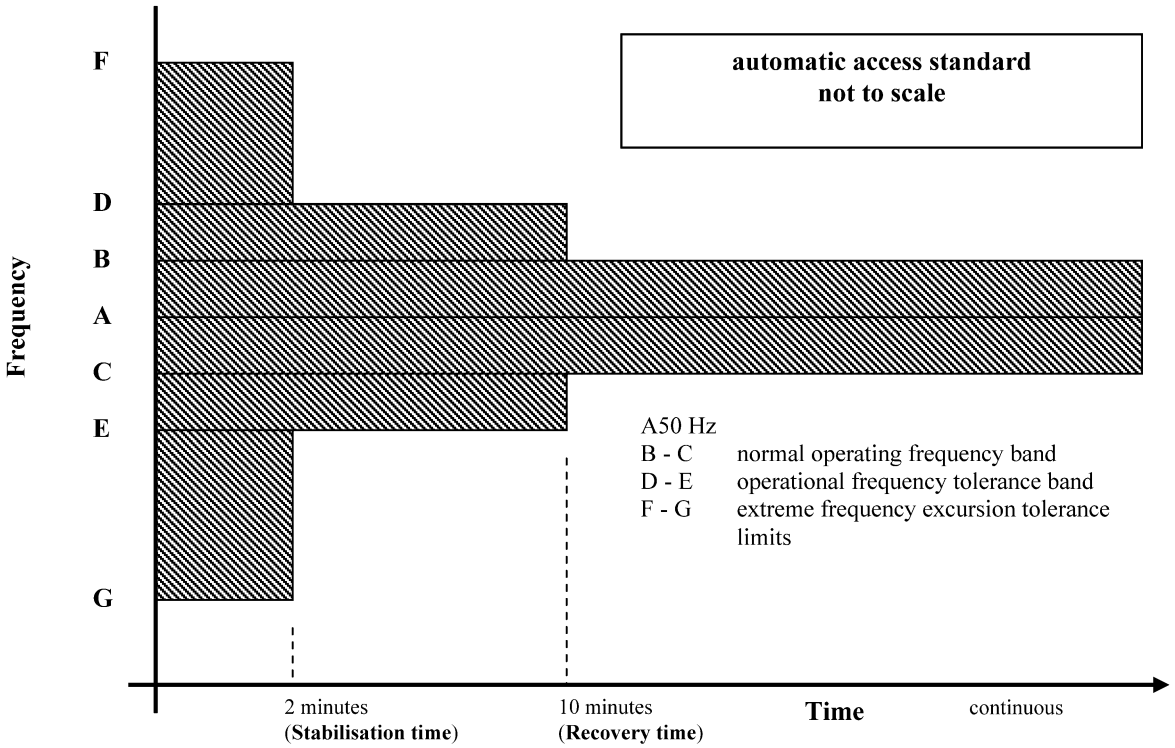
(4) the upper bound of the normal operating frequency band to the upper bound of the operational frequency tolerance band, for at least the recovery time including any time spent in the range under subparagraph (5); and

(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

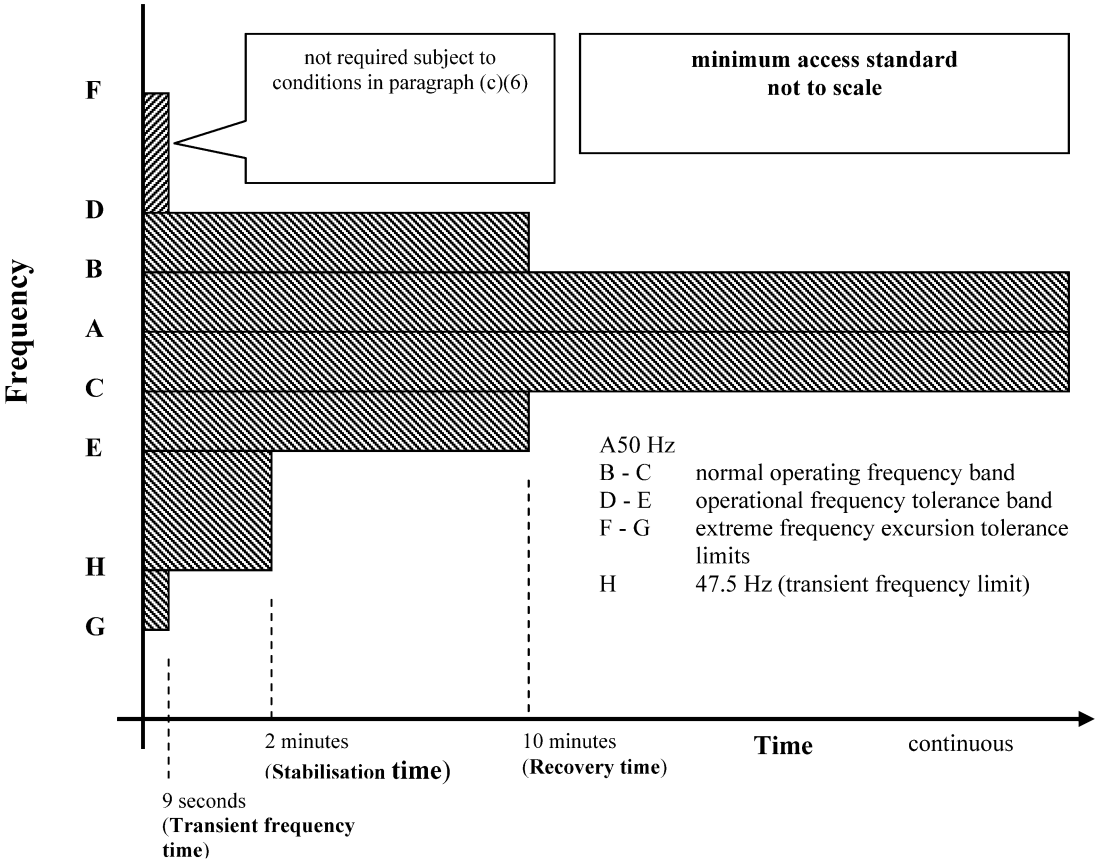
(ii) that does not have a *protection system* to trip the *generating unit* if the *frequency* exceeds a level agreed with *AEMO*,

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

Note

This schedule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this schedule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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.

(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

Note

This schedule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this schedule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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.

(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

Note

This schedule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this schedule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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

This schedule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this schedule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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

Note

This schedule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this schedule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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

Note

This schedule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this schedule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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.

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 *Generating System Model Guidelines*, *Generating System Design Data Sheet*, *Generating 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 *Generating System Model Guidelines*, *Generating System Design Data Sheet* and *Generating System Setting Data Sheet*;

(b) *Customers* and *Network Service Providers*: schedules 5.5.3 and 5.5.4; and

(c) *Customers*: schedule 5.5.5.

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

Generating System Model Guidelines, *Generating System Design Data Sheet* and *Generating System Setting 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 equal to or smaller than 30MW data

A *Generator* that *connects* a *generating unit* equal to or smaller than 30 MW or a number of *generating units* totalling less than 30 MW to a *connection point* to a *distribution network* will usually be required to submit less registered system planning data and less registered data than is indicated in the *Generating System Model Guidelines*, *Generating System Design Data Sheet* and *Generating System Setting Data Sheet*. In general these data will be limited to confirmation of the preliminary system planning data, marked (S), but other data must be supplied if reasonably required by the *Network Service Provider* or *AEMO*.

Codes:

S = Standard Planning Data

D = Detailed Planning Data

R = Registered Data (R1 pre-*connection*, R2 post-*connection*)

S5.5.7 Generating System Design Data Sheet, Generating System Setting Data Sheet and Generating System Model Guidelines

(a) *NEMMCO* must, subject to paragraph (b), develop and *publish* by 1 March 2008, in accordance with the *Rules consultation procedures*:

(1) a *Generating System Design Data Sheet* describing, for relevant technologies, the *generating system* design parameters of *generating units* and *generating systems* including *plant* configurations, impedances, time constants, non-linearities, ratings and capabilities, to be provided under clauses S5.2.4 and this schedule 5.5;

(2) a *Generating System Setting Data Sheet* describing, for relevant *generation* and *control system* technologies, the *protection system* and *control system* settings of *generating units* and *generating systems* including configurations, gains, time constants, delays, deadbands, non-linearities and limits, to be provided under clauses S5.2.4 and this schedule 5.5; and

(3) *Generating System Model Guidelines* describing, for relevant *generation* and *control system* technologies, *NEMMCO's* requirements when developing mathematical models for *generating units* and *generating systems*, including the impact of their *control systems* and *protection systems* on *power system security*,

and there must be a *Generating System Design Data Sheet*, *Generating System Setting Data Sheet* and *Generating System Model Guidelines* in place at all times after that date.

(b) When developing and *publishing* the *Generating System Design Data Sheet*, *Generating System Setting Data Sheet* and *Generating System Model Guidelines* under paragraph (a), *NEMMCO* must have regard to the purpose of developing and *publishing* the sheets and guidelines which is to:

(1) allow *generating units* and *generating systems* to be mathematically modelled by *NEMMCO* in load flow and dynamic stability assessments 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) proposed *access standards* and *performance standards* of *generating units* and *generating systems* to be assessed; and

(iii) settings of *control systems* and *protection systems* of *generating units*, *generating systems* and *networks* to be assessed and quantified for maximum practical performance of the *power system*; and

(2) identify for each type of data its category in terms of clause S5.5.2.

(c) Any person may submit a request (with written reasons) to *AEMO* to amend the *Generating System Design Data Sheet*, *Generating System Setting Data Sheet* or the *Generating System Model Guidelines* and *AEMO* must conduct the *Rules consultation procedures* in relation to the request.

(d) *AEMO* can make amendments requested under paragraph (c) or otherwise to the *Generating System Design Data Sheet*, *Generating System Setting Data Sheet* or the *Generating System Model Guidelines* without conducting the *Rules consultation procedures* if the amendment is minor or administrative in nature.

(e) *AEMO* may at the conclusion of the *Rules consultation procedures* under paragraph (c) or otherwise under paragraph (d), 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		
Nominal voltage	kV	S, D
Highest *voltage*	kV	D
Insulation Co-ordination		
Rated lightning impulse withstand *voltage*	kVp	D
Rated short duration power *frequency* withstand *voltage*	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 *transformer* ratios:		D
Current transformers	A/A	D
Voltage transformers	V/kV	D
Measurement *Transformer* Test Certification details	Text	R1
Network Configuration		
Operation Diagrams showing the electrical circuits of the existing and proposed main *facilities* within the *Registered Participant's* ownership including *busbar* arrangements, phasing arrangements, earthing arrangements, switching *facilities* and operating *voltages*.	Single line Diagrams	S, D, R1
Network Impedance		
For each item of *plant*: 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 *generating units connected* to the *Registered Participant's* 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 *Registered Participant's network* at *connection point*.	% on 100 MVA base	D, R1
Minimum negative sequence impedance of *Registered Participant's network* at *connection point*.	% on 100 MVA base	D, R1
Load Transfer Capability:		
Where a *load*, or group of *loads*, may be fed from alternative *connection points*:		
Load normally taken from *connection point* X	MW	D, R1
Load normally taken from *connection point* Y	MW	D, R1
Arrangements for transfer under planned or fault *outage* 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 *generating units* and *generating systems* as per the *Generating System Design Data Sheet*, *Generating System Setting Data Sheet* and the *Generating System Model Guidelines* where such details are not *confidential information*		

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 *Reactor*	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 *transmission lines*, 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 *transformer* tap changers.	Seconds	D, R1
Reactive Compensation:		
Location and Rating of individual *shunt reactors*	MVAr	D, R1

Data Description	Units	Data Category
Location and Rating of individual *shunt capacitor* banks	MVAr	D, R1
Capacitor bank capacitance	microfarads	D
Inductance of switching *reactor* (if fitted)	millihenries	D
Resistance of capacitor plus *reactor*	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 *Load* eg controlled rectifiers or large motor drives	Text	S
For Fluctuating Loads		
Cyclic variation of *active power* over period	Graph MW/time	S
Cyclic variation of *reactive power* over period	Graph MVAr/time	S
Maximum rate of change of *active power*	MW/s	S
Maximum rate of change of *reactive power*	MVAr/s	S
Shortest Repetitive time interval between fluctuations in active and *reactive power* reviewed annually	s	S
Largest Step Change:		
In *active power*	MW	S
In *reactive power*	MVAr	S

Schedule 5.6 Terms and Conditions of Connection agreements

Note

This schedule has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this schedule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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; and

(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*.

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.

Schedule 5.7 Annual Forecast Information for Planning Purposes

Note

This schedule has no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*.

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 *connection point* to a *transmission network*, 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

Data Description	Units	Time Scale	Data Category
Forecast *load* diversity between each *connection point* to the *network* (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 *connection point*	MW and MVAr	years 1-5	Annual
Day of *network* peak summer and winter MW *load* (as specified)	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
Day of the *network* minimum demand (as specified)	MW and MVAr	years 1-5	Annual

Data Description	Units	Time Scale	Data Category
Undispatched *generation*:			
For each *connection point* to the *network* the following information is required:			
No. of *generating units*	No.	years 1-5	Annual
Capacity of each *generating unit*	MW (sent out)	years 1-5	Annual
Daily/Seasonal Operating characteristics	Text	years 1-5	Annual
Expected output at time of peak *network* Winter *load* (as specified)	MW	years 1-5	Annual
Expected output at time of peak *network* Summer *load* (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 relevant regulatory investment test, 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.

Note

Paragraphs (b)(5)(iii), (h) and (i) of this schedule have no effect in this jurisdiction, and the remainder of this schedule has no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of paragraphs (b)(5)(iii), (h) and (i) of this schedule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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.

Note

Paragraph (h) of this schedule has no effect in this jurisdiction, and the remainder of this schedule has no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of paragraph (h) of this schedule will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

CHAPTER 5A

Chapter 5A Electricity connection for retail customers

Part A Preliminary

5A.A.0 Interpretation

(a) This clause applies in relation to the following:

(1) the provisions f this Chapter;

(2) the provisions of Chapters 11 and 11A, to the extent the provisions operate in relation to this Chapter;

(3) an instrument made under or for the purposes of this Chapter; and

(4) the definitions in Chapter 10, to the extent the definitions are mentioned in a provision or instrument mentioned in subparagraph (1), (2) or (3)

(b) Unless the context or subject matter otherwise indicates or requires, in a provision or instrument mentioned in paragraph (a):

(1) a reference to a "*distribution network*" must be regarded as including a reference to a "*transmission network*";

(2) a reference to a "*distribution system*" must be regarded as including a reference to a "*transmission system*";

(3) a reference to a "*Distribution Network User*" must be regarded as including a reference to a "*Transmission Network User*";

(4) a reference to a "*Distribution Network Service Provider*" must be regarded as including a reference to a "*Transmission Network Service Provider*";

(5) a reference to a "*distribution service*" must be regarded as including a reference to a "*transmission service*"; and

(6) a reference to an "*embedded generating unit*" must be regarded as a reference to a "*generating unit*".

Note

The object of this clause is to ensure the local electricity systems in this jurisdiction are treated as "*distribution systems*" for the purposes of the operation of this Chapter 5A

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

Note

Clause 5A.A.2 has no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations).*

(a) This Chapter does not apply to, or in relation to, a *connection applicant* that is a *Registered Participant* or a person intending to become a *Registered Participant* unless the *Registered Participant* or person intending to become a *Registered 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 ruleChapter 5, Part A 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 Chapter 5, Part A.

(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

Note

Clause 5A.A.3 has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations).* The application of clause 5A.A.3 will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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

Note

Part B of this Chapter has no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations).*

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*.

(ba) For the purposes of paragraph (b)(1), the *AER* must regard the reference to "the national electricity system" in the national electricity objective stated in

section 7 of the Law as including a reference to one or more, or all, of the local electricity systems, as the case requires.

(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*.

(ba) For the purposes of paragraph (b)(1), the *AER* must regard the reference to "the national electricity system" in the national electricity objective stated in section 7 of the Law as including a reference to one or more, or all, of the local electricity systems, as the case requires.

(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

Note

Part C of this Chapter has no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations).*

5A.C.1 Negotiation of connection

Note

Clause 5A.C.1(c) and (d) has no effect in this jurisdiction until the *National Energy Retail Law* is applied as a law of this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*.

(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

Note

Part D of this Chapter has no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations).*

Division 1 Information

5A.D.1 Publication of information

Note

Clause 5AD.1(a)(7) and (b) has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations).* The application of clause 5A.D.1(a)(7) and (b) will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

(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

Note

Clause 5A.D.1A has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of clause 5A.D.1A will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

(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

Note

Clause 5A.E.2 has no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*.

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*.

(ga) For the application of these *Rules* in this jurisdiction:

(1) the *connection charge guidelines* that are in force in the other *participating jurisdictions* on 1 July 2017 are taken:

(i) to be the *connection charge guidelines* in force in this jurisdiction (subject to any amendment or replacement under these *Rules*); and

(ii) to have been developed and *published* by the *AER* on 1 July 2017; and

(2) the *AER* is taken to have complied with the requirements of paragraphs (e), (f) and (g) in developing and *publishing* the *connection charge guidelines*.

5A.E.4 Payment of connection charges

Note

The note to clause 5A.E.4(c) has no effect in this jurisdiction until the *National Energy Retail Law* is applied as a law of this jurisdiction. The remaining provisions of clause 5A.E.4 have no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*.

(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

Note

Part F of this Chapter has no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations).*

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

Note

Clause 5A.F.5(b)(2) has no effect in this jurisdiction until the *National Energy Retail Law* is applied as a law of this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*.

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

Note

Part G of this Chapter has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of Part G will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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

Note

Schedule 5A.1 has no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations).*

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

6.0 Operation of Chapter 6 in this jurisdiction

(a) This rule applies if a *Distribution Network Service Provider* owns, controls or operates more than one *distribution system* in this jurisdiction.

(b) Despite any other provision of this Chapter:

(1) for all of those *distribution systems* there must be, in respect of a particular *regulatory control period*, only one:

(i) draft distribution determination and final distribution determination;

(ii) *framework and approach paper*;

(iii) *building block proposal* and *building block determination*;

(iv) *regulatory proposal*;

(v) proposed and final *tariff structure statement*; and

(vi) regulatory asset base value; and

(2) all of those *distribution systems* must be treated as a single *distribution system* for the purposes of clause 6.5.1 and schedule 6.2.

6.0A Interpretation

(a) this rule applies in relation to the following:

(1) the provisions of this Chapter;

(2) the provisions of Chapters 11 and 11A, to the extent the provisions operate in relation to this Chapter;

(3) an instrument made under or for the purposes of this Chapter; and

(4) the definitions in Chapter 10, to the extent the definitions are mentioned in a provision or instrument mentioned in subparagraph (1), (2) or (3).

(b) Unless the context or subject matter otherwise indicates or requires, in a provision or instrument mentioned in paragraph (a):

(1) a reference to a "*distribution network*" must be regarded as including a reference to a "*transmission network*";

(2) a reference to a "*distribution system*" must be regarded as including a reference to a "*transmission system*";

(3) a reference to a "*Distribution Network User*" must be regarded as including a reference to a "*Transmission Network User*";

(4) a reference to a "*Distribution Network Service Provider*" must be regarded as including a reference to a "*Transmission Network Service Provider*";

(5) a reference to a "*distribution service*" must be regarded as including a reference to a "*transmission service*"; and

(6) a reference to an "*embedded generating unit*" must be regarded as a reference to a "*generating unit*".

Note

The object of this rule is to ensure the local electricity systems in this jurisdiction are treated as "distribution systems" for the purposes of the operation of this Chapter.

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 7A 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) In classifying *distribution services* that have previously been subject to regulation under the present or earlier legislation, the *AER* must act on the basis that, unless a different classification is clearly more appropriate:

(1) there should be no departure from a previous classification (if the services have been previously classified); and

(2) if there has been no previous classification – the classification should be consistent with the previously applicable regulatory approach.

(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) In classifying *direct control services* that have previously been subject to regulation under the present or earlier legislation, the *AER* must act on the basis that, unless a different classification is clearly more appropriate:

(1) there should be no departure from a previous classification (if the services have been previously classified); and

(2) if there has been no previous classification – the classification should be consistent with the previously applicable regulatory approach.

(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.

6.2.4 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

(2A) for a distribution determination for a *Distribution Network Service Provider* in this jurisdiction that will apply during the *1st regulatory control period* – the regulatory arrangements in the *2014 NT Network Price Determination*; and

(3) for a distribution determination for a *Distribution Network Service Provider* in this jurisdiction that will apply after the *1st regulatory control period* – 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.

Note:

The modifications to this paragraph expire on 1 July 2024.

(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

(2A) for a distribution determination for a *Distribution Network Service Provider* in this jurisdiction that will apply during the *1st regulatory control period* – the regulatory arrangements in the *2014 NT Network Price Determination*); and

(3) for a distribution determination for a *Distribution Network Service Provider* in this jurisdiction that will apply after the *1st regulatory control period* – 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.

Note:

The modifications to this paragraph expire on 1 July 2024.

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* 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* 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.

(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.

(ca) For the application of these *Rules* in this jurisdiction:

(1) the *post-tax revenue model* that is in force in the other *participating jurisdictions* on 1 July 2016 is taken:

(i) to be the *post-tax revenue model* in force in this jurisdiction (subject to any amendment or replacement under these *Rules*); and

(ii) to have been prepared and *published* by the *AER* on 1 July 2016; and

(2) the *AER* is taken to have complied with the requirements of paragraphs (a) and (c) in preparing and *publishing* the *post-tax revenue model*.

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);

(5A) for a distribution determination for a *Distribution Network Service Provider* in this jurisdiction that will apply during the *1st regulatory control period* – the other revenue increments or decrements (if any) for that year arising from the application during the *2014-19 NT regulatory control period* of the control mechanism in the *2014 NT Network Price Determination*, as modified by the *2014 NT Ministerial Direction* – see paragraph (b)(5A); and

(6) for a distribution determination for a *Distribution Network Service Provider* in this jurisdiction that will apply after the *1st regulatory control period* – 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).

Note:

The modifications to this paragraph expires on 1 July 2024.

(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, 6.6.3A 6.6.3 and 6.6.4;

(5A) the other revenue increments or decrements referred to in paragraph (a)(5A) are those that are to be carried forward to the *1st regulatory control period* as a result of the application during the *2014-19 NT regulatory control period* of the control mechanism in the *2014 NT Network Price Determination*, as modified by the *2014 NT Ministerial Direction* and are apportioned to the relevant year under the distribution determination for the *1st regulatory control period*;

Note:

This subparagraph expires on 1 July 2024

(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*.

(ea) For the application of these *Rules* in this jurisdiction:

(1) the *Shared Asset Guidelines* that are in force in the other *participating jurisdictions* on 1 July 2016 are taken:

(i) to be the *Shared Asset Guidelines* in force in this jurisdiction (subject to any amendment or replacement under these *Rules*); and

(ii) to have been made and *published* by the *AER* on 1 July 2016; and

(2) the *AER* is taken to have complied with the requirements of paragraph (d) in making and publishing the *Shared Asset Guidelines*.

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*.

(ba) For the application of these *Rules* in this jurisdiction:

(1) the *Expenditure Forecast Assessment Guidelines* that are in force in the other *participating jurisdictions* on 1 July 2016 are taken:

(i) to be the *Expenditure Forecast Assessment Guidelines* in force in this jurisdiction (subject to any amendment or replacement under these *Rules*); and

(ii) to have been developed and *published* by the *AER* on 1 July 2016; and

(2) the *AER* is taken to have complied with the requirements of paragraph (a) in developing and *publishing* the *Expenditure Forecast Assessment Guidelines*.

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*.

(ca) For the application of these *Rules* in this jurisdiction:

(1) the *Capital Expenditure Incentive Guidelines* that are in force in the other *participating jurisdictions* on 1 July 2016 are taken:

(i) to be the *Capital Expenditure Incentive Guidelines* in force in this jurisdiction (subject to any amendment or replacement under these *Rules*); and

(ii) to have been made and *published* by the *AER* on 1 July 2016; and

(2) the *AER* is taken to have complied with the requirements of paragraph (b) in making and *publishing* the *Capital Expenditure Incentive 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.

(da) For the application of these *Rules* in this jurisdiction:

(1) the *roll forward model* that is in force in the other *participating jurisdictions* on 1 July 2016 is taken:

(i) to be the *roll forward model* in force in this jurisdiction (subject to any amendment or replacement under these *Rules*); and

(ii) to have been developed and *published* by the *AER* on 1 July 2016; and

(2) the *AER* is taken to have complied with the requirements of paragraphs (b), (d) and (e) in developing and *publishing* the *roll forward model*.

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.

(qa) For the application of these *Rules* in this jurisdiction:

(1) the *Rate of Return Guidelines* that are in force in the other *participating jurisdictions* on 1 July 2016 are taken:

(i) to be the *Rate of Return Guidelines* in force in this jurisdiction (subject to any amendment or replacement under these *Rules*); and

(ii) to have been made and *published* by the *AER* on 1 July 2016; and

(2) the *AER* is taken to have complied with the requirements of paragraphs (m) and (n) in making and *publishing* the *Rate of Return Guidelines*; and

(3) despite paragraph (p)(1), the *AER* need only review the *Rate of Return Guidelines* when it is required to review the Guidelines in the other *participating jurisdictions*.

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* ($\mathbf{ETC_t}$) 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).

(c) The *AER* must 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*):

(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 *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) 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*.

(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*.

(da) For the application of these *Rules* in this jurisdiction:

(1) the *efficiency benefit sharing scheme* that is in force in the other *participating jurisdictions* on 1 July 2016 is taken:

(i) to be the *efficiency benefit sharing scheme* in force in this jurisdiction (subject to any amendment or replacement under these *Rules*); and

(ii) to have been developed and *published* by the *AER* on 1 July 2016; and

(2) the *AER* is taken to have complied with the requirements of paragraphs (a) and (c) in developing and *publishing* the *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*.

(ea) For the application of these *Rules* in this jurisdiction:

(1) the *capital expenditure sharing scheme* that is in force in the other *participating jurisdictions* on 1 July 2016 is taken:

(i) to be the *capital expenditure sharing scheme* in force in this jurisdiction (subject to any amendment or replacement under these *Rules*); and

(ii) to have been developed by the *AER* on 1 July 2016; and

(2) the *AER* is taken to have complied with the requirements of paragraphs (b), (c) and (d) in developing the *capital expenditure sharing scheme*.

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

Note:

Clause 6.6.1(a1)(4), (c)(6)(iii), (l) and (m) have no effect in this jurisdiction until the *National Energy Retail Law* is applied as a law of this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*.

(a1) Any of the following is a *pass through event* for a distribution determination:

(1AA) a local event prescribed by the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations*;

Notes:

1 See Part 3 of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations* for modifications to the operation of this clause 6.6.1 in relation to a local event.

2 Subparagraph (1AA) expires when the *National Energy Retail Law* is applied as a law of this jurisdiction.

(1AB) a NT transitional regulatory change event prescribed by the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations*;

Note:

1 See Part 3 of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations for modifications to the operation of this clause 6.6.1 in relation to a NT transitional regulatory change event

2 Subparagraph (1AB) expires on 1 July 2024.

(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*.

(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 *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).

(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*; and

(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*.

(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 or clause 6.6.1AB; and

Note:

The modification to this paragraph (7A) expires on 1 July 2024.

(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.

6.6.1AA Cost pass through – deemed determinations

(a) On and from 1 July 2019, an amount that:

(1) under clause 3.1.3(a)(ii) of Part B of the *2014 NT Network Price Determination*, the *AER* had determined, on or after 1 July 2018, should be passed through to network users in a *regulatory year* of the *1st regulatory control period* or a subsequent *regulatory control period*; or

(2) under clause 3.1.3(d)(ii) of Part B of the *2014 NT Network Price Determination*, should be passed through to network users in a *regulatory year* of the *1st regulatory control period* or a subsequent *regulatory control period* as a result of the *AER*, on or after 1 July 2018, failing to make a determination within the prescribed period,

is taken to be an amount determined under clause 6.6.1(d)(2).

(b) On and from 1 July 2019, an amount that, under clause 3.1.5(a)(ii)(B) of Part B of the *2014 NT Network Price Determination*, the *AER* had determined, on or after 1 July 2018, should be passed through to network users in a *regulatory year* of the *1st regulatory control period* or a subsequent *regulatory control period* is taken to be an amount determined under clause 6.6.1(g)(2)(ii).

Note:

This clause expires on 1 July 2024.

6.6.1AB Cost pass through – NT events

(a) A *Distribution Network Service Provider* may seek the approval of the *AER* to pass through to *Distribution Network Users* a *positive pass through amount* in relation to an *NT positive change event*.

Note:

See Part 3 of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations* for modifications to the operation of this clause 6.6.1AB in relation to certain *NT positive change events*.

(b) The *AER* may require a *Distribution Network Service Provider* to pass through to *Distribution Network Users* a *negative pass through amount* in relation to an *NT negative change event* 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* in relation to an *NT positive change event*, a *Distribution Network Service Provider* must submit to the *AER*, within 90 *business days* after the commencement of the *1st regulatory control period*, a written statement that specifies:

(1) the details of the *NT positive change event*;

(2) the date on which the *NT positive change event* occurred;

(3) the *eligible pass through amount* in respect of that *NT positive change event*;

(4) the *positive pass through amount* the *Distribution Network Service Provider* proposes in relation to the *NT 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 each *regulatory year* after the *NT 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 *NT positive change event*; and

(7) such other information as may be required under any relevant *regulatory information instrument*.

(d) If the *AER* determines that an *NT 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 *Distribution Network Users* in each *regulatory year* after the *NT positive change event* occurred,

taking into account the matters referred to in paragraph (j).

(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 *NT positive change event*; and

(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 each *regulatory year* after the *NT positive change event* occurred, is the amount that should be so passed through in each such *regulatory year*.

(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* after the later of the commencement of the *1st regulatory control period* and the date on which the provider becomes aware of the occurrence of an *NT negative change event* for the provider, a written statement that specifies:

(1) the details of the *NT negative change event*;

(2) the date on which the *NT negative change event* occurred;

(3) the costs in the provision of *direct control services* and *NT equivalent services* that the *Distribution Network Service Provider* has saved and is likely to save as a result of the *negative change event* until the end of the *1st regulatory control period*;

(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 each *regulatory year* after the *NT 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 *NT 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 *NT negative change event*.

(g) If an *NT negative change event* occurs (whether or not the occurrence of that *NT 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 *NT 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 each *regulatory year* after the *NT 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 *NT 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 *NT negative change event* under paragraph (f) – the later of the date the *AER* notifies the *Distribution Network Service Provider* under paragraph (f1) 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 *NT positive change event* or *NT negative change 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 an *NT positive change event*, the increase in costs in the provision of *direct control services* or *NT equivalent services* that, as a result of the *NT positive change event*, the *Distribution Network Service Provider* has incurred and is likely to incur until the end of the *1st regulatory control period*;

(2A) in the case of a *NT negative change event*, the costs in the provision of *direct control services* or *NT equivalent services* that, as a result of the *NT negative change event*, the *Distribution Network Service Provider* has saved and is likely to save until the end of the *1st regulatory control period*;

(3) in the case of an *NT positive change event*, the efficiency of the *Distribution Network Service Provider's* decisions and actions in relation to the risk of the *NT 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 *NT 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 *NT positive change event*;

(4) the time cost of money based on the *allowed rate of return* for the *Distribution Network Service Provider* for the *1st regulatory control period*;

(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 an *NT positive change event* or *NT negative change event*;

(6) in the case of a tax change event (as defined in Part B of the *2014 NT Network Price Determination*), 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 *NT positive change event* or *NT negative change event* have already been factored into the calculation of the *Distribution Network Service Provider's annual revenue requirement* for the *1st regulatory control period* 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 or 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 *NT positive change event* or *NT negative change 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).

Note:

This clause expires on 1 July 2024.

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.

(ca) For the application of these *Rules* in this jurisdiction:

(1) the *service target performance incentive scheme* that is in force in the other *participating jurisdictions* on 1 July 2016 is taken:

(i) to be the *service target performance incentive scheme* in force in this jurisdiction (subject to any amendment or replacement under these *Rules*); and

(ii) to have been developed and *published* by the *AER* on 1 July 2016; and

(2) the *AER* is taken to have complied with the requirements of paragraphs (a) and (b) in developing and *publishing* the *service target performance incentive 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 via a *transmission or distribution system* in this jurisdiction 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*.

(ab) For the purposes of paragraph (a), the *AER* must regard the reference to "the national electricity system" in the national electricity objective stated in section 7 of the Law as including a reference to one or more, or all, of the local electricity systems, as the case requires.

(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*.

(c) Following its receipt of an application made in accordance with paragraphs (a) and (b), the *AER* must:

(1) consult with the *Distribution 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 (g).

(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*.

(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 (l1), 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 (l1), 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*.

(l1) 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) 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*.

(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 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 $15 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.

(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) 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).

(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) 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).

(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);

(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 5.5(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; and

(B) 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), 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 5.5, 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, 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 5.5, 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) rule 5.4A, 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 5.5 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, 5.3A and 5.4A 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 *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*; and

(viii) the application to the *Distribution Network Service Provider* of the *Expenditure Forecast Assessment Guidelines*; and

(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.

(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.

(ea) Despite paragraph (e), for a *Distribution Network Service Provider* in this jurisdiction, the *AER* must:

(1) after consulting with the *Distribution Network Service Provider* and other persons as the *AER* considers appropriate, make a *framework and approach paper* by 1 August 2017; and

(2) give a copy of the paper to the *Distribution Network Service Provider*, and *publish* it, as soon as is reasonably practicable.

Note:

This paragraph expires on 1 July 2019.

(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*.

(ba) Despite paragraph (b), for a distribution determination for a *Distribution Network Service Provider* in this jurisdiction that will apply during the *1st regulatory control period*, the provider must submit the information referred to in paragraph (a) on or before 1 July 2017.

Note:

This paragraph expires on 1 July 2019.

6.8.2 Submission of regulatory proposal and tariff structure statement

(aa) Paragraph (c)(5A) has no effect in this jurisdiction until the *National Energy Retail Law* is applied as a law of this jurisdiction.

(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*.

(b) A *regulatory proposal* and a proposed *tariff structure statement* 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*; or

(3) any information accompanying such a *regulatory proposal* or proposed *tariff structure statement*,

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* 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* 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* 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* 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*; and

(3) any information accompanying such a *regulatory proposal* or proposed *tariff structure statement*,

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:

(4) the *AER's* proposed *Negotiated Distribution Service Criteria* for the *Distribution Network Service Provider*; and

(5) an invitation for written submissions on the documents and information referred to in sub-paragraphs (1) to (4),

after the *AER* decides that the *regulatory proposal*, proposed *tariff structure statement* 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)(3);

(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)(3), 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)(4) or the issues paper within the time specified in the invitations referred to in paragraphs (a)(5) 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* and the proposed *tariff structure statement*;

(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)(4); 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.

(ba) In addition, if the draft distribution determination will apply to a *distribution system* in this jurisdiction during the *1st regulatory control period*, the *AER* must have regard to:

(1) any amount that, under clause 3.1.3(a)(ii) or 3.1.5(a)(ii)(B) of Part B of the *2014 NT Network Price Determination*, the *AER* determined, before 1 July 2018, should be passed through to network users in a *regulatory year* of the *1st regulatory control period* or a subsequent *regulatory control period*; and

(2) any amount that, under clause 3.1.3(d)(ii) of Part B of the *2014 NT Network Price Determination*, should be passed through to network users in a *regulatory year* of the *1st regulatory control period* or a subsequent *regulatory control period* as a result of the *AER* failing, before 1 July 2018, to make a determination within the prescribed period.

Note:

This paragraph expires on 1 July 2024.

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* and the proposed *tariff structure statement*;

(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.

(ba) In addition, if the distribution determination will apply to a *distribution system* in this jurisdiction during the *1st regulatory control period*, the *AER* must have regard to:

(1) any amount that, under clause 3.1.3(a)(ii) or 3.1.5(a)(ii)(B) of Part B of the *2014 NT Network Price Determination*, the *AER* determined, before 1 July 2018, should be passed through to network users in a *regulatory year* of the *1st regulatory control period* or a subsequent *regulatory control period*; and

(2) any amount that, under clause 3.1.3(d)(ii) of Part B of the *2014 NT Network Price Determination*, should be passed through to network

users in a *regulatory year* of the *1st regulatory control period* or a subsequent *regulatory control period* as a result of the *AER* failing, before 1 July 2018, to make a determination within the prescribed period.

Note:

This paragraph (ba) expires on 1 July 2024.

(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

6.12.1AA Application in this jurisdiction

Clauses 6.12.1(21) and 6.12.3(i) and (j) have no effect in this jurisdiction until the *National Energy Retail Law* is applied as a law of this jurisdiction.

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*;

(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(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*;

(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*); and

(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);

(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 a *regulatory proposal* or proposed *tariff structure statement*.

(b) The classification of *distribution services* must be as set out in the relevant *framework and approach paper* unless the *AER* considers that unforeseen circumstances justify departing from the classification as set out in that paper.

(c) The form of the control mechanisms must be as set out in the relevant *framework and approach paper*.

(c1) The formulae that give effect to the control mechanisms referred to in paragraph (c) must be as set out in the relevant *framework and approach paper* unless the *AER* considers that unforeseen 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.

(da) For the application of these *Rules* in this jurisdiction:

(1) the *Distribution Confidentiality Guidelines* that are in force in the other *participating jurisdictions* on 1 July 2016 are taken:

(i) to be the *Distribution Confidentiality Guidelines* in force in this jurisdiction (subject to any amendment or replacement under these *Rules*); and

(ii) to have been made and *published* by the *AER* on 1 July 2016; and

(2) the *AER* is taken to have complied with the requirements of paragraphs (a) and (b) in making and *publishing* the *Distribution Confidentiality Guidelines*.

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.

(ea) For the application of these *Rules* in this jurisdiction:

(1) the *Cost Allocation Guidelines* that are in force in the other *participating jurisdictions* on 1 July 2016 are taken:

(i) to be the *Cost Allocation Guidelines* in force in this jurisdiction (subject to any amendment or replacement under these *Rules*); and

(ii) to have been made and *published* by the *AER* on 1 July 2016; and

(2) the *AER* is taken to have complied with the requirements of paragraphs (a), (b) and (e) in making and *publishing* the *Cost Allocation Guidelines*.

6.15.4 Cost Allocation Method

(a) Each *Distribution Network Service Provider* in this jurisdiction must submit to the *AER* for its approval a document setting out its proposed *Cost Allocation Method* 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.

6.17.1A Distribution Ring-Fencing Guidelines deferred until 1 July 2019

Despite clause 6.17.1, the *Distribution Ring-Fencing Guidelines* have no effect in this jurisdiction until 1 July 2019.

6.17.1B Application of Distribution Ring-Fencing Guidelines in this jurisdiction

Despite clause 6.17.1, in this jurisdiction:

(a) the following provisions of the *Distribution Ring-Fencing Guidelines* have no effect:

(1) clause 1.1.1, all words from "For the avoidance" to "**DNSP**s.";

(2) clause 1.4, definition **non-distribution services**; and (3)

clauses 3.1, 4.2.1, 4.2.2 and 4.2.3; and

(b) a reference in the *Distribution Ring-Fencing Guidelines* to "**non-distribution services**" must be regarded as a reference to "**other services**"; and

(c) a reference in clause 3.2.1(a) of the *Distribution Ring-Fencing Guidelines* and the note to that paragraph to "**affiliated entities**" must be regarded as a reference to "**related electricity service providers**"; and

(d) a reference in clause 6.2.1(b)(iv) of the *Distribution Ring-Fencing Guidelines* to "**affiliated entity**" must be regarded as a reference to "r**elated electricity service provider**".

Note:

This clause, and the operation of the *Distribution Ring-Fencing Guidelines* in this jurisdiction, will be revisited in the event of the introduction of contestable services (including contestable metering services) in this jurisdiction.

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 Provide*r 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.

(ha) However, for a distribution determination for a *Distribution Network Service Provider* in this jurisdiction that will apply or applies during the *1st regulatory control period*, the reference in paragraph (h) to "the previous *regulatory year*" must be regarded as a reference to "the year that precedes the relevant *regulatory year* of the *1st regulatory control period* (which may be the last year of the *2014-19 NT regulatory control period*)".

Note:

This paragraph expires on 1 July 2024.

(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 $(1 + CPI)(1 – X)(1 + 2\%)$

(2) CPI plus 2%.

Note:

The calculation is of the form $(1 + CPI)(1 + 2\%)$

(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

Note:

Clause 6.18.9(a)(3) has no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations).*

(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.

(b) 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*.

(c) 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

Note:

This Part has no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this Part will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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:

(1) *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

(2) *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

Note:

This Part has no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this Part will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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

Note:

This Part has no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this Part will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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 5.5(f) or clause 5.5(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

Note:

This Part has no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this Part will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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

Note:

This Part has no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this Part will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

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.

6.27A Application in this jurisdiction

(a) Despite rule 6.27, an *annual benchmarking report published* before 1 January 2018 must not relate to a *Distribution Network Service Provider* in this jurisdiction.

(b) For an *annual benchmarking report* that is to be *published* between 1 January 2018 and 30 June 2019, the reference in rule 6.27(a) to "*direct control services*" must, in relation to *Distribution Network Service Providers* in this jurisdiction, be regarded as a reference to "*NT equivalent services*".

Note:

This rule expires on 1 July 2019.

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*;

(5A) in the case of a *building block proposal* for a distribution determination for a *Distribution Network Service Provider* in this jurisdiction that will apply during the *1st regulatory control period*:

(i) capital expenditure for each of the past years of the *2009-14 NT regulatory control period* and *2014-19 NT regulatory control period*, and the expected capital expenditure for each of the last two years of the *2014-19 NT regulatory control period*, categorised in the same way as for the capital expenditure forecast and separately identifying for each such year:

(A) 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

(B) expenditure that should have been treated as operating expenditure in accordance with the policy submitted under paragraph (8) for that year; and

(ii) an explanation of any significant variations in the forecast capital expenditure from capital expenditure in the *2009-14 NT regulatory control period* and *2014-19 NT regulatory control period*;

(5B) in the case of a *building block proposal* for a distribution determination for a *Distribution Network Service Provider* in this jurisdiction that will apply during the *2nd regulatory control period*:

(i) capital expenditure for each of the past years of the *2014-19 NT regulatory control period* and each of the past regulatory years of the *1st regulatory control period*, and the expected capital expenditure for each of the last two *regulatory years* of the *1st regulatory control period*, categorised in the same way as for the capital expenditure forecast and separately identifying for each such year:

(A) 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

(B) expenditure that should have been treated as operating expenditure in accordance with the policy submitted under paragraph (8) for that year; and

(ii) an explanation of any significant variations in the forecast capital expenditure from capital expenditure in the *2014–19 NT regulatory control period* and *1st regulatory control period*; and

(6) in the case of a *building block proposal* for a distribution determination for a *Distribution Network Service Provider* in this jurisdiction that will apply after the *2nd regulatory control period* – 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) in the case of a *building block proposal* for a distribution determination for a *Distribution Network Service Provider* in this jurisdiction that will apply after the *2nd regulatory control period* – 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.

Note:

The modifications to this clause expire on 1 July 2029.

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*;

(6A) in the case of a *building block proposal* for a distribution determination for a *Distribution Network Service Provider* in this jurisdiction that will apply during the *1st regulatory control period*:

(i) operating expenditure for each of the past years of the *2009-14 NT regulatory control period* and *2014-19 NT regulatory control period*, and the expected operating expenditure for each of the last two years of the *2014-19 NT regulatory control period*, categorised in the same way as for the operating expenditure forecast; and

(ii) an explanation of any significant variations in the forecast operating expenditure from operating expenditure in the *2009-14 NT regulatory control period* and *2014-19 NT regulatory control period*;

(6B) in the case of a *building block proposal* for a distribution determination for a *Distribution Network Service Provider* in this jurisdiction that will apply during the *2nd regulatory control period*:

(i) operating expenditure for each of the past years of the *2014-19 NT regulatory control period* and each of the past *regulatory years* of the *1st regulatory control period*, and the expected operating expenditure for each of the last two *regulatory years* of the *1st regulatory control period*, categorised in the same way as for the operating expenditure forecast; and

(ii) an explanation of any significant variations in the forecast operating expenditure from operating expenditure in the *2014-19 NT regulatory control period* and the *1st regulatory control period*;

(7) in the case of a *building block proposal* for a distribution determination for a *Distribution Network Service Provider* in this jurisdiction that will apply after the *2nd regulatory control period* – 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) in the case of a *building block proposal* for a distribution determination for a *Distribution Network Service Provider* in this jurisdiction that will apply after the *2nd regulatory control period* – an explanation of any significant variations in the forecast operating expenditure from historical operating expenditure.

Note:

The modifications to this clause expire on 1 July 2029.

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

Note:

Clause S6.2.1(d) has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*.

(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*.

However, this clause S6.2.1 does not apply to the establishment of the value of the regulatory asset base for a *distribution system* in this jurisdiction as at the beginning of the *1st regulatory control period*.

Note:

See clause S6.2.3A for the establishment of the value of the regulatory asset base for a *distribution system* in this jurisdiction as at the beginning of the *1st regulatory control period*. Also see rule 6.0(b)(2) for the treatment of *distribution systems* in this jurisdiction for the purposes of this schedule.

(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 S6.2.3 and S6.2.3A.

(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	*Distribution Network Service Provider*	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)

Jurisdiction	*Distribution Network Service Provider*	Regulatory Asset Base ($m)
	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.
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) 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.

(3A) However, in calculating the value of the regulatory asset base for a *distribution system* in this jurisdiction as at the beginning of the first *regulatory year* of the *2nd regulatory control period*, the previous value of the regulatory asset base must be adjusted for the difference between:

(i) the estimated capital expenditure for any part of the *2014-19 NT regulatory control period* or *1st 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 *2014-19 NT regulatory control period* or *1st regulatory control period*.

This adjustment must also remove any benefit or penalty associated with any difference between the estimated and actual capital expenditure.

Note:

This subparagraph expires on 1 July 2029.

(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) 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*.

(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

Note:

Clause S6.2.2 has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*.

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 prudency 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.

(a2) However, for a decision on the regulatory asset base for a *distribution system* in this jurisdiction as at the commencement of the *2nd regulatory control period*, "**review period**" means only the previous control period (excluding the last two *regulatory years* of that previous control period).

Note:

This paragraph expires on 1 July 2029.

(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

Note:

Clause S6.2.2B(b) and (c) has no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations).*

(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) (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.

S6.2.3A Establishment of opening regulatory asset base for distribution system in this jurisdiction for 1st 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* in this jurisdiction as at the beginning of the *1st regulatory control period*.

(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.

(c) **Previous value of regulatory asset base for distribution system in this jurisdiction**

For paragraph (d), the previous value of the regulatory asset base for all *distribution systems* in this jurisdiction that are owned, controlled or operated by the *Distribution Network Service Provider* mentioned in the table below is as set out in the table:

Jurisdiction	Distribution Network Service Provider	Regulatory Asset Base ($m)
Northern Territory	Power and Water Corporation ABN 15 947 352 360	928.34 (as at 1 July 2014 in July 2014 dollars)

(d) **Method of adjustment of value of regulatory asset base**

The value of the regulatory asset base for the *distribution systems* mentioned in paragraph (c) as at the beginning of the first *regulatory year* of the *1st regulatory control period* must be calculated by adjusting the previous value (the **previous value**) of the regulatory asset base for the *distribution systems* as specified in paragraph (c) 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 *2014-19 NT regulatory control period* (the ***previous control period***), including any capital expenditure determined for that period under clause 3.2.4(d)(i)(A) of Part B of the *2014 NT Network Price Determination* where the Determination has been amended under clause 3.2.4(d)(iii) of the Determination (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 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 3.1 of Part B of the *2014 NT Network Price Determination* 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 *Utilities Commission* or *AER* for any part of the previous control period for which actual capital expenditure is not available.

(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 the *2009-14 NT regulatory control period* or *2014-19 NT 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 *2009-14 NT regulatory control period* or *2014-19 NT 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 estimated or actual capital expenditure to the extent that all such capital expenditure is properly allocated to the provision of *NT equivalent services* in accordance with the Cost Allocation Methodology (as amended, varied or substituted from time to time) that is the subject of the *Utilities Commission's* final decision referred to in Chapter 5 of Part A of the *2014 NT Network Price Determination*.

(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 *2014 NT Network Price Determination*.

(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 an asset where the asset was previously used to provide *NT equivalent services* but, as a result of the classification of the asset under Part B, the asset is not to be used to provide *standard control services* for the *1st regulatory control period*.

(8) 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 *NT equivalent services* in the previous control period but, as a result of a change to the classification of a particular service under Part B, is to be used to provide

standard control services for the *1st regulatory control period*; or

(ii) was never previously used to provide *NT equivalent services* but is to be used to provide *standard control services for the 1st regulatory control period*.

(e) An increase or reduction in the value of the regulatory asset base under paragraph (d)(7) or (8) is to be based on the portion of the value of the asset properly allocated, or formerly properly allocated, to *NT equivalent services* in accordance with the principles and policies set out in the Cost Allocation Methodology (as amended, varied or substituted from time to time) that is the subject of the *Utilities Commission's* final decision referred to in Chapter 5 of Part A of the *2014 NT Network Price Determination*. The value of the relevant asset is taken to be its value as shown in independently audited and published accounts.

CHAPTER 6A

6A. Economic Regulation of Transmission Services

Note:

This Chapter has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this Chapter will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

CHAPTER 6B

6B. Retail Markets

Note:

This Chapter has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this Chapter will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

CHAPTER 7

7. Metering

Note:

This Chapter has no effect in this jurisdiction but will take effect at a later date. Chapter 7A applies in this jurisdiction from 1 July 2019 in substitution for this Chapter.

Criteria for assessing when the transition to this Chapter will take effect will be considered as part of the phased implementation of the Rules in this jurisdiction.

CHAPTER 7A

7A. Metering

Under the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations* the Northern Territory has inserted a new Chapter 7A - Metering into the Northern Territory version of the National Electricity Rules. Chapter 7A has no effect in the Northern Territory until 1 July 2019. A copy of Chapter 7A, as set out in the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations*, is available on the AEMC's website.

Chapter 7A applies in substitution for Chapter 7 (which establishes the metering framework that applies in the participating jurisdictions other than the Northern Territory). Chapter 7A operates as a transitional framework until Chapter 7 takes effect in the Northern Territory.

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

Note

Clause 8.1.3(b)(5) and (7) has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations).*

(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

Note

This Part has no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*. The application of this Part will be revisited as part of the phased implementation of the *Rules* in this jurisdiction.

Part C Registered Participants' confidentiality obligations

8.6 Confidentiality

8.6.1 Confidentiality

Note

Clause 8.6.1(d) and (e) has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*.

(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 clause 6.9.2.

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.)

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

Note

Clause 8.6.2(l) has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*.

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* and the *AEMC* against any claim, action, damage, loss, liability, expense or outgoing which the *AER* or the *AEMC* 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

Note

This clause has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*.

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

Note

This clause has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations).*

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* 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* and all *Registered Participants*; and

(4) subject to confidentiality obligations, are publicised or available to the public.

8.7.2 Reporting requirements and monitoring standards for Registered Participants

Note

Clause 8.7.2(a)(2) and (4) and (b)(2) has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations).*

(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* in relation to matters relevant to the *Rules.*

(b) The *AER* must:

(1) after consultation with the *AEMC* 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) and (5); and

(2) after consultation with the *AEMC* 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 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* 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* 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*a *Registered Participant* must not recklessly or knowingly provide, or permit any other person to provide on behalf of that *Registered Participant*. 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* 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*. The relevant *Registered Participants* 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*.

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

Note

Clause 8.7.6 has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*.

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

Note

This part has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*.

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;

(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*; and

(E) a person representing the interests of end use customers for electricity.

(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 *reliability* of electricity *supply* under the *market* arrangements;

(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 person representing *Transmission Network Service Providers* appointed under clause 8.8.2(a)(3)(C), 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 person representing *Transmission Network Service Providers* appointed under clause 8.8.2(a)(3)(C), 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*; 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 insolvent or under administration;

(2) 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;

(3) the person resigns or dies;

(4) the *AEMC* is required to remove the person under clause 8.8.2(c) or 8.8.2(c1)(2); or

(5) the person fails to discharge the obligations of that office imposed by the *Rules*.

(d1) The person referred to in clause 8.8.2(a)(3)(E) must be appointed and removed by the *AEMC* after consultation with such bodies representing the interests of end use customers for electricity and other persons as the *AEMC* considers appropriate 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.

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 calendar 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) in accordance with this clause 8.8.3.

(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* is not required to follow the process in paragraphs (c) to (l) for the purposes of its functions under clause 8.8.1(a)(1b).

(d) The *Reliability Panel* must give notice to all *Registered Participants* of a determination or review. The notice must give particulars of the terms of reference for the determination or review (as the case may be), the deadline for the receipt of any submissions to the *Reliability Panel* and the date and place for the meeting referred to in clause 8.8.3(f). The notice must be given at least 8 weeks prior to the meeting or such other time specified by the *AEMC* in any request for a review.

(e) The deadline for receipt of submissions must not be earlier than 4 weeks prior to the meeting or such other time specified by the *AEMC* in any request for a review.

(f) The *Reliability Panel* must hold a meeting open to the public for any determination or review by the *Reliability Panel*.

(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 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* no later than 6 weeks after the meeting referred to in clause 8.8.3(f) or such other deadline for reporting specified by the *AEMC* in any request for a review.

(k) The *AEMC* must, within 10 *days* of receiving the written report of the *Reliability Panel*, make the report publicly available (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.

(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*. Within 3 *business days* of receipt of the notice *AEMO* must *publish* the notice on its website. Where the *AEMC* 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 given).

(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, 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*. Within 3 *business days* of receipt of the draft report *AEMO* must *publish* the draft report on its website. Where the *AEMC* 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, 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*. Within 3 *business days* of receipt of the final report *AEMO* must *publish* the final report on its website. Where the *AEMC* 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

Note

This part has no effect in this jurisdiction (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*.

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

Note

This Part has no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations)*.

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*.

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 *licence* to distribute and supply electricity.
Distributor	A person who holds a distribution *licence*.
EI Act	*Electricity Industry Act 2000* (Vic).
EI (RP) Act	*Electricity Industry (Residual Provisions) Act 1993* (Vic).
ESC	The Essential Services Commission established under section 7 of the *ESC Act*.
ESC Act	The *Essential Services Commission Act 2001* (Vic).
licence	A *licence* within the meaning of the *EI Act* or deemed to be issued under the *EI Act* by operation of clause 5 of Schedule 4 to the *EI (RP) Act*.
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 *State Electricity Commission Act 1958* (Vic).
Smelter Agreements	Each of the agreements, contracts and deeds referred to in Part A of schedule 3 to the *EI (RP) Act* 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 *Office of the Regulator-General Act 1994* (Vic) on 3 October 1994 and saved and continued in operation by section 67 of the *ESC Act*.

Column 1	Column 2
VENCorp	Victorian Energy Networks Corporation established under Division 2A of Part 2 of the *Gas Industry Act 1994* (Vic) and continued under Part 8 of the *Gas Industry Act 2001* (Vic).
Victorian Distribution Network	In relation to a person that holds a distribution *licence*, the *distribution systems* in Victoria to which that *licence* relates and includes any part of those systems.
Victorian Minister	The Minister who, for the time being, administers the *National Electricity (Victoria) Act 1997* (Vic).
Victorian Transmission Network	The *declared shared network* of Victoria.
Wholesale Metering Code	The code of that name sealed by the Office of the Regulator-General under the *Office of the Regulator-General Act 1994* (Vic) on 3 October 1994, as in force immediately before *market commencement*.

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 Country	40.0 kA 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 *financial year* 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 that 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	*Electricity Supply Act 1995* (NSW).
IPART	The New South Wales Independent Pricing and Regulatory Tribunal established under the *IPART Act*.
IPART Act	*Independent Pricing and Regulatory Tribunal Act 1992* (NSW).
Minister	The Minister administering the *ES Act* from time to time.
Mount Piper Power Station	The *power station* 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 *Energy Services Corporations Act 1995* (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)(l), 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]**I

(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 *Utilities Act 2000* (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 *Electricity Act*
Distribution Lessor Corporation	A subsidiary of the Treasurer of the State of South Australia established by the *Public Corporations (Distribution Lessor Corporation) Regulations 1999* 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	*Electricity Act* 1996 (SA).
ETSA Corporation	The statutory corporation established pursuant to the *Electricity Corporations Act 1994* 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 *Public Corporations (ETSA Power) Regulations 1995*, and includes its successors and assigns.
ETSA Transmission Corporation	The statutory corporation established pursuant to the *Electricity Corporations Act 1994* 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 *Public Corporations (Generation Lessor Corporation) Regulations 1999* 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 *generating system* and associated *generating units* 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 *distribution network*, plant and equipment owned by Distribution Lessor Corporation from time to time.
SA Generation Corporation	The statutory corporation established pursuant to the *Electricity Corporations Act 1994* 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 *generating systems* and associated *generating units* owned by Generation Lessor Corporation from time to time.
South Australian network	A *network* 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 *transmission network* 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 *transmission network*, 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 *market commencement*..
Electricity Act	The *Electricity Act 1994* (Qld).
excluded customer	An excluded customer as defined in the *Electricity Act*.
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 *generating system*, 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 *Government Owned Corporations Act 1993* (Qld).
Minister	The Minister administering the *Electricity Act* from time to time.
Nominated Generator	A State Electricity Entity determined by the *Minister* for the purposes described in clause 9.34.6 for a *generating system* 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 *Queensland Competition Authority Act*.
Queensland Competition Authority Act	The *Queensland Competition Authority Act 1997* (Qld).
Queensland distribution network	A *distribution network* (including any part of a *distribution network*) 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 *transmission network* located in Queensland operating at a nominal *voltage* of 275 kV, the *connection assets* associated with that *network* and any *transmission or distribution system connected* to that *network* and also located in Queensland.
Queensland transmission network	A *transmission network* (including any part of a *transmission network*) situated in Queensland.
Small Generator	A *Generator* whose *generating system* is *connected* to the Queensland system and has a *nameplate rating* 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	*generating systems* 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 *power station* known as the "Stanwell Power Station" located at Stanwell, Queensland.
State Electricity Entity	A State electricity entity as defined in the *Electricity Act*.
transmission authority	An authority of that name issued under the *Electricity Act*.

(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 *Rules*, in Queensland the *transmission network* assets are to be taken to include only those assets owned by Powerlink Queensland or any other *Transmission Network Service Provider* that holds a transmission authority irrespective of the *voltage* level and does not include any assets owned by a *Distribution Network Service Provider* whether or not such *distribution* assets are operated in parallel with the *transmission system*.

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 S.5.2.5.13 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 *transmission systems*.
ESI Act	The *Electricity Supply Industry Act 1995* (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 *ESI Act*.
Tasmanian Code	The Tasmanian Electricity Code issued under section 49A of the *ESI Act*.
Tasmanian Code Participant	A person who is a Code Participant within the meaning of the *Tasmanian Code*.
Tasmanian Electricity Regulator	The office of the Regulator established pursuant to section 5 of the *ESI Act*.
Tasmanian Network Service Provider	A person who is a *Network Service Provider* in respect of a *network* located in Tasmania (including the *Network Service Provider* 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 *Electricity - National Scheme (Tasmania) Act 1999* 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

1st regulatory control period

In relation to a *Network Service Provider* in this jurisdiction, means the first period during which the provider will be or is subject to a control mechanism imposed by a distribution determination, being the period from 1 July 2019 to 30 June 2024.

2nd regulatory control period

In relation to a *Network Service Provider* in this jurisdiction, means the second period during which the provider will be or is subject to a control mechanism imposed by a distribution determination, being the period from 1 July 2024 to 30 June 2029.

Note:

This definition expires on 1 July 2029.

2009-14 NT regulatory control period

The regulatory control period that commenced on 1 July 2009 under the *NT Network Access Code*.

2014-19 NT regulatory control period

The regulatory control period that commenced on 1 July 2014 under the *NT Network Access Code*.

2014 NT Ministerial Direction

The direction issued by the shareholding Minister of Power and Water Corporation ABN 15 947 352 360 to the board of the Corporation under section 8(4)(a) of the *Government Owned Corporations Act* (NT), dated 19 June 2014.

2014 NT Network Price Determination

The "2014 Network Price Determination" made by the *Utilities Commission* under the *Utilities Commission Act* (NT), *Electricity Reform Act* (NT) and Chapter 6 of the *NT Network Access Code* that:

(a) applies, or applied, from 1 July 2014 to 30 June 2019; and

(b) because of section 57 of the *Electricity Networks (Third Party Access) Act* (NT), is, or was, a network pricing determination made under section 6A(1) of that Act,

as amended, varied or substituted from time to time.

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 *Transmission Network Service Provider* - an amount described in clause 5.4A(g)-(j).

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 5.5(f)(4); and

(b) *negotiated distribution services* which would have been treated as *negotiated transmission services* were it not for the operation of clause 6.24.2(c), an amount described in clause 5.4A(g)-(j).

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 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 *recording 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*.

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 under clause 5.3.4B or 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.

(6A) Northern Territory:

(a) the *Electricity Reform Act* (NT);

(b) all instruments made and licences granted under the *Electricity Reform Act* (NT);

(c) the *Utilities Commission Act* (NT); and

(d) all instruments made under the *Utilities Commission Act* (NT).

application to connect

An application made by a *Connection Applicant* in accordance with Chapter 5, Part A 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* or *NT 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 clause 6.6.1AB(d)(2); or

(b) the amount the *AER* is taken to have determined under clause 6.6.1(e)(1) or 6.6.1AB(e)(1),

as the case may be.

Note:

The modification to this definition expires on 1 July 2024.

approved pricing proposal

A *pricing proposal* approved by the *AER*.

ASRR

The *annual service revenue requirement*.

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 Central Standard Time (ACST)

The time that is set at 9 hours and 30 minutes in advance of *Co-ordinated Universal Time*.

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 5.5(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) a public holiday as defined in section 17 of the *Interpretation Act* (NT) (other than a public holiday that is part of a day) in the City of Darwin.

calculated metering data

The *recording interval* data corresponding to the calculation of consumed *energy* for a type 7 *metering installation* in accordance with schedule 7A.3. *Calculated metering data* is held in the *metering data services 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*.

check metering installation

A *metering installation* that includes a *check meter* which is used as the source of *check metering data* for data validation.

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* 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:

(a) *Registered Participant*;

(b) person intending to become a *Registered Participant*; or

(c) non-registered embedded generator who elects to seek *connection* of an *embedded generating unit* under Chapter 5 in accordance with clause 5A.A.2(c),

who wants to establish or modify a *connection* to a *transmission network* or *distribution network* and/or who wishes to receive *network services* and who makes an *application* to *connect*.

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 application

Has (in the context of Chapter 5A) the meaning given in clause 5A.A.1.

connection assets

Those components of a *transmission or distribution system* which are used to provide *connection services*.

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 *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 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*, 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.

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 a *Network Service Provider* for managing the *power system*.

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:

(a) under Part 3 of the *Electricity Reform Act* (NT), holds a licence authorising the selling of electricity ; but

(b) does not hold a licence authorising the ownership or operation of an electricity network under that Part.

customer authorised representative

A person authorised by a *retail customer* to request and receive information under Chapter 7A 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 (including where it has been negotiated in accordance with clause 5.4A(f)(3)) 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 *Australian Central Standard Time*.

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*.

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* 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 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 or, in the case of *child connection points*, in accordance with guidelines developed by the *AER* under clause 2.5.1(d) and the *ENM service level procedures*.

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:

(a) engages in the activity of owning, controlling, or operating a *distribution system*; and

(b) under Part 3 of the *Electricity Reform Act* (NT), holds a licence authorising the ownership or operation of an electricity network.

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 standard control service revenue

Has the meaning given in rule 6.26(b)(2).

distribution system

Means:

(a) a *distribution network*, together with the *connection assets* associated with the *distribution network*, which is connected to another *transmission or distribution system* within the other *participating jurisdictions*; or

(b) a *distribution network* that forms part or all of a local electricity system, together with the *connection assets* associated with the *distribution network*.

Connection assets on their own 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.

In respect of an *NT positive change event* for a *Distribution Network Service Provider*, the increase in costs in the provision of *direct control services* or *NT equivalent services* that, as a result of that *NT 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 the end of the *1st regulatory control period*.

Note:

The modification to this definition expires on 1 July 2024.

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 CO_2-e/MWh) of energy produced by each *power station*.

enabled

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.

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

Means:

(a) the national electricity legislation as defined in the *National Electricity Law*;

(b) these Rules and instruments made under these Rules;

(c) the national gas legislation as defined in the National Gas (NT) Law;

(d) the National Gas Rules as defined in the National Gas (NT) Law and instruments made under those Rules; and

(e) any other Northern Territory legislation that regulates energy.

Note:

The modifications to this definition expire when the *National Energy Retail Law* is applied as a law of this jurisdiction.

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 schedule 7A.3. *Estimated metering data* is held in a *metering data services 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).

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 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*;

(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 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 a *connection point*, a term which is used to describe the person authorised to have either:

1. the *load connected* at that *connection point*; or

2. the *generating unit connected* at that *connection point*.

Note:

The obligations on *Customers* (including *retailers*) and *Generators* in relation to the authorisation of, respectively, *load* or *generating units connected* at a *connection point* will be considered as part of the phased implementation of the *Rules* in this jurisdiction.

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.

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*.

Note:

There are no franchise customers in this jurisdiction.

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 System Design Data Sheet

The data sheet *published* by *AEMO* under clause S5.5.7(a)(1).

Generating System Model Guidelines

The guidelines *published* by *AEMO* under clause S5.5.7(a)(3).

Generating System Setting Data Sheet

The data sheet *published* by *AEMO* under clause S5.5.7(a)(2).

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:

(a) 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

(b) is a *Registered Participant* who, under Part 3 of the *Electricity Reform Act* (NT), holds a licence authorising the generation of electricity..

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) use of the *transmission network* which has been negotiated in accordance with clause 5.4A(f)(3)(i); or

(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), a group of *Network Service Providers*) seeks to achieve by investing in the *network*.

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 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).

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 *recording interval* or are submultiples of a *recording interval*. *Interval energy data* is held in the *metering installation*.

interval meter

A meter that records *interval energy data*.

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*.

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.

involuntary load shedding

Load shedding where the *load* shed is not an *interruptible load* except *load* under the control of underfrequency relays as described in clause S5.1.10.1(a), or a *scheduled load*.

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***)

Any of the conditions described in clause 4.8.4(b), (c) or (d).

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*.

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 appointed to the role of *Metering Coordinator* in this jurisdiction.

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 *NT NMI 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.

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 (NT) Law.

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

Means the sum of:

(a) all *connected transmission systems* and *distribution systems* within the *participating jurisdictions*; and

(b) the *transmission systems* and *distribution systems* in this jurisdiction.

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 *network support payments* (if any) that is provided for in the *annual building block revenue requirement* for the provider for that *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* or *NT 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) or 6.6.1AB(g).

Note:

The modification to this definition expires on 1 July 2024.

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*; or

(c) undertaking *system strength connection works*,

but does not include an *above-standard system shared transmission service* or a *market network service*.

Negotiated Transmission Service Criteria

For a *Transmission Network Service Provider* under a *transmission determination*, the criteria set out in that *transmission determination* pursuant to clause 6A.9.4.

Negotiated Transmission Service Principles

The principles set out in clause 6A.9.1.

negotiated use of system service

A *use of system service* in respect of which:

(a) a *Connection Applicant* may negotiate with a *Transmission Network Service Provider*;

(b) an *Embedded Generator* may negotiate with a *Distribution Network Service Provider*; or

(c) a *Market Network Service Provider* may negotiate with a *Distribution Network Service Provider*,

in accordance with clauses 5.4A(f)(3) or 5.5(f)(3).

negotiated use of system charges

The charges described in clauses 5.4A(f)(3) or 5.5(f)(3).

negotiating framework

For a *Transmission Network Service Provider*, the negotiating framework approved or included by the *AER* for that *Transmission Network Service Provider* in a final decision under clause 6A.14.1(6).

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).

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 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; and

(b) is located at or adjacent to a *metering installation* at the *connection point* of a *retail customer*.

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, *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 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:

(a) **Transmission asset** means the apparatus, equipment and plant, including transmission lines and substations of a transmission system; and

(b) **distribution asset** means the apparatus, equipment and plant, including distribution lines, substations and sub transmission lines, of a distribution system.

Note:

The modification to this definition expires on 1 July 2017.

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 *Distribution Network Service Provider* or *Transmission Network Service Provider*.

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 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 *network support payments* (if any) that is provided for in the *annual building block revenue requirement* for the *Transmission Network Service Provider* for that *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*.

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

A payment by a *Transmission Network Service Provider* to:

(a) any *Generator* providing *network* support services in accordance with rule 5.4AA; or

(b) any other person providing a *network* support service that is an alternative to *network augmentation*.

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 Participant* 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*.

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)(1AA) 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-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*; 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

Network support and control ancillary service required to:

(a) 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

(b) 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*.

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*.

NT equivalent services

Regulated network access services (as defined in clause 3 of the *NT Network Access Code*) that are designated as direct control services in Table 3.1 of Part A of the *2014 NT Network Price Determination*.

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.

NT negative change event

A negative change event (as defined in Part B of the *2014 NT Network Price Determination*) for a *Distribution Network Service Provider*:

(a) that occurred during the *2014-19 NT regulatory control period*; and

(b) in relation to which, on or before 30 June 2019, a determination had not been made under clause 3.1.5(a) of Part B of the *2014 NT Network Price Determination* and the time for making it had not expired.

Note:

This definition expires on 1 July 2024.

NT Network Access Code

The Network Access Code as defined in section 2A(1) of the *Electricity Networks (Third Party Access) Act* (NT).

NT NMI 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 relevant *Network Service Provider*;

(d) the relevant *distribution loss factor* applicable to the *connection point*;

(e) the Network Tariff (identified by a code) applicable in respect of the *connection point*;

(f) 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*,

and, to avoid doubt, does not include any *metering data* or other details of an end-user's consumption at that *connection point*.

NTP functions

Has the meaning given in the *National Electricity Law.*

NT positive change event

A positive change event (as defined in Part B of the *2014 NT Network Price Determination*) for a *Distribution Network Service Provider*:

(a) that occurred during the *2014-19 NT regulatory control period;* and

(b) in relation to which, on or before 30 June 2019, either:

(1) a statement had not been submitted under clause 3.1.2 of Part B of the *2014 NT Network Price Determination* and the time fixed for submitting it had not expired; or

(2) a statement had been submitted under clause 3.1.2 of Part B of the *2014 NT Network Price Determination* but a determination had not been made under clause 3.1.3(a) of Part B of the Determination and the time for making it had not expired.

Note:

This definition expires on 1 July 2024.

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 *pass through 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.

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 *network support payments* (if any) that is provided for in the *annual building block revenue requirement* for the provider for that *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) or 6.6.1AB(c).

Note:

The modification to this definition expires on 1 July 2024.

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 or arrangements.

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 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.

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).

reconfiguration investment

Has the meaning given in clause 5.6.5C(a)(5).

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*.

recording interval

A 30 minute period ending on the hour (*Australian Central Standard Time*) or on the half-hour and, if identified by a time, means the 30 minute period ending at that time.

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*; and

(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*.

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

In respect of a *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.

In respect of an *NT negative change event* for a *Distribution Network Service Provider*, the costs in the provision of *direct control services* or *NT equivalent services* that, as a result of the *NT 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 the end of the *1st regulatory control period*.

Note:

The modification to this definition expires on 1 July 2024.

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*.

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.

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 s*mall 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.

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 National Electricity Rules as defined in section 2(1) of the *National Electricity Law.*

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 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

According to context:

(a) a person who is an existing or intending *Registered Participant* or a person who is eligible to become a *Registered Participant*; or

(b) 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 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 schedule 7A.3. *Substituted metering data* is held in a *metering data services 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 condensors

Plant, similar in construction to a *generating unit* of the *synchronous generator* category, which operates at the equivalent speed of the *frequency* of the *power system*, specifically provided to generate or absorb *reactive power* through the adjustment of rotor current.

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 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-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 6A.1.2 (access to *transmission services*);

(b) the terms and conditions described in clause 6.1.3 (access to *distribution services*).

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*.

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

Australian Central 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

Means:

(a) a *network* in this jurisdiction operating at *nominal voltages* of 66kV and above; or

(b) a *network* or part of a *network* prescribed by local instrument to be a *transmission network* or part of a *transmission network*,

but does not include a *network* or part of a *network* prescribed by local instrument not to be a *transmission network* or part of a *transmission network*.

Note:

The *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations* are a local instrument.

transmission network connection point

A *connection point* on a *transmission network*.

Transmission Network Service Provider

A person who:

(a) engages in the activity of owning, controlling or operating a *transmission system*; and

(b) under Part 3 of the *Electricity Reform Act* (NT), holds a licence authorising the ownership or operation of an electricity network.

Transmission Network User

In relation to a *transmission network*, a *Transmission Customer*, a *Generator* whose *generating unit* is directly *connected* to the *transmission network* or a *Network Service Provider* whose *network* is *connected* to the *transmission network*.

transmission network user access

The *power transfer capability* of the *transmission network* in respect of:

(a) *generating units* or group of *generating units*;

(b) *network elements*; or

(c) plant,

at a *connection point* which has been negotiated in accordance with rule 5.4A.

transmission or distribution system

A *transmission system* or a *distribution 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 *Service 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 6A.1.2, that is for determination by a *commercial arbitrator* under Part K of Chapter 6A.

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*.

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*.

Utilities Commission

The Utilities Commission of the Northern Territory established by section 5 of the *Utilities Commission Act* (NT).

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

Parts A to ZZI, ZZK, ZZL, ZZN (except for clause 11.86.8), ZZO to ZZT, ZZV and ZZX have no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations). The application of those Parts may be revisited as part of the phased implementation of the Rules in this jurisdiction.

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 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.*

****

11.86.8 Distribution Ring Fencing Guidelines

(a) *AER* must by 1 December 2016 *publish Distribution Ring-Fencing Guidelines*.

****

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 determinationfor both an effected 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.

Note

Part ZZV will be inserted by the National Electricity Amendment (Demand Response Mechanism and Ancillary Services Unbundling) Rule 2016 No. 10 which commences on 1 July 2017.

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 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

CONDITION	CONTAINMENT	STABILISATION	RECOVERY
			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 Commencment 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) In this rule:

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) 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*".

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 system 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) subject to paragraph (d), 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 (b).

(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) subject to paragraph (d), 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 ZZZD 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.

CHAPTER 11A

11A. NT Savings and Transitional Rules

Under the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations* the Northern Territory has inserted a new Chapter 11A – NT Savings and Transitional Rules into the Northern Territory version of the National Electricity Rules. None of the Parts of Chapter 11A has any effect in the Northern Territory until 1 July 2019. A copy of Chapter 11A, as set out in the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations*, is available on the AEMC's website.