

Important note

This document shows changes proposed by the Australian Energy Market Commission to the National Electricity Rules and National Energy Retail Rules for the purposes of the review *Updating the regulatory frameworks for distributor-led stand-alone power systems* (EMO0038), and should not be used for any other purpose.

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CHAPTER 2

2. Registered Participants and Registration

2.2 Generator

2.2.1 Registration as a Generator

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

Note:

A person who is exempt from registration as a *Generator*, may register with AEMO as a *Small Generation Aggregator* under rule 2.3A or if the relevant generating system is connected to a stand-alone distribution system, as a SAPS Resource Provider under rule 2.3B.

- (d) Without limitation, an exemption may be given which only relieves a person or class of persons from the requirement to register as a *Generator* in relation to certain specified *generating systems* or classes of *generating systems*.
- (e) To be eligible for registration as a *Generator*, a person must:
 - (1) obtain the approval of AEMO to classify each of the *generating units* that form part of the *generating system* that the person owns, operates or controls, or from which it otherwise sources electricity, as:
 - (i) a *scheduled generating unit*;
 - (ii) a *semi-scheduled generating unit*; or
 - (iii) a *non-scheduled generating unit*;
 - (2) classify the *generating units* in accordance with AEMO's approval as referred to in subparagraph (1);
 - (2A) if a *generating unit* is classified as a *scheduled generating unit* or a *semi-scheduled generating unit* in accordance with subparagraph (1):
 - (i) notify AEMO of the year in which the *Generator* expects the *generating unit* to cease supplying electricity to the *transmission network* or *distribution network* at its *connection point* (*expected closure year*); and
 - (ii) immediately notify AEMO of any change to the *expected closure year*; and
 - (3) satisfy AEMO that each *generating system* will be capable of meeting or exceeding its *performance standards*.

- (f) Except in relation to a proposed *generating unit*, a person must also classify each of those *generating units* as either a *market generating unit* or a *non-market generating unit*.
- (f1) A *Generator* may also classify one or more of its *generating units* as an *ancillary service generating unit* where it has obtained the approval of *AEMO* to do so.
- (g) Nothing in clause 2.2.1(e) or (f) requires the classification of any *generating unit* which forms part of a *generating system* in respect of which an exemption under clause 2.2.1(c) applies.

2.3 Customer

2.3.4 Market Customer

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

Note

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

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

- (h) A *Customer* who is also a *Local Retailer* must classify any *connection point* which *connects* its *local area* to another part of the *power system* as a *market load*.

Note

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

2.3A Small Generation Aggregator

2.3A.1 Registration

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

responsible as determined for each *trading interval* in accordance with the provisions of Chapter 3.

2.3B SAPS Resource Provider

2.3B.1 Registration and classification

- (a) A person who intends to supply electricity from one or more *generating units* to a *stand-alone distribution system* in a *regulated SAPS* may, upon application for registration by that person in accordance with rule 2.9, be registered by AEMO as a *SAPS Resource Provider*.
- (b) To be eligible for registration as a *SAPS Resource Provider*, a person must satisfy AEMO that the person intends to classify, within a reasonable amount of time, one or more *generating units connected* to a *stand-alone distribution system* in a *regulated SAPS* each as a *market generating unit*, with each *market generating unit* having a separate *connection point*.
- (c) A person must not engage in the activity of selling electricity directly to the *market* at any *connection point* in a *regulated SAPS* unless that person is registered by AEMO as a *Market Participant* and that *connection point* is classified as one of that person's *market connection points*.
- (d) A *Market SAPS Resource Provider* must classify each *generating unit* from which it proposes to supply electricity to a *regulated SAPS* as a *market generating unit*, with each *market generating unit* having a separate *connection point*.

2.3B.2 Market SAPS Resource Provider

- (a) A *Market SAPS Resource Provider* must sell all *sent out generation* through the *market* and accept payments from AEMO for all *sent out generation* at the price applicable at the *connection point* for which it is *financially responsible* as determined for each *trading interval* in accordance with the provisions of Chapter 3.
- (b) A *Market SAPS Resource Provider* must purchase all electricity *supplied* through the *national grid* to the *Market SAPS Resource Provider* at a *connection point* for which it is *financially responsible* from the *market* and must make payments to AEMO for such electricity *supplied* at the *connection point* as determined for each *trading interval* in accordance with the provisions of Chapter 3.

2.4 Market Participant

2.4.1 Registration as a category of Market Participant

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

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

2.4.2 Eligibility

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

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

2.10 Ceasing to be a Registered Participant

2.10.1 Notification of intention

- (a) A person:
 - (1) may notify *AEMO* in writing that it wishes to cease to be registered in any category of *Registered Participant* or that it wishes to terminate any of its classifications of *loads*, *generating units* (other than a *generating unit* specified in subparagraph (2)) or *network services*; and
 - (2) who is a *Scheduled Generator* or *Semi-Scheduled Generator*, must notify *AEMO* in writing if it wishes to terminate any of its classifications of *generating units*.

- (b) A person is not entitled to notify *AEMO* that it wishes to cease to be registered in relation to any category for which that person is required to be registered under the *National Electricity Law* or under the *Rules*.
- (c) In any notice given under subparagraph (a)(1), the *Registered Participant* must specify a date upon which it wishes to cease to be so registered or for an existing classification to be terminated and, in the case of a *Market Participant*, the date upon which it will cease to *supply* or acquire electricity or trade directly in the *market* and whether entirely or in relation to one or more *connection points* or *market network services*.
- (c1) In any notice given under subparagraph (a)(2), the *Registered Participant*:
 - (1) must specify a date (the *closure date*):
 - (i) for a *Non-Market Generator*, by which the classification of the *generating unit* will be terminated; and
 - (ii) for a *Market Generator*, by which:
 - (A) the classification of the *generating unit* will be terminated; and
 - (B) it will cease to supply electricity or trade directly in the *market* whether entirely or in relation to one or more *connection points*; and
 - (2) must provide an updated notice to *AEMO* under subparagraph (a)(2) of any amendments to the *closure date*.
- (c2) A *Scheduled Generator* or *Semi-Scheduled Generator's* first notified *closure date* for a *generating unit* must be no earlier than 42 months from the date of the notice given under subparagraph (a)(2), except where the relevant *Generator* has applied for, and is granted an exemption by the *AER* under paragraph (c4).
- (c3) A *Scheduled Generator* or *Semi-Scheduled Generator's* amended *closure date* for a *generating unit* provided in a notice to *AEMO* under subparagraph (c1)(2) (**amended notice**):
 - (1) may be a date that is later than the most recent *closure date* provided to *AEMO* under paragraph (a)(2); and
 - (2) must not be a date that is earlier than the most recent *closure date* provided to *AEMO* under paragraph (a)(2) except where:
 - (i) the amended *closure date* is no earlier than 42 months from the date the amended notice is provided to *AEMO*; or
 - (ii) the *Generator* has applied for, and is granted, an exemption by the *AER* under paragraph (c4).
- (c4) The *AER* may, in accordance with guidelines issued from time to time by the *AER*, exempt any *Scheduled Generator* or *Semi-Scheduled Generator* from the requirement to provide the *closure date* in accordance with paragraph (c2) and (c3).
- (c5) The *AER*, in accordance with the *Rules consultation procedures*:

- (1) must develop and *publish* guidelines referred to in paragraph (c4) that include:
 - (i) the information to be provided by a *Generator* to the *AER* when requesting an exemption; and
 - (ii) procedures for handling requests for exemption received from *Generators*; and
 - (2) may amend these guidelines from time to time.
- (c6) The *AER* may make minor and administrative amendments to the guidelines under clause (c5) without complying with the *Rules consultation procedures*.
- (d) *AEMO* may reject a notice from a *Market Customer* that it wishes to terminate its classification of a *connection point* as one of its *market loads* or otherwise cease to be a *Market Customer* in relation to any of its *market loads* unless *AEMO* is satisfied that:
- (1) another person has classified the *connection point* as one of its *market loads* and is registered as a *Market Customer*;
 - (2) the relevant *Local Retailer* has agreed or is otherwise required by laws of the relevant *participating jurisdiction* to assume responsibility for payments to *AEMO* for electricity *supplied* to that *connection point*; or
 - (3) the *load* at that *connection point* will be *disconnected* on and from the date specified and, taking into consideration any relevant guidelines and procedures specified by the relevant *participating jurisdiction* to *AEMO*, that *disconnection* is not inappropriate.
- (d1) *AEMO* may reject a notice from a *Market Small Generation Aggregator* which states that it wishes to terminate its classification of a *small generating unit* as a *market generating unit*, or otherwise cease to be a *Market Small Generation Aggregator* in relation to any of its *market generating units*, unless *AEMO* is satisfied that:
- (1) another person has classified the *small generating unit* as one of its *market generating units* and that person is registered as a *Small Generation Aggregator* and a *Market Small Generation Aggregator*;
 - (2) the relevant *Local Retailer* has agreed or is otherwise required by laws of the relevant *participating jurisdiction* to assume responsibility for payments with *AEMO* for electricity *supplied* to the *connection points* of the *market generating units*; or
 - (3) the *small generating unit* at that *connection point* will be *disconnected* on and from the date specified in the notice, and, after having regard to any relevant guidelines and procedures specified by the relevant *participating jurisdictions* to *AEMO*, *disconnection* is appropriate.
- (d2) *AEMO* may reject a notice from a *Market SAPS Resource Provider* which states that it wishes to terminate its classification of a *generating unit* as a *market generating unit*, or otherwise cease to be a *Market SAPS Resource Provider* in relation to any of its *market generating units*, unless *AEMO* is satisfied that:

- (1) another person has classified the relevant *generating unit* as one of its *market generating units* and that person is registered as a *SAPS Resource Provider* and a *Market SAPS Resource Provider*;
 - (2) the relevant *Local Retailer* has agreed or is otherwise required by laws of the relevant *participating jurisdiction* to assume responsibility for payments with *AEMO* for electricity supplied to the *connection points* of the *market generating unit*; or
 - (3) the *market generating unit* at that *connection point* will be *disconnected* on and from the date specified in the notice, and, after having regard to any relevant guidelines and procedures specified by the relevant *participating jurisdictions* to *AEMO*, *disconnection* is appropriate.
- (e) Upon receiving a notice which complies with clause 2.10.1 from a person who wishes to cease to be registered in any category of *Market Participant*, or to terminate the classification of any of its *market loads*, *market generating units*, or *market network services*, *AEMO* must deliver a notice to the *AER* and the *AEMC* and notify all *Registered Participants* stating that:
- (1) *AEMO* has received a notice under clause 2.10.1(a); and
 - (2) the person who gave the notice has stated that, from the date specified in the notice, the person intends to cease *supplying* or acquiring electricity or trading directly in the *market* and whether entirely or in relation to certain *connection points* or *market network services*.
- (f) If a *Market Customer* that is a *retailer* gives a notice under this clause, *AEMO* must, before deciding whether to reject the notice under paragraph (d), consult with the *AER*.

2.12 Interpretation of References to Various Registered Participants

- (a) A person may register in more than one of the categories of *Registered Participant*.
- (b) Notwithstanding anything else in the *Rules*, a reference to:
 - (1) a "*Generator*" applies to a person registered as a *Generator* only in so far as it is applicable to matters connected with the person's *scheduled generating units*, *semi-scheduled generating units*, *non-scheduled generating units*, *market generating units* or *non-market generating units*;
 - (1A) a "*Small Generation Aggregator*" applies to a person registered as a "*Small Generation Aggregator*" only in so far as it is applicable to matters connected with the person's *small generating units* or *market generating units* other than (in each case) those connected to a stand-alone distribution system in a regulated SAPS;
 - (1B) a "*Market Ancillary Service Provider*" applies to a person registered as a "*Market Ancillary Service Provider*" only in so far as it is applicable to matters connected with the person's *ancillary service load*;
 - (1C) a "*SAPS Resource Provider*" applies to a person registered as a "*SAPS Resource Provider*" only in so far as it is applicable to matters connected with the person's *generating units* or *market generating units*

that are (in each case) connected to a stand-alone distribution system in a regulated SAPS;

- (2) a "Scheduled Generator", "Semi-Scheduled Generator", "Non-Scheduled Generator", "Market Generator" or "Non-Market Generator" applies to a person only in so far as it is applicable to matters connected with the person's *scheduled generating units, semi-scheduled generating units, non-scheduled generating units, market generating units* or *non-market generating units* respectively;
- (3) a "Customer" applies to a person registered as a *Customer* only in so far as it is applicable to matters connected with the person's *first-tier loads, second-tier loads* or *market loads*;
- (4) a "First Tier Customer", "Second Tier Customer" or "Market Customer" applies to a person only in so far as it is applicable to matters connected with the person's *first-tier loads, second-tier loads* or *market loads* respectively;
- (4A) a "Trader" applies to a person only in so far as it is applicable to matters connected with the person's activities as a *Trader*;
- (4B) a "Reallocator" applies to a person only in so far as it is applicable to matters connected with the person's activities as a *Reallocator*;
- (5) subject to clause 2.5.1A(f), a "Network Service Provider" applies to a person registered as a *Network Service Provider* only in so far as it is applicable to matters connected with the person's *network services, including market network services* and *scheduled network services*;
- (5A) a "Dedicated Connection Asset Service Provider" applies to a person only in so far as it is applicable to matters connected with the person's *dedicated connection assets*;
- (6) a "Market Network Service Provider" or "Scheduled Network Service Provider" applies to a person only in so far as it is applicable to matters connected with the person's *market network services* or *scheduled network services* respectively;
- (7) a "Market Participant" applies to a person who is a *Market Participant* and:
 - (i) where that person is registered as a *Market Generator*, in so far as it is applicable to matters connected with the person's *market generating units* or *ancillary services generating units*; and
 - (i1) where that person is registered as a *Market Small Generation Aggregator*, in so far as it is applicable to matters connected with the person's *market generating units*; and
 - (i2) where that person is registered as a *Market Ancillary Service Provider*, in so far as it is applicable to matters connected with the person's *ancillary service load*; and
 - (i3) where that person is registered as a *Market SAPS Resource Provider*, in so far as it is applicable to matters connected with the person's *market generating units* that are connected to a stand-alone distribution system in a regulated SAPS; and

- (ii) where that person is registered as a *Market Customer*, in so far as it is applicable to matters connected with the person's *market loads* or *market ancillary service loads*; and
 - (iii) where that person is registered as a *Market Network Service Provider*, in so far as it is applicable to matters connected with the person's *market network services*; and
 - (iv) where that person is registered in any category of *Market Participant* additional to a *Market Generator* and/or a *Market Customer* and/or a *Market Network Service Provider*, to the extent to which the reference would otherwise apply to the person if it were not taken to be a *Market Generator*, *Market Customer* or *Market Network Service Provider*; and
- (8) a "*Registered Participant*" applies to a person who is registered under Chapter 2 and:
 - (i) where that person is registered as a *Generator*, in so far as it is applicable to matters connected with any of the *Generator's scheduled generating units, semi-scheduled generating units, non-scheduled generating units, market generating units* and *non-market generating units*;
 - (ii) where that person is registered as a *Customer*, in so far as it is applicable to matters connected with any of the *Customer's first-tier loads, second-tier loads* or *market loads*; and
 - (iii) where that person is registered in any other *Registered Participant* category, to the extent to which the reference would apply to the person if it were not registered in another *Registered Participant* category.
- (c) In rule 2.12, "*matter*" includes any assets, liabilities, acts, omissions or operations (whether past, present or future).

CHAPTER 3

3. Market Rules

3.15 Settlements

3.15.1 Settlements management by AEMO

- (a) *AEMO* must facilitate the billing and *settlement* of payments due in respect of *transactions* under this Chapter 3, including:
 - (1) *spot market transactions*;
 - (2) *reallocation transactions*;
 - (3) negative *settlements residue* under clause 3.6.5; ~~and~~
 - (4) under clause 3.15.6A-; and
 - (5) under clause 3.21.3.
- (b) *AEMO* must determine the *Participant fees* and the *Market Participants* must pay them to *AEMO* in accordance with the provisions of rule 2.11.

3.21 Regulated stand-alone power systems

3.21.1 Application of this Chapter to a regulated SAPS

- (a) This Chapter applies in respect of *regulated SAPS*, *SAPS energy*, *SAPS Participants*, *SAPS facilities* and *connection points* in a *regulated SAPS* in the manner provided for in this rule.
- (b) The following provisions apply in respect of *regulated SAPS*, *SAPS energy*, *SAPS Participants*, *SAPS facilities* and *connection points* in a *regulated SAPS*:
 - (1) this rule;
 - (2) rule 3.3 including the calculation of *outstandings* taking into account *trading amounts* calculated in respect of the sale and purchase of *SAPS energy*; and
 - (3) the arrangements in rules 3.15.12 to 3.15.25 for *settlements*; and
 - (4) the arrangements in rule 3.19 for access to the *market management systems*.
- (c) Except as provided for in this rule, this Chapter does not apply in respect of a *regulated SAPS*, *SAPS energy*, *SAPS Participants*, *SAPS facilities* or *connection points* in a *regulated SAPS*.

3.21.2 Determination of the SAPS settlement price

- (a) The *SAPS settlement price* for a *regional reference node* for a *financial year* is equal to 80% of the average *regional reference price* for the *regional reference node* for the *prior financial year*.
- (b) For the purposes of paragraph (a), the average is calculated by adding the *regional reference prices* for the node for all *trading intervals* in the *prior financial year* and dividing the result by the number of *trading intervals* in the *financial year*.

- (c) AEMO must as soon as practicable after the start of a financial year determine and publish the SAPS settlement price for each regional reference node for the financial year.

3.21.3 SAPS trading amount

- (a) In each trading interval, in relation to each connection point in a regulated SAPS for which a Market Participant is financially responsible, a transaction occurs, which results in a trading amount for that Market Participant determined in accordance with the formula:

$$\text{TA} = \text{ME} \times \text{SAPSSP}$$

where:

TA = the trading amount to be determined (which will be a positive or negative dollar amount for each trading interval);

ME = the amount of electrical energy, expressed in MWh, flowing at the connection point in the trading interval, as recorded in the metering data in respect of that connection point and that trading interval (expressed as a positive value where the flow is towards the stand-alone distribution system in the regulated SAPS and a negative value where the flow is in the other direction); and

SAPSSP = the SAPS settlement price for the financial year in which the trading interval falls and the regional reference node for the region in which the regulated stand-alone power system is located expressed in dollars per MWh.

- (b) For the purposes of calculating ME under paragraph (a), for a market connection point for a market generating unit, calculated metering data must be used.
- (c) A trading amount calculated under paragraph (a) for a trading interval must be included in the calculation of the settlement amount under clause 3.15.12.

CHAPTER 4

4. Power System Security

4.1 Introduction

4.1.2 Application to a regulated SAPS

This Chapter does not apply to or in respect of a *regulated SAPS*.

CHAPTER 4A

4A Retailer Reliability Obligation

Part A Introduction

4A.A Definitions

4A.A.4 Peak demand

- (a) For the purposes of section 14C of the *National Electricity Law*, the maximum electricity demanded is the highest actual demand in a *trading interval* in a *region* (in MW).

Note

Section 14C of the *National Electricity Law* states the peak demand, for a period in a *region*, means the maximum electricity demanded, in megawatts, in the region during the period, determined in accordance with the *Rules*.

- (b) The actual demand for a *region* for a *trading interval* is:
- (1) the demand for that *region* (excluding demand in a regulated SAPS);
 - (2) adjusted, to reflect what would have been the demand but for the following adjustments in the *market*:
 - (i) directions by *AEMO*;
 - (ii) *RERT* activated or dispatched by *AEMO*;
 - (iii) *load shedding* by *AEMO*; and
 - (iv) any other adjustments as set out in the *Reliability Forecast Guidelines*,in each case as determined in accordance with the *Reliability Forecast Guidelines*.
- (c) *AEMO* must publish the actual demand for a *trading interval* for all *regions* on its website as soon as practicable after the end of that *trading interval*.

Part D Liable Entities

4A.D.1 Application

This Part D applies in relation to each T-1 reliability instrument and a reference to:

- (a) a matter is a reference to the matter for the *region* to which the T-1 reliability instrument applies;
- (b) a *connection point* is a reference to a *connection point* in that *region*, but does not include a reference to a connection point in a regulated SAPS;
- (c) a *reliability gap period* is a reference to that period stated in that T-1 reliability instrument;
- (d) a T-3 reliability instrument is to be construed as a reference to the T-3 reliability instrument related to the T-1 reliability instrument (and vice versa); and

- (e) a position day, opt-in cut-off day or opt-in register is a reference to those matters as stated in, or related to, that T-1 reliability instrument.

Part F Compliance with the Retailer Reliability Obligation

Division 1 Application

4A.F.1 Application

- (a) This Part F applies in respect of a *region* if a T-1 reliability instrument has been made by the *AER* for that *region*.
- (b) This Part F applies in relation to each T-1 reliability instrument and a reference to:
 - (1) a matter is a reference to the matter for the *region* to which the T-1 reliability instrument applies;
 - (2) a *reliability gap period*, gap trading interval and one-in-two year peak demand forecast, is a reference to those matters as stated in that T-1 reliability instrument; and
 - (3) a compliance TI or *PoLR TI* is a reference to those intervals which occur during the *reliability gap period* the subject of the T-1 instrument.
- (c) In this Part F (other than this paragraph):
 - (1) a reference to a *connection point* does not include a reference to a *connection point* in a *regulated SAPS*; and
 - (2) the *adjusted gross energy* at a *connection point* in a *regulated SAPS* must not be taken into account in determining liable load for a *compliance TI*.

CHAPTER 5

5. Network Connection Access, Planning and Expansion

Part A Introduction

5.1 Introduction to Chapter 5

5.1.2 Overview of Part B and connection and access under the Rules

- (a) Rule 5.1A sets out the purpose, application and principles for Part B.
- (b) Rule 5.2 sets out the obligations of *Registered Participants* under Part B and other relevant Parts of this Chapter 5.
- (c) Rule 5.2A sets out obligations and principles relevant to *connection* and access to *transmission networks* and *large dedicated connection assets*. This includes the classification of certain services relating to assets relevant to *connection* as *prescribed transmission services*, *negotiated transmission services* and *non-regulated transmission services*. Rule 5.2A does not apply to the *declared transmission system* of an *adoptive jurisdiction*.
- (d) Rules 5.3, 5.3A and 5.3AA and Chapter 5A set out processes by which *Connection Applicants* can negotiate for connection and access to the *national grid* from a *Network Service Provider*. The process applicable will depend on the nature of the application. The table below sets out an overview of the relevant processes:

| Connection Applicant | Process |
|--|------------------|
| A <i>Registered Participant</i> or a person intending to become a <i>Registered Participant</i> for a <i>generating plant</i> connecting to a <i>transmission network</i> | Rule 5.3 applies |
| A <i>Registered Participant</i> or a person intending to become a <i>Registered Participant</i> (or a person pursuant to clause 5.1A.1(c)) for a <i>load</i> connecting to a <i>transmission network</i> | Rule 5.3 applies |
| A <i>load</i> connecting to a <i>distribution network</i> where the <i>Connection Applicant</i> is a <i>Registered Participant</i> or a person intending to become a <i>Registered Participant</i> (and is not acting as the agent of a <i>retail customer</i>) | Rule 5.3 applies |
| A <i>distribution network</i> (including an <i>embedded network</i>) connecting to another <i>distribution network</i> or to a | Rule 5.3 applies |

| Connection Applicant | Process |
|---|---|
| <i>transmission network</i> where the <i>Connection Applicant</i> is a <i>Registered Participant</i> , intending to become a <i>Registered Participant</i> or will obtain an exemption from registration | |
| A <i>Market Network Service Provider</i> or person intending to register as one seeking <i>connection</i> to a <i>distribution network</i> or a <i>transmission network</i> | Rule 5.3 applies |
| An <i>embedded generating unit</i> connecting to a <i>distribution network</i> where the <i>Connection Applicant</i> is a <i>Registered Participant</i> or a person intending to become a <i>Registered Participant</i> | Rules 5.3 and 5.3A apply (see clause 5.3.1A for the interaction between the two rules) |
| A non-registered embedded generator who makes an election for rule 5.3A to apply instead of Chapter 5A | Rules 5.3 and 5.3A apply (see clause 5.3.1A for the interaction between the two rules) <u>The election is not available where connecting to a regulated SAPS</u> |
| A <i>Generator</i> wishing to alter a <i>connected generating plant</i> in the circumstances set out in clause 5.3.9 | Clause 5.3.9 applies |
| A <i>Connection Applicant</i> for <i>prescribed transmission services</i> or <i>negotiated transmission services</i> that do not require the establishment or modification of a <i>connection</i> or alteration of a <i>connected generating plant</i> in the circumstances set out in clause 5.3.9 | Rule 5.3 applies as modified by clause 5.2A.3(c) |
| An <i>Embedded Generator</i> or <i>Market Network Service Provider</i> applying for <i>distribution network user access</i> | Rule 5.3 or 5.3A (as applicable) and rule 5.3AA apply |
| A <i>load</i> or <i>generating plant</i> connecting to a <i>declared shared network</i> | Rule 5.3 as modified by clause 5.1A.1(d) to (g) and rule 5.3B apply |
| A <i>load</i> connecting to a <i>distribution network</i> where the <i>Connection Applicant</i> is not a <i>Registered Participant</i> and is not intending to | Chapter 5A applies |

| Connection Applicant | Process |
|--|--------------------|
| <p>become a <i>Registered Participant</i> (unless it is acting as the agent of a <i>retail customer</i>)</p> <p><u>Any load connecting to a regulated SAPS</u></p> <p>A non-registered embedded generator who does not make an election for Rule 5.3A to apply instead of Chapter 5A <u>or is connecting to a regulated SAPS</u></p> | |
| <p>A <i>retail customer</i> (or a <i>retailer</i> on behalf of that customer) <i>connecting</i> a micro embedded generator to a <i>distribution network</i></p> | Chapter 5A applies |

- (e) In addition to the rules referred to in paragraph (d), in relation to *connection* and access to a *distribution network*:
- (1) a *Distribution Network Service Provider* must comply with its *negotiating framework* and *Negotiated Distribution Service Criteria* when *negotiating the terms and conditions of access to negotiated distribution services*;
 - (2) disputes relating to the *terms and conditions of access* to a *direct control service* or to a *negotiated distribution service*, *access charges* or matters referred to in clause 5.3AA(f) (*negotiated use of system charges*) or 5.3AA(h) (*avoided charges for the locational component of prescribed TUOS services*) may be referred to the *AER* in accordance with Part L of Chapter 6;
 - (3) Part G of Chapter 5A provides for dispute resolution by the *AER* for certain disputes under Chapter 5A; and
 - (4) other disputes relating to *connection* and access may be subject to dispute resolution under rule 8.2.
- (f) In addition to the rules referred to in paragraph (d), in relation to *connection* and access to a *transmission network*:
- (1) schedule 5.11 sets out the negotiating principles which apply to negotiations between a *Transmission Network Service Provider* and a *Connection Applicant* for *negotiated transmission services*;
 - (2) rule 5.4 provides a framework for *Connection Applicants* and *Transmission Network Service Providers* to appoint an *Independent Engineer* to provide advice on certain technical matters; and
 - (3) rule 5.5 provides for commercial arbitration of disputes between a *Transmission Network Service Provider* and a *Connection Applicant* as to *terms and conditions of access* for the provision of *prescribed*

transmission services or for the provision of *negotiated transmission services*.

- (g) Part B also provides for a *Dedicated Connection Asset Service Provider* to have an *access policy* for a *large dedicated connection asset* and for *commercial arbitration* under rule 5.5 to apply to a *large DCA services access dispute*.

5.1.3 Application to a connection to a regulated SAPS

The following provisions do not apply to or in respect of a *connection* or *proposed connection* to a regulated SAPS:

- (a) rules 5.3 and 5.3A; and
- (b) Part C.

Part B Network Connection and Access

5.2 Obligations

5.2.3 Obligations of network service providers

- (a) To be registered by *AEMO* as a *Network Service Provider*, a person must satisfy the relevant requirements specified in Chapter 2 and submit an application to *AEMO* in such form as *AEMO* may require.
- (b) A *Network Service Provider* must comply with the *power system performance* and *quality of supply* standards:
 - (1) described in schedule 5.1;
 - (2) in accordance with any *connection agreement* with a *Registered Participant*,and if there is an inconsistency between schedule 5.1 and such a *connection agreement*:
 - (3) if compliance with the relevant provision of the *connection agreement* would adversely affect the quality or security of *network service* to other *Network Users*, schedule 5.1 is to prevail;
 - (4) otherwise the *connection agreement* is to prevail.

Note

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

- (c) Where the provisions of the *connection agreement* vary the technical requirements set out in the schedules to this Chapter, the relevant *Network Service Provider* must report on such variations to *AEMO* on an annual basis. *AEMO* must allow access to such information to all other *Network Service Providers* and the *Network Service Providers* must keep such information confidential.

Note

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

(d) A *Network Service Provider* must:

- (1) review and process *applications to connect* or modify a *connection* which are submitted to it and must enter into a *connection agreement* with each *Registered Participant* and any other person to which it has provided a *connection* in accordance with rules 5.3 or 5.3A (as is relevant) to the extent that the *connection point* relates to its part of the *national grid*;
- (1A) co-operate with any other *Network Service Provider* who is processing a *connection* enquiry or *application to connect* to allow that *connection* enquiry or *application to connect* to be processed expeditiously and in accordance with rules 5.3 or 5.3A (as is relevant);
- (2) ensure that, to the extent that a *connection point* relates to its part of the *national grid*, every arrangement for *connection* with a *Registered Participant* or any other arrangement involving a *connection agreement* with that *Network Service Provider* complies with all relevant provisions of the *Rules*;
- (3) co-ordinate the design aspects of equipment proposed to be *connected* to its *networks* with those of other *Network Service Providers* in accordance with rule 5.6 in order to seek to achieve *power system* performance requirements in accordance with schedule 5.1;
- (4) together with other *Network Service Providers*, arrange for and participate in planning and development of their *networks* and *connection points* on or with those *networks* in accordance with Part D of Chapter 5;
- (5) permit and participate in inspection and testing of *facilities* and equipment in accordance with rule 5.7;
- (6) permit and participate in commissioning of *facilities* and equipment which are to be *connected* to its *network* in accordance with rule 5.8;
- (7) advise a *Registered Participant* or other person with whom there is a *connection agreement* upon request of any expected interruption characteristics at a *connection point* on or with its *network* so that the *Registered Participant* or other person may make alternative arrangements for *supply* during such interruptions, including negotiating for an alternative or backup *connection*;

Note

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

- (8) use its reasonable endeavours to ensure that modelling data used for planning, design and operational purposes is complete and accurate and order tests in accordance with rule 5.7 where there are reasonable grounds to question the validity of data;

Note

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

- (9) provide to *AEMO* and other *Network Service Providers* all data available to it and reasonably required for modelling the static and *dynamic performance* of the *power system*;
- (10) forward to *AEMO* and other *Network Service Providers* subsequent updates of the data referred to in subparagraph (9) and, to the best of its ability and knowledge, ensure that all data used for the purposes referred to in rules 5.3 or 5.3A (as is relevant) is consistent with data used for such purposes by other *Network Service Providers*;

Note

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

- (11) provide to *AEMO* the information required from *Generators* under schedule 5.2 and from *Customers* under schedule 5.3 and from *Market Network Service Providers* under schedule 5.3a in relation to a *connection agreement* and details of any *connection points* with other *Network Service Providers*; and

Note

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

- (12) where *network augmentations*, setting changes or other technical issues arise which could impact across *regional* boundaries, provide *AEMO* with a written report on the impact and its effects.

Note

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

- (e) A *Network Service Provider* (including a *Dedicated Connection Asset Service Provider*) must arrange for operation of that part of the interconnected national electricity system ~~*national grid*~~ over which it has control in accordance with instructions given by *AEMO*.

Note

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

- (e1) A *Network Service Provider* must, except in so far as its *market network services* and parts of its *network* which are used solely for the provision of *market network services* are concerned, arrange for:
 - (1) management, maintenance and operation of its part of the *national grid* such that, in the *satisfactory operating state*, electricity may be transferred continuously at a *connection point* on or with its *network* up to the *agreed capability*;

- (2) operation of its *network* such that the fault level at any *connection point* on or with that *network* does not breach the limits that have been specified in a *connection agreement*;
- (3) management, maintenance and operation of its *network* to minimise the number of interruptions to *agreed capability* at a *connection point* on or with that *network* by using *good electricity industry practice*; and
- (4) restoration of the *agreed capability* at a *connection point* on or with that *network* as soon as reasonably practicable following any interruption at that *connection point*.

Note

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

- (f) A *Network Service Provider* must comply with *applicable regulatory instruments*.

Note

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

- (g) Each *Network Service Provider* must in respect of new or altered equipment owned, operated or controlled by it for the purpose of providing a *market network service*:
 - (1) submit an *application to connect* and enter into a *connection agreement* with a *Network Service Provider* in accordance with rule 5.3 prior to that equipment being connected to the *network* of that *Network Service Provider* or altered (as the case may be);
 - (2) comply with the reasonable requirements of *AEMO* and the relevant *Network Service Provider* in respect of design requirements of equipment proposed to be *connected* to the *network* of that *Network Service Provider* in accordance with rule 5.6 and schedule 5.3a;
 - (3) provide forecast information to the relevant *Network Service Provider* in accordance with Part D of Chapter 5;
 - (4) permit and participate in inspection and testing of *facilities* and equipment in accordance with rule 5.7;
 - (5) permit and participate in commissioning of *facilities* and equipment which are to be *connected* to a *network* for the first time in accordance with rule 5.8; and
 - (6) **[Deleted]**
 - (7) give notice of intended voluntary permanent *disconnection* in accordance with rule 5.9.

Note

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

- (g1) A *Network Service Provider* must comply with any terms and conditions of a *connection agreement* for its *market network service facilities* that provide for the implementation, operation, maintenance or performance of a *system strength remediation scheme*.

Note

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

(h) **[Deleted]**

(h1) **[Deleted]**

(h2) **[Deleted]**

(h3) **[Deleted]**

- (i) This Chapter is neither intended to require, nor is it to be read or construed as having the effect of requiring, a *Network Service Provider* to permit *connection* to or to *augment* any part of its *network* which is solely used for the provision of *market network services*.

- (j) If in *AEMO's* reasonable opinion, there is a risk a *Network Service Provider's plant* or equipment will:

- (1) adversely affect *network capability, power system security, quality or reliability of supply, inter-regional power transfer capability*;
- (2) adversely affect the use of a *network* by a *Network User*; or
- (3) have an *adverse system strength impact*,

AEMO may request the *Network Service Provider* to provide information of the type described in clause 4.3.4(o), and following such a request, the *Network Service Provider* must provide the information to *AEMO* and any other relevant *Network Service Provider(s)* in accordance with the requirements and circumstances specified in the *Power System Model Guidelines*, the *Power System Design Data Sheet* and the *Power System Setting Data Sheet*.

Note

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

- (k) If in *AEMO's* reasonable opinion, information of the type described in clause 4.3.4(o) is required to enable a *Network Service Provider* to conduct the assessment required by clause 5.3.4B, *AEMO* may request any other relevant *Network Service Provider* to provide the information, and following such a request, that *Network Service Provider* must provide the information to *AEMO* and the other relevant *Network Service Provider*.

Note

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

- (l) All information provided to *AEMO* and the relevant *Network Service Provider(s)* under paragraphs (j) and (k) must be treated as *confidential information* by those recipients.

5.3A Establishing or modifying connection - embedded generation

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 industry engagement document~~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.

Part D Network Planning and Expansion

5.10 Network development generally

5.10.2 Definitions

In this Part D and schedules 5.4A, 5.8, 5.9 and 5.13~~5.8, 5.9 and 5.4A~~:

affected network user means, in relation to a proposal to undertake a *DNSP-led SAPS project*:

- (a) each person supplied with a *distribution service* by means of the *network* that

will form part of the *regulated SAPS*; and

(b) each landowner for land on which is situated premises supplied by means of the *network* that will form part of the *regulated SAPS*.

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.

consumer panel report has the meaning given in clause 5.22.7(a).

Cost Benefit Analysis Guidelines means the guidelines made by the *AER* under clause 5.22.5.

cost threshold means a cost threshold specified in clause 5.15.3(b) or 5.15.3(d) (as relevant).

cost threshold determination means a final determination under clause 5.15.3(i).

cost threshold review means a review conducted under clause 5.15.3(e).

credible option has the meaning given to it in clause 5.15.2(a).

~~**demand side engagement document** means the document published by the *Distribution Network Service Provider* under clause 5.13.1(g).~~

~~**demand side engagement register** means a facility by which a person can register with a *Distribution Network Service Provider* their interest in being notified of developments relating to *distribution network* planning and expansion.~~

~~**demand side engagement strategy** means the strategy developed by a *Distribution Network Service Provider* under clause 5.13.1(e) and described in its demand side engagement document.~~

de-rate means, in respect of a *Network Service Provider*, a reduction in the *network capability* of a *network element* in the *network* of that *Network Service Provider*.

design fault level means the maximum level of fault current that a *facility* can sustain while maintaining operation at an acceptable *performance standard*.

development path means a set of projects in an *Integrated System Plan* that together address power system needs.

dispute notice has the meaning given in clause 5.16B.5(c)(1) and 5.17.5(c)(1).

disputing party has the meaning given in clause 5.16B.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*.

Forecasting Best Practice Guidelines means the guidelines made by the AER under clause 4A.B.5.

forward planning period means the period determined by the *Distribution Network Service Provider* under clause 5.13.1(a)(1).

future ISP project means a project:

- (a) that relates to a transmission asset or *non-network option* the purpose of which is to address an *identified need* specified in an *Integrated System Plan* and which forms part of an *optimal development path*; and
- (b) that is forecast in the *Integrated System Plan* that identifies the project, to be an *actionable ISP project* in the future.

IASR review report has the meaning given in clause 5.22.9(a).

industry engagement document means the document published by the *Distribution Network Service Provider* under clause 5.13.1(g).

industry 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*.

industry engagement strategy means the strategy developed by a *Distribution Network Service Provider* under clause 5.13.1(e) and described in its *industry engagement document*.

Inputs, Assumptions and Scenario Report means the report published by *AEMO* under clause 5.22.8(a).

ISP candidate option means a credible option specified in an *Integrated System Plan* that the RIT-T proponent must consider as part of a *regulatory investment test for transmission* for an *actionable ISP project*.

ISP consumer panel has the meaning given in clause 5.22.7(a).

ISP development opportunity means a development identified in an *Integrated System Plan* that does not relate to a transmission asset or *non-network option* and may include distribution assets, *generation*, storage projects or demand side developments that are consistent with the efficient development of the *power system*.

ISP methodology means the methodology published by *AEMO* under clause 5.22.8(d).

ISP parameters means, for an ISP project:

- (a) the inputs, assumptions and scenarios set out in the most recent Inputs, Assumptions and Scenarios Report;
- (b) the other ISP projects associated with the optimal development path; and
- (c) any weightings specified as relevant to that project.

ISP project means an *actionable ISP project*, a future ISP project or an ISP development opportunity.

ISP review report has the meaning given in clause 5.22.13(a).

ISP timetable means the timetable published by *AEMO* under clause 5.22.4(a).

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).

landowner means, in relation to an area of land, each person who is an owner or lessee of the land.

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(~~

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.

options screening report means the report prepared under clause 5.17.4(b).

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 between *regional reference nodes*.

power system needs has the meaning given in clause 5.22.3(a).

preferred option has the meaning given in clause 5.15A.1(c) and 5.17.1(b).

preparatory activities means activities required to design and to investigate the costs and benefits of *actionable ISP projects* and if applicable, future ISP projects including:

- (a) detailed engineering design;
- (b) route selection and easement assessment work;
- (c) cost estimation based on engineering design and route selection;
- (d) preliminary assessment of environmental and planning approvals; and
- (e) council and stakeholder engagement.

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), 5.16.4(u) or 5.16A.4(i) (as applicable).

project assessment draft report means the report prepared under clause 5.16.4(j) or 5.16A.4(c) (as applicable).

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* or *SAPS performance and supply standards* 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);

- (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; or
- (c) an *actionable ISP 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*.

SAPS customer engagement document means the document *published by the Distribution Network Service Provider* under clause 5.13.4(b).

SAPS customer engagement objectives means the following objectives:

- (a) providing relevant and timely information about *DNSP-led SAPS projects* and *SAPS customer engagement strategies and processes*; and
- (b) engaging in timely and effective communications and other engagement with affected network users and landowners during the planning, development, construction and commissioning of a *DNSP-led SAPS project*.

SAPS customer engagement strategy means the strategy developed by a *Distribution Network Service Provider* under clause 5.13.4(a) and described in its *SAPS customer engagement document*.

SAPS quality of supply principle means the principle that the quality and reliability of *supply* experienced by a *Distribution Customer* having a *connection point* with a *regulated SAPS* should be no worse than the quality and reliability of *supply* that the *Distribution Customer* would experience if the *connection point* were in a part of the *distribution network* forming part of the *interconnected national electricity system*.

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.

5.11 Forecasts of connection to transmission network and identification of system limitations

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 or *SAPS performance and supply standards*, notify any affected *Registered Participants* and *AEMO* of these limitations; and
- (c) notify any affected *Registered Participants* and *AEMO* of the expected time for undertaking proposed corrective action which may consist of:
 - (1) *dual function assets* or an investment in a *transmission network* designed to address limitations in respect of a *distribution network* notified under paragraph (b); and
 - (2) *network options* or *non-network options* or modifications to *connection facilities*, designed to address the limitations notified under paragraph (b).

5.13 Distribution annual planning process

5.13.1 Distribution annual planning review

Scope

- (a) A *Distribution Network Service Provider* must:
 - (1) subject to paragraph (b), determine an appropriate forward planning period for its distribution assets; and
 - (2) analyse the expected future operation of its *network* over the forward planning period in accordance with this clause 5.13.1.
- (b) The minimum forward planning period for the purposes of the *distribution* annual planning review is 5 years.

- (c) The *distribution* annual planning review must include all assets that would be expected to have a material impact on the *Distribution Network Service Provider's network* over the forward planning period.

Requirements

- (d) Each *Distribution Network Service Provider* must, in respect of its *network*:
- (1) prepare forecasts covering the forward planning period of *maximum demands* for:
 - (i) sub-transmission lines;
 - (ii) zone substations; and
 - (iii) to the extent practicable, primary distribution feeders,having regard to:
 - (iv) the number of customer *connections*;
 - (v) *energy* consumption; and
 - (vi) estimated total output of known *embedded generating units*;
 - (2) identify, based on the outcomes of the forecasts in subparagraph (1), limitations on its *network*, including limitations caused by one or more of the following factors:
 - (i) forecast *load* exceeding total capacity;
 - (ii) the requirement for asset refurbishment or replacement;
 - (iii) the requirement for *power system security* or *reliability* improvement;
 - (iv) design fault levels being exceeded;
 - (v) the requirement for *voltage* regulation and other aspects of quality of supply to other *Network Users*; and
 - (vi) the requirement to meet any *regulatory obligation or requirement*;
 - (3) identify whether corrective action is required to address any system limitations identified in subparagraph (2) and, if so, identify whether the *Distribution Network Service Provider* is required to:
 - (i) carry out the requirements of the *regulatory investment test for distribution*; and
 - (ii) carry out industry engagement obligations ~~demand-side engagement obligations~~ as required under paragraph (f); and
 - (4) take into account any *jurisdictional electricity legislation*.

Industry engagement obligations~~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*; ~~and~~
 - (3) in relation to an *adoptive SAPS network*, considering *SAPS options*.

- (f) A *Distribution Network Service Provider* must engage with non-network providers and consider *non-network options* and SAPS options for addressing system limitations in accordance with its industry engagement strategy~~demand side engagement strategy~~.
- (g) A *Distribution Network Service Provider* must develop and publish an industry engagement document setting out its industry engagement strategy~~demand side engagement strategy in a demand side engagement document which must be published by no later than 31 August 2013~~.
- (h) A *Distribution Network Service Provider* must include the information specified in schedule 5.9 in its industry engagement document~~demand side engagement document~~.
- (i) A *Distribution Network Service Provider* must review and *publish* a revised industry engagement document~~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* industry engagement document~~demand side engagement document~~ under paragraph (g).

5.13B Converting network to a regulated SAPS

5.13B.1 SAPS performance and supply standards and monitoring

Development and publication of SAPS performance and supply standards

- (a) Before converting any part of its network to a regulated SAPS, a *Distribution Network Service Provider* must develop and publish on its website performance and quality of supply standards (SAPS performance and supply standards) to apply to all regulated SAPS that it owns, operates or controls.
- (b) In developing or amending its SAPS performance and supply standards, a *Distribution Network Service Provider* must comply with:
 - (1) this clause and Schedule 5.13; and
 - (2) the Rules consultation procedures.
- (c) If a *Distribution Network Service Provider* amends its SAPS performance and supply standards, it must promptly publish the amended version on its website.
- (d) In developing initial SAPS performance and supply standards or any amendment to its SAPS performance and supply standards, a *Distribution Network Service Provider* must have regard to:
 - (1) the SAPS quality of supply principle; and
 - (2) the principle that performance and quality of supply standards for a regulated SAPS should be established that:

- (i) are necessary or desirable for the safe and reliable operation of a regulated SAPS;
 - (ii) are necessary or desirable for the safe and reliable operation of equipment forming part of, or taking a supply from, a regulated SAPS; and
 - (iii) seek to avoid the imposition of undue costs on Distribution Network Service Providers or Network Users.
- (e) A Distribution Network Service Provider must ensure that its SAPS performance and supply standards are in accordance with good electricity industry practice.

Note

The AEMC recommends that this clause be classified as a civil penalty provision.

Compliance with SAPS performance and supply standards

- (f) A Distribution Network Service Provider must in respect of a regulated SAPS that it owns, operates or controls, comply with the performance and quality of supply standards:
 - (1) described in its SAPS performance and supply standards; and
 - (2) in accordance with any connection agreement with a Network User relating to the Network User's connection point in the regulated SAPS,
and if there is an inconsistency between the SAPS performance and supply standards 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, the SAPS performance and supply standards are to prevail; and
 - (4) otherwise, the connection agreement is to prevail.

Note

The AEMC recommends that this clause be classified as a civil penalty provision.

- (g) A Distribution Network Service Provider that owns, operates or controls a regulated SAPS must establish and implement a program to monitor the performance of its regulated SAPS.

Note

The AEMC recommends that this clause be classified as a civil penalty provision.

- (h) A program under paragraph (g) must:
 - (1) be in accordance with good electricity industry practice;
 - (2) enable the Distribution Network Service Provider to be reasonably satisfied that its regulated SAPS perform in accordance with the relevant SAPS performance and supply standards;
 - (3) include provision for testing of new or altered facilities; and
 - (4) provide for publication of information about its regulated SAPS performance monitoring on the Distribution Network Service

Provider's website.

- (i) A Distribution Network Service Provider must maintain records for 7 years of its monitoring conducted in accordance with its program under paragraph (g) and make these records available to the AER on request.

Variation to SAPS performance and supply standards by negotiation

- (j) Except for standards of frequency and system stability and subject to paragraph (k), a Distribution Network Service Provider may negotiate with a Network User terms of a connection agreement regarding standards of performance and quality of supply in a regulated SAPS (including relevant charges).
- (k) The terms of a connection agreement regarding standards of performance or quality of supply in a regulated SAPS must provide for standards of performance or quality of supply at levels at or above the minimum standards set out in SAPS performance and supply standards and must have regard to the need for terms that:
 - (1) are necessary or desirable for the safe and reliable operation of a regulated SAPS;
 - (2) are necessary or desirable for the safe and reliable operation of equipment forming part of, or taking a supply from, a regulated SAPS.

5.13B.2 SAPS customer engagement strategy

- (a) A Distribution Network Service Provider with an adoptive SAPS network must develop a strategy (SAPS customer engagement strategy) for engaging with affected network users in relation to DNSP-led SAPS projects being considered by the Distribution Network Service Provider in relation to the network.
- (b) A Distribution Network Service Provider must develop and publish a SAPS customer engagement document that sets out its SAPS customer engagement strategy.
- (c) In developing and amending its SAPS customer engagement document, a Distribution Network Service Provider must:
 - (1) have regard to any guidelines made by the AER under clause 5.13B.3 and the SAPS customer engagement objectives;
 - (2) take into account the obligations of the Distribution Network Service Provider under clause 5.13B.4; and
 - (3) take into account obligations under planning and environmental laws that may apply in respect of a DNSP-led SAPS project.
- (d) A Distribution Network Service Provider must review and publish a revised SAPS customer engagement document at least once every three years.
- (e) A Distribution Network Service Provider must engage with affected network users in relation to a DNSP-led SAPS project relating to its network in accordance with its SAPS customer engagement document.

Note

The AEMC recommends that this clause be classified as a civil penalty provision.

5.13B.3 SAPS customer engagement guidelines

- (a) The *AER* may develop and *publish* and may from time to time amend guidelines about engaging with affected network users in relation to *DNSP-led SAPS projects*.
- (b) In developing guidelines under paragraph (a)(f), the *AER* may undertake such consultation as it considers appropriate.
- (c) The guidelines developed under paragraph (a)(f) may provide guidance on:
 - (1) the form and content of a SAPS customer engagement document;
 - (2) the steps to be taken to identify landowners and other persons likely to be affected by a *DNSP-led SAPS project*;
 - (3) general information to be included in a SAPS customer engagement document about supply by means of a *regulated SAPS*;
 - (4) information about a proposal to convert a part of a *network* to a *regulated SAPS* to be included in a notice under clause 5.13B.4(a);
 - (5) addressing issues raised by affected network users relating to a *DNSP-led SAPS project*; and
 - (6) other matters the *AER* considers appropriate to promote the SAPS customer engagement objectives.

5.13B.4 DNSP-led SAPS notice and consultation

- (a) Subject to paragraph (f), a *Distribution Network Service Provider* who is developing a proposal to convert any part of its *network* to a *regulated SAPS* must give notice in accordance with paragraphs (b) to (e) and its SAPS customer engagement document.

Note

The AEMC recommends that this clause be classified as a civil penalty provision.

- (b) A notice under paragraph (a) must be given to:
 - (1) each person who at the time of giving the notice is supplied with a *distribution service* by means of the *network* that will form part of the *regulated SAPS*;
 - (2) each person who is at the time of giving the notice a landowner for land on which is situated premises supplied by means of the *network* that will form part of the *regulated SAPS*; and
 - (3) the public in the area in which the *regulated SAPS* will be located.
- (c) A notice under paragraph (a) must:
 - (1) provide reasonably detailed information about the proposal to which it relates and the *SAPS performance and supply standards* that would apply;
 - (2) specify a reasonable period in which to comment on the proposal and

- explain how comments may be submitted; and
- (3) refer to the *Distribution Network Service Provider's* SAPS customer engagement document and identify where it can be found.
- (d) The notice to the public under paragraph (b)(3) must be given by way of a notice published on the *Distribution Network Service Provider's* website.
- (e) The *Distribution Network Service Provider* must have regard to any comments received in response to a notice given under paragraph (a).
- (f) Where a *Distribution Network Service Provider* is developing a proposal to convert any part of its *network* to a *regulated SAPS* in order to address an urgent and unforeseen *network* issue as described in clause 5.17.3(a)(1), the *Distribution Network Service Provider* is not required to give notice under paragraph (a) but must use reasonable endeavours to meet the SAPS customer engagement objectives in relation to the proposal by other means appropriate in the circumstances.

5.14 Joint planning

5.14.1 Joint planning obligations of Transmission Network Service Providers and Distribution Network Service Providers

- (a) Subject to paragraphs (b) and (c):
 - (1) each *Distribution Network Service Provider* must conduct joint planning with each *Transmission Network Service Provider* of the *transmission networks* to which the *Distribution Network Service Provider's networks* are connected; and
 - (2) each *Transmission Network Service Provider* must conduct joint planning with each *Distribution Network Service Provider* of the *distribution networks* to which the *Transmission Network Service Provider's networks* are connected.
- (b) In the case of the *declared shared network* of an *adoptive jurisdiction*, the relevant *declared transmission system operator*, the relevant *Distribution Network Service Provider*, *AEMO* and any *interested party* that has informed *AEMO* of its interest in the relevant plans, shall conduct joint planning.
- (c) For the purposes of this clause 5.14.1, a *Transmission Network Service Provider* does not include a *Network Service Provider* that is a *Transmission Network Service Provider* only because it owns, controls or operates *dual function assets*.
- (d) The relevant *Distribution Network Service Provider* and *Transmission Network Service Provider* must:
 - (1) assess the adequacy of existing *transmission* and *distribution networks* and the assets associated with transmission-distribution connection points over the next five years and to undertake joint planning of projects which relate to both *networks* (including, where relevant, *dual function assets*);

- (2) use best endeavours to work together to ensure efficient planning outcomes and to identify the most efficient options to address the needs identified in accordance with subparagraph (4);
- (3) identify any limitations or constraints:
 - (i) that will affect both the *Transmission Network Service Provider's* and *Distribution Network Service Provider's* network; or
 - (ii) which can only be addressed by corrective action that will require coordination by the *Transmission Network Service Provider* and the *Distribution Network Service Provider*; and
- (4) where the need for a joint planning project is identified under subparagraph (3):
 - (i) jointly determine plans that can be considered by relevant *Registered Participants*, *AEMO*, *interested parties*, and parties registered on the industry engagement register~~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.

5.15 Regulatory investment tests generally

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 this clause~~paragraphs (b) or (d) (as relevant)~~.
- (b) In applying the *regulatory investment test for transmission*, the RIT-T proponent must consider, in relation to a RIT-T project other than those described in clauses 5.16.3(a)(1)-(8), all options that could reasonably be classified as credible options taking into account:
 - (1) energy source;

- (2) technology;
 - (3) ownership;
 - (4) the extent to which the credible option enables *intra-regional* or *inter-regional* trading of electricity;
 - (5) whether it is a *network option* or a *non-network option*;
 - (6) whether the credible option is intended to be regulated;
 - (7) whether the credible option has a proponent; and
 - (8) any other factor which the RIT-T proponent reasonably considers should be taken into account.
- (c) In applying the *regulatory investment test for distribution*, the RIT-D proponent must consider, in relation to a RIT-D project other than those described in clauses 5.17.3(a)(1)-(7), all options that could reasonably be classified as credible options, without bias as to:
- (1) energy source;
 - (2) technology;
 - (3) ownership; and
 - (4) whether it is a *network option*, ~~or~~ a *non-network option* or a *SAPS option*.
- (d) The absence of a proponent does not exclude an option from being considered a credible option.

5.17 Regulatory investment test for distribution

5.17.1 Principles

- (a) The *AER* must develop and *publish* the *regulatory investment test for distribution* in accordance with the *distribution consultation procedures* and this clause 5.17.1.
- (b) The purpose of the *regulatory investment test for distribution* is to identify the credible option that maximises the present value of the net economic benefit to all those who produce, consume and transport electricity in the *National Electricity Market* (the preferred option). For the avoidance of doubt, a preferred option may, in the relevant circumstances, have a negative net economic benefit (that is, a net economic cost) where the *identified need* is for reliability corrective action.
- (c) The *regulatory investment test for distribution* must:
 - (1) be based on a cost-benefit analysis that must include an assessment of reasonable scenarios of future supply and demand;
 - (2) not require a level of analysis that is disproportionate to the scale and likely impact of each of the credible options being considered;
 - (3) be capable of being applied in a predictable, transparent and consistent manner;

- (4) require the RIT-D proponent to consider whether each credible option could deliver the following classes of market benefits:
- (i) changes in voluntary *load* curtailment;
 - (ii) changes in involuntary *load shedding* and *customer* interruptions caused by *network* outages, using a reasonable forecast of the value of electricity to *customers*;
 - (iii) changes in costs for parties, other than the RIT-D proponent, due to differences in:
 - (A) the timing of new *plant*;
 - (B) capital costs; and
 - (C) the operating and maintenance costs;
 - (iv) differences in the timing of expenditure;
 - (v) changes in load transfer capacity and the capacity of *Embedded Generators* to take up *load*;
 - (vi) any additional option value (where this value has not already been included in the other classes of market benefits) gained or foregone from implementing the credible option with respect to the likely future investment needs of the *National Electricity Market*;
 - (vii) changes in *electrical energy losses*; and
 - (viii) any other class of market benefit determined to be relevant by the *AER*.
- (5) with respect to the classes of market benefits set out in subparagraphs (4)(i) and (ii), ensure that, if a credible option is for reliability corrective action, the consideration and any quantification assessment of these classes of market benefits will only apply insofar as the market benefit delivered by that credible option exceeds the minimum standard required for reliability corrective action;
- (6) require the RIT-D proponent to consider whether the following classes of costs would be associated with each credible option and, if so, quantify the:
- (i) financial costs incurred in constructing or providing the credible option;
 - (ii) operating and maintenance costs over the operating life of the credible option;
 - (iii) cost of complying with laws, regulations and applicable administrative requirements in relation to the construction and operation of the credible option; and
 - (iv) any other financial costs determined to be relevant by the *AER*.
- (7) require a RIT-D proponent, in exercising judgement as to whether a particular class of market benefit or cost applies to each credible option, to have regard to any submissions received on the ~~non-network options~~

~~report~~options screening 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~~must, 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.

5.17.4 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 ~~industry engagement register~~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~~options screening 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* or a SAPS 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.

Options screening report~~Non-network options report~~

- (e) ~~A non-network options report~~An options screening 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* or (in relation to an adoptive SAPS network) a SAPS option~~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 and (in relation to an adoptive SAPS network) SAPS 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~~options screening 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~~options screening report, the RIT-D proponent, if it is a *Distribution Network Service Provider*, must notify persons registered on its industry engagement register~~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* industry engagement register~~demand-side engagement register~~ must be provided with not less than three months in which to make submissions on the ~~non-network options report~~options screening 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~~a options screening report then the RIT-D proponent, having regard, where relevant, to any submissions received on the ~~non-network options report~~options screening 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~~a options screening report; or
 - (ii) where ~~a non-network options report~~a options screening 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~~options screening 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 industry engagement register~~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 industry engagement register~~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*.

5.18B Completed embedded generation projects

5.18B.1 Definitions

- (a) For the purposes of this rule 5.18B:

completed embedded generation projects means all *embedded generating units* owned, operated or controlled by:

 - (1) a *Generator*; or
 - (2) a person who was required to apply to *AEMO* for an exemption from the requirement to register as a *Generator* in respect of an *embedded generating unit*,

and are connected to the *Distributor Network Service Provider's network* or form part of a regulated SAPS forming part of the Distribution Network Service Provider's network.

DAPR date has the same meaning as in clause 5.13.2.

Schedule 5.1a System standards

S5.1a.1 Purpose

The purpose of this schedule is to establish *system standards* that:

- (a) are necessary or desirable for the safe and reliable operation of the *facilities* of *Registered Participants*;
- (b) are necessary or desirable for the safe and reliable operation of equipment;
- (c) could be reasonably considered *good electricity industry practice*; and
- (d) seek to avoid the imposition of undue costs on the industry or *Registered Participants*.

A *Registered Participant* should not, by virtue of this schedule, rely on *system standards* being fully complied with at a *connection point* under all circumstances. However, a *Registered Participant* should expect to be reasonably informed of circumstances where the standard of *supply* at its *connection points* will not conform to the *system standards*.

Except for standards of *frequency* and system stability, a *Registered Participant* should have the opportunity to negotiate or renegotiate relevant terms of a *connection agreement* (including relevant charges), to improve the standard of *supply* to the level of the *system standard*.

The *system standards* are set out below.

This schedule does not apply to a *Distribution Network Service Provider* in relation to a *regulated SAPS*. The performance and quality of *supply* standards for a *regulated SAPS* are defined by the *Distribution Network Service Provider* in accordance with clause 5.13B.1 and Schedule 5.13.

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

S5.1.1 Introduction

This schedule describes the planning, design and operating criteria that must be applied by *Network Service Providers* to the *transmission networks* and *distribution networks* which they own, operate or control. It also describes the requirements on *Network Service Providers* to institute consistent processes to determine the appropriate technical requirements to apply for each *connection* enquiry or *application to connect* processed by the *Network Service Provider* with the objective that all *connections* satisfy the requirements of this schedule.

The criteria and the obligations of *Registered Participants* to implement them, fall into two categories, namely:

- (a) those required to achieve adequate levels of *network power transfer capability* or quality of *supply* for the common good of all, or a significant number of, *Registered Participants*; and
- (b) those required to achieve a specific level of *network service* at an individual *connection point*.

A *Network Service Provider* must:

- (1) fully describe the quantity and quality of *network services* which it agrees to provide to a person under a *connection agreement* in terms that apply to the *connection point* as well as to the *transmission or distribution system* as a whole;
- (2) ensure that the quantity and quality of those *network services* are not less than could be provided to the relevant person if the *national grid* were planned, designed and operated in accordance with the criteria set out in this clause S5.1.1 and recognising that levels of service will vary depending on location of the *connection point* in the *network*; and

- (3) observe and apply the relevant provisions of the *system standards* in accordance with this schedule 5.1.

To the extent that this schedule 5.1 does not contain criteria which are relevant to the description of a particular *network service*, the *Network Service Provider* must describe the *network service* in terms which are fair and reasonable.

This schedule includes provisions for *Network Service Providers* and *Registered Participants* to negotiate the criteria to apply to a *connection* within defined ranges between a lower bound (*minimum access standard*) and an upper bound (*automatic access standard*). All criteria which are intended to apply to a *connection* must be recorded in a *connection agreement*. Where it is intended to apply a *negotiated access standard* in accordance with clause 5.3.4A of the *Rules*, the *Network Service Provider* must first be satisfied that the application of the *negotiated access standard* will not adversely affect other *Registered Participants*.

This schedule does not apply to a *Distribution Network Service Provider* in relation to a *regulated SAPS*. The performance and quality of supply standards for a *regulated SAPS* are defined by the *Distribution Network Service Provider* in accordance with clause 5.13B.1 and Schedule 5.13.

Schedule 5.3 Conditions for Connection of Customers

S5.3.1a Introduction to the schedule

- (a) This schedule applies to the following classes of *Network User*:
- (1) a *First-Tier Customer* in respect of its *first-tier load*;
 - (2) a *Second-Tier Customer* in respect of its *second-tier load*;
 - (3) a *Market Customer* in respect of its *market load*;
 - (4) a *Non-Registered Customer* in respect of *supply* it takes from a *network*; and
 - (5) a *Distribution Network Service Provider* in respect of its *distribution network*.
- (b) For the purposes of this schedule 5.3 the term ***Network Service Provider*** must be interpreted to mean the *Network Service Provider* with whom the *Connection Applicant* has sought, or is seeking, a *connection* in accordance with clause 5.3.2 of the *Rules*.
- (c) All *Network Users* must comply with the requirements for the establishment of *performance standards* in accordance with provisions contained in schedule 5.1a for *system standards* or schedule 5.1 for *Network Service Providers* and this schedule 5.3 for *Customers*.
- (d) If the *Connection Applicant* is a *Registered Participant* in relation to the proposed *connection*, the *Network Service Provider* may include as terms and conditions of the *connection agreement* any provision of this schedule that is expressed as an obligation on a *Network User*. If the *Connection Applicant* is not a *Registered Participant* in relation to the proposed *connection*, the *Network Service Provider* must include as terms and conditions of the *connection agreement*:

- (1) each provision of this schedule that is expressed as an obligation on a *Network User*; and
 - (2) each agreed *performance standard* and an obligation to comply with it.
- (e) The purpose of this schedule is to:
- (1) describe the information that must be exchanged for the *connection* enquiry and *application to connect* processes described in rule 5.3 of the *Rules*;
 - (2) establish the *automatic access standards* and *minimum access standards* that will apply to the process of negotiating access standards under clause 5.3.4A of the *Rules*; and
 - (3) establish obligations to apply prudent design standards for the *plant* to be *connected*.
- (f) This schedule does not apply to a *Network Service Provider* or a *Network User* in relation to a *connection* to a *regulated SAPS*.

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;

(d1) for an *adoptive SAPS network*, information on system limitations in the forward planning period for which a potential solution is a *regulated SAPS*, including at least:

- (1) estimates of the location and timing (month(s) and year) of the system limitation; and
- (2) a brief discussion of the types of potential *stand-alone power systems* that may address the system limitation;

- (e) a high-level summary of each RIT-D project for which the *regulatory investment test for distribution* has been completed in the preceding year or is in progress, including:
 - (1) if the *regulatory investment test for distribution* is in progress, the current stage in the process;
 - (2) a brief description of the *identified need*;
 - (3) a list of the credible options assessed or being assessed (to the extent reasonably practicable);
 - (4) if the *regulatory investment test for distribution* has been completed a brief description of the conclusion, including:
 - (i) the net economic benefit of each credible option;
 - (ii) the estimated capital cost of the preferred option; and
 - (iii) the estimated construction timetable and commissioning date (where relevant) of the preferred option; and
 - (5) any impacts on *Network Users*, including any potential material impacts on *connection charges* and *distribution use of system charges* that have been estimated;
- (f) for each identified system limitation which a *Distribution Network Service Provider* has determined will require a *regulatory investment test for distribution*, provide an estimate of the month and year when the test is expected to commence;

- (g) a summary of all committed investments to be carried out within the forward planning period with an estimated capital cost of \$2 million or more (as varied by a cost threshold determination) that are to address an urgent and unforeseen *network* issue as described in clause 5.17.3(a)(1), including:
 - (1) a brief description of the investment, including its purpose, its location, the estimated capital cost of the investment and an estimate of the date (month and year) the investment is expected to become operational;
 - (2) a brief description of the alternative options considered by the *Distribution Network Service Provider* in deciding on the preferred investment, including an explanation of the ranking of these options to the committed project. Alternative options could include, but are not limited to, *generation* options, demand side options, and options involving other *distribution* or *transmission networks*;
- (h) the results of any joint planning undertaken with a *Transmission Network Service Provider* in the preceding year, including:
 - (1) a summary of the process and methodology used by the *Distribution Network Service Provider* and relevant *Transmission Network Service Providers* to undertake joint planning;
 - (2) a brief description of any investments that have been planned through this process, including the estimated capital costs of the investment and an estimate of the timing (month and year) of the investment; and
 - (3) where additional information on the investments may be obtained;
- (i) the results of any joint planning undertaken with other *Distribution Network Service Providers* in the preceding year, including:
 - (1) a summary of the process and methodology used by the *Distribution Network Service Providers* to undertake joint planning;
 - (2) a brief description of any investments that have been planned through this process, including the estimated capital cost of the investment and an estimate of the timing (month and year) of the investment; and
 - (3) where additional information on the investments may be obtained;
- (j) information on the performance of the *Distribution Network Service Provider's network*, including:
 - (1) a summary description of reliability measures and standards in *applicable regulatory instruments*;
 - (2) a summary description of the quality of *supply* standards that apply, including the relevant codes, standards and guidelines;
 - (3) a summary description of the performance of the *distribution network* against the measures and standards described under subparagraphs (1) and (2) for the preceding year;
 - (4) where the measures and standards described under subparagraphs (1) and (2) were not met in the preceding year, information on the corrective action taken or planned;

- (5) a summary description of the *Distribution Network Service Provider's* processes to ensure compliance with the measures and standards described under subparagraphs (1) and (2); and
 - (6) an outline of the information contained in the *Distribution Network Service Provider's* most recent submission to the AER under the *service target performance incentive scheme*;
- (k) information on the *Distribution Network Service Provider's* asset management approach, including:
 - (1) a summary of any asset management strategy employed by the *Distribution Network Service Provider*;
 - (1A) an explanation of how the *Distribution Network Service Provider* takes into account the cost of *distribution losses* when developing and implementing its asset management and investment strategy;
 - (2) a summary of any issues that may impact on the system limitations identified in the *Distribution Annual Planning Report* that has been identified through carrying out asset management; and
 - (3) information about where further information on the asset management strategy and methodology adopted by the *Distribution Network Service Provider* may be obtained;
- (l) information on the *Distribution Network Service Provider's* demand management activities, including:
 - (1) a qualitative summary of:
 - (i) *non-network options* that have been considered in the past year, including *generation from embedded generating units*;
 - (ii) key issues arising from *applications to connect embedded generating units* received in the past year;
 - (iii) actions taken to promote ~~non-network~~ proposals or (for an adoptive SAPS network) SAPS 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; and
- (o) for an adoptive SAPS network, information on the Distribution Network Service Provider's activities in relation to DNSP-led SAPS projects including:
 - (1) opportunities to develop DNSP-led SAPS projects that have been considered in the past year;
 - (2) committed projects to implement a regulated SAPS over the forward planning period; and
 - (3) a quantitative summary of:
 - (i) the total number of regulated SAPS in the network; and
 - (ii) the total number of premises of retail customers supplied by means of those regulated SAPS.

Schedule 5.9 Industry engagement document~~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* industry engagement document~~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* and (in relation to a network where regulated SAPS are permitted by the laws of a participating jurisdiction) potential SAPS 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* or where applicable, potential SAPS 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* or SAPS option;
- (d) an outline of the information a non-network provider is to include in a non-network or DNSP-led SAPS project 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 or DNSP-led SAPS project proposals;
- (f) an outline of the principles that the *Distribution Network Service Provider* considers in developing the payment levels for non-network options or (where applicable) SAPS options;
- (g) a reference to any applicable incentive payment schemes for the implementation of non-network options or SAPS 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 or SAPS 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 industry engagement register~~demand side engagement register~~; and
- (o) the *Distribution Network Service Provider's* contact details.

Schedule 5.13 SAPS Performance Requirements to be defined by Distribution Network Service Providers

Note

The local definitions in clause 5.10.2 apply to this schedule.

(a) The SAPS performance and supply standards of a Distribution Network Service Provider must specify:

- (1) the standards for the performance of its regulated SAPS covering each of the parameters in table S5.13.1 and including at a minimum the information specified in that table;
- (2) the planning, design and operating standards and requirements for coordination with Network Users that the Distribution Network Service Provider will apply in relation to its regulated SAPS to:
 - (i) achieve adequate levels of network power transfer capability and

- quality of supply in its regulated SAPS;
- (ii) achieve a specific level of network service at an individual connection point in a regulated SAPS; and
- (iii) observe and apply the relevant provisions of the quality of supply and system standards specified in accordance with subparagraph (1); and
- (3) the contingencies taken into account by the Distribution Network Service Provider in the planning and design of a regulated SAPS.
- (b) The standards, approaches and other matters in Schedule 5.1a and Schedule 5.1 must where relevant be considered in the development of SAPS performance and supply standards.

Table S5.13.1

| Parameter | Minimum content of standards |
|--|--|
| <u>Frequency</u> | <u>Frequency band in normal operation</u> <u>Frequency band following a contingency and the maximum permitted time for excursions outside this band</u> |
| <u>System stability</u> | <u>Transient, oscillatory or voltage stability requirements to ensure stable supply in a regulated SAPS</u> |
| <u>Power frequency voltage</u> | <u>Normal voltage of supply at connection points</u> <u>Acceptable limits of supply voltage variation from normal voltage in normal operation and following a contingency</u> <u>Maximum time for which voltage may vary from normal voltage for any given variation from normal voltage</u> <u>These are to be set to achieve distortion free voltage supply for the efficient and safe operation of equipment in customer installations</u> |
| <u>Voltage fluctuations (flicker)</u> | <u>Maximum voltage fluctuation level of supply</u> |
| <u>Voltage waveform distortion</u> | <u>Permitted voltage distortion (harmonics)</u> |
| <u>Voltage unbalance (if applicable)</u> | <u>Voltage unbalance is to be measured as negative sequence voltage</u> <u>Maximum average voltage unbalance in normal operation, measured at a connection point, over a specified averaging period</u> <u>Maximum average voltage unbalance following a contingency</u> |
| <u>Fault clearance times</u> | <u>Maximum allowed fault clearance times at nominal voltage levels</u> <u>Fault ride through requirements as necessary to meet stability requirements</u> |

| Parameter | Minimum content of standards |
|--------------------|---|
| | <u>These must be reasonable and sufficiently fast that they ensure stability and safety with respect to a <i>regulated SAPS</i></u> |
| <u>Reliability</u> | <u>Performance targets for frequency and duration of <i>supply</i> interruptions in a <i>regulated SAPS</i></u> <u>Performance targets for expected load not served in a <i>regulated SAPS</i></u> |

CHAPTER 5A

5A. Electricity connection for retail customers

Part A Preliminary

5A.A.1 Definitions

In this Chapter:

basic connection service

means a *connection service* related to a *connection* (or a proposed *connection*) between a *distribution system* and a *retail customer's* premises (excluding a non-registered *embedded generator's* premises) in the following circumstances:

- (a) either:
 - (1) the *retail customer* is typical of a significant class of *retail customers* who have sought, or are likely to seek, the service; or
 - (2) the *retail customer* is, or proposes to become, a *micro embedded generator*; and
- (b) the provision of the service involves minimal or no *augmentation* of the *distribution network*; and
- (c) a *model standing offer* has been approved by the *AER* for providing that service as a *basic connection service*.

basic micro EG connection service

means a *basic connection service* for a *retail customer* who is a *micro embedded generator*.

confidential information

means, in relation to a *Registered Participant*, *AEMO* or a *connection applicant*, information which is or has been provided to that *Registered Participant*, *AEMO* or *connection applicant* under or in connection with the *Rules* and which is stated under the *Rules*, or by *AEMO*, the *AER* or the *AEMC*, to be *confidential information* or is otherwise confidential or commercially sensitive. It also includes any information which is derived from such information.

connection

means a physical link between a *distribution system* and a *retail customer's* premises to allow the flow of electricity.

connection alteration

means an alteration to an *existing connection* ~~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.

existing connection

includes a connection in a part of a distribution system that has been temporarily isolated from the interconnected national electricity system due to an event or circumstance beyond the control of the Distribution Network Service Provider such as bushfire or flood.

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~~ 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) in all cases, a non-registered embedded generator ~~non-registered embedded generator~~ and a micro embedded generator; and

(b) in relation to a regulated SAPS, a Registered Participant or Intending Participant.

standard connection service

means a *connection service* (other than a *basic connection service*) for a particular class (or sub-class) of *connection applicant* and for which a *model standing offer* has been approved by the AER.

supply service

means a service (other than a *connection service*) relating to the *supply* of electricity.

5A.A.2 Application of this Chapter

- (a) This Chapter does not apply to, or in relation to, a *connection applicant* that is a *Registered Participant* or an *Intending Participant* unless:
- (1) the Registered Participant or Intending Participant is acting as the agent of a retail customer; or
 - (2) the connection applicant is seeking connection or connection services in relation to a regulated SAPS.
- (b) Where a *non-registered embedded generator* wishing to connect an *embedded generating unit* to a *Distribution Network Service Provider's network*:
- (1) falls within a particular class (or subclass) of *connection applicant* for which that *Distribution Network Service Provider* provides a *standard connection service*, this Chapter will apply;
 - (2) does not fall within a particular class (or subclass) of *connection applicant* for which that *Distribution Network Service Provider* provides a *standard connection service*, paragraph (c) will apply.
- (c) A *non-registered embedded generator* that meets the requirements in paragraph (b)(2) may elect to seek *connection* of the relevant *embedded generating unit* under rule 5.3A instead of this Chapter. A non-registered embedded generator seeking to connect to a regulated SAPS is not entitled to elect to seek connection under rule 5.3A.
- (d) Any election made by a *non-registered embedded generator* under paragraph (c) must be:
- (1) made before an *enquiry* is made or if no *enquiry* is made, before a *connection application* is lodged with the relevant *Distribution Network Service Provider*;
 - (2) in writing; and
 - (3) delivered to the relevant *Distribution Network Service Provider* at the same time as lodging an *enquiry* under clause 5.3A.5.
- (e) For the avoidance of doubt, clause 5A.C.1(a)(2) is still applicable when a *non-registered embedded generator* meets the requirements in paragraph (b)(1).

5A.A.4 SAPS Resource Provider deemed to be agent of a retail customer

A Market SAPS Resource Provider is deemed to be the agent of a retail customer whose premises are connected to a stand-alone distribution system, where there is an agreement between the Market SAPS Resource Provider and the retail customer relating to the retail customer's small generating unit under which the Market SAPS Resource Provider is financially responsible for the market connection point at which the relevant generating unit is connected to the stand-alone distribution system.

5A.A.54 Connection to or by means of a regulated SAPS

A Distribution Network Service Provider must not establish a new connection ~~new connection to its network~~ by converting a part of its network to a regulated SAPS or establishing a new regulated SAPS.

Note

The AEMC ~~proposes to~~ recommends that this clause be classified as a civil penalty provision.

Part D Application for connection service

Division 1 Information

5A.D.1 Publication of information

- (a) A Distribution Network Service Provider must publish on its website the following:
- (1) an application form for a *new connection* or a *connection alteration*; and
 - (2) a description of how an application for a *new connection* or a *connection alteration* is to be made (including a statement of the information required for the application); and
 - (3) a description of the *Distribution Network Service Provider's basic connection services* and *standard connection services* and the classes (or subclasses) of *retail customer* to which they apply. If the *Distribution Network Service Provider* does not provide *standard connection services* for all or some ~~non-registered embedded generators~~ 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 clauses 5.3A.3(b)(1)(vii) and 5.3A.3(b)(2)-(7) as such information relates to the *connection of embedded generating units* by a *non-registered embedded generator*; and
 - (8) if the Distribution Network Service Provider has an adoptive SAPS network, its SAPS performance and supply standards.

- (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).

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~~, *a Registered Participant or an Intending Participant*) 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*, *Registered Participant or Intending Participant* *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.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*, a *Registered Participant* or an *Intending Participant*) are exempt from any requirement to pay *connection charges* (or to give consideration in the form of a capital contribution, prepayment or financial guarantee) for an *augmentation* (other than an *extension*) to the *distribution network* necessary to make the *connection*; and
 - (5) describe the methods for calculating the *augmentation* component for the *connection assets* and, if the *augmentation* consists of or includes an *extension*, the *extension* component of a *connection charge*; and
 - (6) describe the method for calculating:
 - (i) the amount of a refund of *connection charges* for a *connection asset* when an *extension* asset originally installed to *connect* the premises of a single *retail customer* is used, within 7 years of its installation, to *connect* other premises and thus comes to be used for the benefit of 2 or more *retail customers*; and
 - (ii) the threshold below which the refund is not payable; and
 - (7) describe the treatment of *augmentation* assets.
- (d) The principles for establishing an exemption under paragraph (c)(4) must ensure that the exemption only operates in the following circumstances:
- (1) the *connection* is a *low voltage connection*; and
 - (2) the *connection* would not normally require *augmentation* of the *network* beyond the *extension* to the *distribution network* necessary to make the *connection*; and
 - (3) the *connection* is not expected to increase the *load* on the *distribution network* beyond a level the *Distribution Network Service Provider* could reasonably be expected to cope with in the ordinary course of managing the *distribution network*.
- (e) In developing the guidelines, the *AER* must have regard to:
- (1) historical and geographical differences between *networks*; and
 - (2) inter-jurisdictional differences related to regulatory control mechanisms, classification of services and other relevant matters; and

- (3) the circumstances in which *connection services* may be provided by persons other than *Distribution Network Service Providers* (and are therefore *contestable*).
- (f) In developing guidelines dealing with the method for calculating the amount of a refund of *connection charges* paid before a *connection asset* becomes a shared asset, the *AER* must have regard to:
 - (1) the *Distribution Network Service Provider's* obligation to make the refund; and
 - (2) future projections of *distribution network* expansion and usage and any consequent effect on the *Distribution Network Service Provider's* capacity to finance the acquisition of *augmentation* assets out of increased revenue; and
 - (3) the fact that the *Distribution Network Service Provider's* obligation to make the refund will expire after 7 years.
- (g) In developing guidelines under this clause, the *AER* must act in accordance with the *distribution consultation procedures*.

5A.E.4 Payment of connection charges

- (a) *Connection charges* payable in respect of a *connection service* must be paid to the *Distribution Network Service Provider* by the *retail customer's retailer* unless:
 - (1) the *retailer* did not apply for the *connection service* and the *Distribution Network Service Provider* has notified the *retail customer* that the *retail customer* must pay the *connection charge* directly; or
 - (2) the *retail customer* asks to pay the *connection charge* directly and the *Distribution Network Service Provider* agrees; or
 - (3) the *Distribution Network Service Provider* and the *retailer* agree that the *Distribution Network Service Provider* is to recover the *connection charge* from the *retail customer*.
- (b) If the *retail customer* pays, or is required to pay, a *connection charge* directly to a *Distribution Network Service Provider* under paragraph (a), the *Distribution Network Service Provider* must not recover that charge from the *retail customer's retailer*.
- (c) The *Distribution Network Service Provider* must separately identify each *connection charge* on the statement or invoice to the *retailer* or other person.

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.

CHAPTER 6

6. Economic Regulation of Distribution Services

Part B Classification of Distribution Services and Distribution Determinations

6.2 Classification

6.2.1A Classification of distribution services, and treatment of inputs, involving a SAPS

- (a) The AER must give effect to the principles in this clause when classifying *distribution services* provided by means of, or in connection with, a *stand-alone distribution system* in a *regulated SAPS* and when determining the regulatory treatment of inputs used to provide those *distribution services*.
- (b) A *distribution service* provided by a *Distribution Network Service Provider* by means of, or in connection with, a *stand-alone distribution system* in a *regulated SAPS* must be given the same classification that it would have been given if the *distribution service* were provided by means of, or in connection with, a part of the *Distribution Network Service Provider's distribution system* not in a *regulated SAPS*.
- (c) If activity or expenditure of a *Distribution Network Service Provider* in establishing and maintaining a *regulated SAPS* is not classified in accordance with paragraph (b) and is:
 - (1) a *distribution service*, it must be classified as a *standard control service*;
 - or
 - (2) an input used to provide a *distribution service*, it must be treated as an input used to provide a *standard control service*.
- (d) For the purposes of paragraph (c):
 - (1) providing, or arranging for the provision of, services or *facilities* (including a *generating system*) required for *supply* to a *Distribution Customer* by means of a *stand-alone distribution system* is to be treated as an input used to provide a *distribution service*; and
 - (2) despite anything else in this clause, the production of electricity for *supply* to a *stand-alone distribution system* is not a *distribution service* or an input used to provide a *distribution service*.

Note

As the production of electricity by means of the *generating system* is not a *distribution service*, a *Distribution Network Service Provider* who proposes to own, operate or control a *generating system* in a *regulated SAPS* (instead of using a related entity or a third party to provide a *generation service*) must have regard to the *Distribution Ring-Fencing Guidelines*.

6.2.3A Distribution Service Classification Guidelines

- (a) The AER must, in accordance with the *distribution consultation procedures*, develop, maintain and publish guidelines (the *Distribution Service Classification Guidelines*) that set out the approach the AER proposes to take when classifying *distribution services* as:

- (1) *direct control services* or *negotiated distribution services* under clause 6.2.1(a); and
 - (2) *standard control services* or *alternative control services* under clause 6.2.2(a).
- (b) The *Distribution Service Classification Guidelines* must set out an explanation of the *AER*'s proposed approach (including worked examples) to:
- (1) determining whether to classify a *distribution service*;
 - (2) applying the factors set out in:
 - (i) clause 6.2.1(c), when classifying *distribution services* as *direct control services* or *negotiated distribution services*; and
 - (ii) clause 6.2.2(c), when classifying *direct control services* as *standard control services* or *alternative control services*; and
 - (3) distinguishing between *distribution services* (including, but not limited to, those that are classified as *direct control services*) and the operating and capital inputs that are used to provide such services; and
 - (4) applying the principles in clause 6.2.1A, when classifying services provided by means of, or in relation to, a *stand-alone distribution system* in a *regulated SAPS*.
- (c) Nothing prevents the *AER* from publishing the *Distribution Service Classification Guidelines* in the same document as another guideline published under this Chapter.

Part C Building Block Determinations for standard control services

6.4 Post-tax revenue model

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 or is for the production of electricity for supply in a regulated SAPS that is sold through a market;
 - (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*.
- (f) For the purposes of this clause:
- (1) the production of electricity for supply to a stand-alone distribution system in a regulated SAPS is taken to be a service referred to in subparagraph (a)(2); and
 - (2) the sale of the electricity to the market under Chapter 3 is taken to be a charge for the provision of the service.

6.5 Matters relevant to the making of building block determinations

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* or *SAPS options*; and
 - (11) any relevant final project assessment report (as defined in clause 5.10.2) *published* under clause 5.17.4(o), (p) or (s);
 - (12) any other factor the *AER* considers relevant and which the *AER* has notified the *Distribution Network Service Provider* in writing, prior to the submission of its revised *regulatory proposal* under clause 6.10.3, is an *operating expenditure factor*.

6.5.7 Forecast capital expenditure

- (a) A *building block proposal* must include the total forecast capital expenditure for the relevant *regulatory control period* which the *Distribution Network Service Provider* considers is required in order to achieve each of the following (the *capital expenditure objectives*):

- (1) meet or manage the expected demand for *standard control services* over that period;
 - (2) comply with all applicable *regulatory obligations or requirements* associated with the provision of *standard control services*;
 - (3) to the extent that there is no applicable *regulatory obligation or requirement* in relation to:
 - (i) the quality, reliability or security of supply of *standard control services*; or
 - (ii) the reliability or security of the *distribution system* through the supply of *standard control services*,
 to the relevant extent:
 - (iii) maintain the quality, reliability and security of supply of *standard control services*; and
 - (iv) maintain the reliability and security of the *distribution system* through the supply of *standard control services*; and
 - (4) maintain the safety of the *distribution system* through the supply of *standard control services*.
- (b) The forecast of required capital expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal* must:
- (1) comply with the requirements of any relevant *regulatory information instrument*;
 - (2) be for expenditure that is properly allocated to *standard control services* in accordance with the principles and policies set out in the *Cost Allocation Method* for the *Distribution Network Service Provider*;
 - (3) include both:
 - (i) the total of the forecast capital expenditure for the relevant *regulatory control period*; and
 - (ii) the forecast capital expenditure for each *regulatory year* of the relevant *regulatory control period*; and
 - (4) identify any forecast capital expenditure for the relevant *regulatory control period* that is for an option that has satisfied the *regulatory investment test for transmission* or the *regulatory investment test for distribution* (as the case may be); and
 - (5) not include *expenditure for a restricted asset*, unless:
 - (i) to the extent that any such expenditure includes an amount of unspent capital expenditure for a *contingent project* in accordance with paragraph (g), an *asset exemption* has been granted by the *AER* under clause 6.4B.1(a)(2) in respect of that asset or that class of asset for that *contingent project*;
 - (ii) to the extent that any such expenditure relates to a *positive pass through amount*, an *asset exemption* has been granted by the *AER*

under clause 6.4B.1(a)(3) in respect of that asset or that class of asset for that *positive pass through amount*; or

- (iii) otherwise, the *Distribution Network Service Provider* has submitted an *exemption application* with the *regulatory proposal* requesting an *asset exemption* under clause 6.4B.1(a)(1) for the *regulatory control period* in respect of that asset or class of asset.

(c) The *AER* must:

- (1) subject to subparagraph (c)(2), accept the forecast of required capital expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal* if the *AER* is satisfied that the total of the forecast capital expenditure for the *regulatory control period* reasonably reflects each of the following (the *capital expenditure criteria*):
 - (i) the efficient costs of achieving the *capital expenditure objectives*;
 - (ii) the costs that a prudent operator would require to achieve the *capital expenditure objectives*; and
 - (iii) a realistic expectation of the demand forecast and cost inputs required to achieve the *capital expenditure objectives*.
- (2) not accept the forecast of required capital expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal* if that forecast includes *expenditure for a restricted asset*, unless:
 - (i) to the extent that any such expenditure includes an amount of unspent capital expenditure for a *contingent project* in accordance with paragraph (g), an *asset exemption* has been granted by the *AER* under clause 6.4B.1(a)(2) in respect of that asset or that class of asset for that *contingent project*;
 - (ii) to the extent that any such expenditure relates to a *positive pass through amount*, an *asset exemption* has been granted by the *AER* under clause 6.4B.1(a)(3) in respect of that asset or that class of asset for that *positive pass through amount*; or
 - (iii) otherwise:
 - (A) that *Distribution Network Service Provider* has requested an *asset exemption* under subparagraph (b)(5) in respect of that asset or that class of asset; and
 - (B) the *AER* has granted that *asset exemption*.
- (d) If the *AER* is not satisfied as referred to in paragraph (c), it must not accept the forecast of required capital expenditure of a *Distribution Network Service Provider*.
- (e) In deciding whether or not the *AER* is satisfied as referred to in paragraph (c), the *AER* must have regard to the following (the *capital expenditure factors*):
 - (1) [Deleted]
 - (2) [Deleted]
 - (3) [Deleted]

- (4) the most recent *annual benchmarking report* that has been *published* under rule 6.27 and the benchmark capital expenditure that would be incurred by an efficient *Distribution Network Service Provider* over the relevant *regulatory control period*;
- (5) the actual and expected capital expenditure of the *Distribution Network Service Provider* during any preceding *regulatory control periods*;
- (5A) the extent to which the capital expenditure forecast includes expenditure to address the concerns of electricity consumers as identified by the *Distribution Network Service Provider* in the course of its engagement with electricity consumers;
- (6) the relative prices of operating and capital inputs;
- (7) the substitution possibilities between operating and capital expenditure;
- (8) whether the capital expenditure forecast is consistent with any incentive scheme or schemes that apply to the *Distribution Network Service Provider* under clauses 6.5.8A or 6.6.2 to 6.6.4;
- (9) the extent the capital expenditure forecast is referable to arrangements with a person other than the *Distribution Network Service Provider* that, in the opinion of the *AER*, do not reflect arm's length terms;
- (9A) whether the capital expenditure forecast includes an amount relating to a project that should more appropriately be included as a *contingent project* under clause 6.6A.1(b);
- (10) the extent the *Distribution Network Service Provider* has considered, and made provision for, efficient and prudent *non-network options* or SAPS options;
- (11) any relevant final project assessment report (as defined in clause 5.10.2) *published* under clause 5.17.4(o), (p) or (s); and
- (12) any other factor the *AER* considers relevant and which the *AER* has notified the *Distribution Network Service Provider* in writing, prior to the submission of its revised *regulatory proposal* under clause 6.10.3, is a *capital expenditure factor*.

Forecast capital expenditure and contingent projects

- (f) Paragraphs (g) - (j) apply where:
 - (1) in a *regulatory control period* (the **first regulatory control period**), the *AER* determines under clause 6.6A.2(e)(1)(iii) that the likely completion date for a *contingent project* is a date which occurs in the immediately following *regulatory control period* (the **second regulatory control period**); and
 - (2) there is an unspent amount of capital expenditure for that *contingent project* under paragraph (g).
- (g) Subject to paragraphs (ga) and (j), a *Distribution Network Service Provider's regulatory proposal* for the second *regulatory control period* must include in the forecast of required capital expenditure referred to in paragraph (a) an

amount of any unspent capital expenditure for each *contingent project* as described in subparagraph (f)(2), that equals the difference (if any) between:

- (1) the total capital expenditure for that *contingent project*, as determined by the *AER* in the first *regulatory control period* under clause 6.6A.2(e)(1)(ii); and
 - (2) the total of the capital expenditure actually incurred (or estimated capital expenditure for any part of the first *regulatory control period* for which actual capital expenditure is not available) in the first *regulatory control period* for that *contingent project*.
- (ga) For the purposes of calculating any unspent capital expenditure in accordance with paragraph (g), the total or estimate of capital expenditure referred to in subparagraph (g)(2) must not include *expenditure for a restricted asset*, unless:
- (1) the *Distribution Network Service Provider* has submitted an *exemption application* under clause 6.6A.1(a1) for the previous *regulatory control period*, which requested an *asset exemption* under clause 6.4B.1(a)(2) in respect of that asset or class of asset for that *contingent project*; and
 - (2) the *AER* has granted that *asset exemption*.
- (h) The *AER* must include in any forecast capital expenditure for the second *regulatory control period* which is accepted in accordance with paragraph (c) or substituted in accordance with clause 6.12.1(3)(ii) (as the case may be) the amount of any unspent capital expenditure calculated in accordance with paragraph (g).
- (i) Without limiting the requirement in paragraph (h), in deciding whether or not to accept the forecast of required capital expenditure of a *Distribution Network Service Provider* for the second *regulatory control period* in accordance with this clause 6.5.7, the *AER* must not:
- (1) assess the reasonableness of the amount of unspent capital expenditure for a *contingent project* referred to in paragraph (g) or the remaining period to which the *contingent project* applies;
 - (2) assess the reasonableness of the timing of the unspent capital expenditure within the remaining period for a *contingent project* referred to in paragraph (g) except as part of the assessment of the total forecast capital expenditure under paragraph (c); or
 - (3) take into account any amount which represents for a *contingent project* referred to in paragraph (g) the difference between:
 - (i) the amount representing the sum of the forecast capital expenditure for that *contingent project* for each year of the immediately preceding *regulatory control period* referred to in clause 6.6A.2(e)(1)(i); and
 - (ii) the total capital expenditure actually incurred (or estimated capital expenditure for any part of the preceding *regulatory control period* for which actual capital expenditure is not available) in the immediately preceding *regulatory control period* for that *contingent project*.

- (j) A *regulatory proposal* in respect of the second *regulatory control period* must not include in the forecast of required capital expenditure referred to in paragraph (a) any capital expenditure for a *contingent project* for the first *regulatory control period*:
 - (1) to the extent that the capital expenditure was included in the amount of capital expenditure for that *contingent project* as determined in the first *regulatory control period* under clause 6.6A.2(e)(1)(i); and
 - (2) the capital expenditure actually incurred (or estimated capital expenditure for any part of the first *regulatory control period* for which actual capital expenditure is not available) in the first *regulatory control period* for that *contingent project* exceeded the capital expenditure referred to in subparagraph (1).

6.5.8 Efficiency benefit sharing scheme

- (a) The *AER* must, in accordance with the *distribution consultation procedures*, develop and *publish* an incentive scheme or schemes (*efficiency benefit sharing scheme*) that provide for a fair sharing between *Distribution Network Service Providers* and *Distribution Network Users* of:
 - (1) the efficiency gains derived from the operating expenditure of *Distribution Network Service Providers* for a *regulatory control period* being less than; and
 - (2) the efficiency losses derived from the operating expenditure of *Distribution Network Service Providers* for a *regulatory control period* being more than,

the forecast operating expenditure accepted or substituted by the *AER* for that *regulatory control period*.
- (b) An *efficiency benefit sharing scheme* may (but is not required to) be developed to cover efficiency gains and losses related to *distribution losses*.
- (c) In developing and implementing an *efficiency benefit sharing scheme*, the *AER* must have regard to:
 - (1) the need to ensure that benefits to electricity consumers likely to result from the scheme are sufficient to warrant any reward or penalty under the scheme for *Distribution Network Service Providers*;
 - (2) the need to provide *Distribution Network Service Providers* with a continuous incentive, so far as is consistent with economic efficiency, to reduce operating expenditure-;
 - (3) the desirability of both rewarding *Distribution Network Service Providers* for efficiency gains and penalising *Distribution Network Service Providers* for efficiency losses;
 - (4) any incentives that *Distribution Network Service Providers* may have to capitalise expenditure; and
 - (5) the possible effects of the scheme on incentives for the implementation of *non-network options* or *SAPS options*.

- (d) The *AER* may, from time to time and in accordance with the *distribution consultation procedures*, amend or replace an *efficiency benefit sharing scheme*.

6.6 Adjustments after making of building block determination.

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* or *SAPS options*; and
- (4) must have regard to the *Distribution Reliability Measures Guidelines*.

- (c) The *AER* may, from time to time and in accordance with the *distribution consultation procedures*, amend or replace any scheme that is developed and *published* under this clause.

Note:

A *Distribution Network Service Provider* is not precluded from entering into a contract with a third party (such as a network support service provider) under which the benefits of a *service target performance incentive scheme* are passed on to the third party, or the third party is required to indemnify the provider for penalties to which the provider becomes liable under the scheme.

6.6.3 Demand management incentive scheme

- (a) The *AER* must develop a *demand management incentive scheme* consistent with the *demand management incentive scheme objective*.
- (b) The objective of the *demand management incentive scheme* is to provide *Distribution Network Service Providers* with an incentive to undertake efficient expenditure on relevant *non-network options*, or *SAPS 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*, or *SAPS 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*, or *SAPS options*, relating to demand management. In doing so, the *AER* may take into account the net economic benefits delivered to all those who produce, consume and transport electricity in the *market* associated with implementing relevant *non-network options*;
 - (4) the level of the incentive:
 - (i) should be reasonable, considering the long term benefit to *retail customers*;
 - (ii) should not include costs that are otherwise recoverable from any another source, including under a relevant distribution determination; and
 - (iii) may vary by *Distribution Network Service Provider* and over time;
 - (5) penalties should not be imposed on *Distribution Network Service Providers* under any scheme;
 - (6) the incentives should not be limited by the length of a *regulatory control period*, if such limitations would not contribute to the achievement of the *demand management incentive scheme objective*; and

- (7) the possible interaction between the scheme and:
 - (i) any other incentives available to the *Distribution Network Service Provider* in relation to undertaking efficient expenditure on, or implementation of, relevant *non-network options*, or *SAPS options, relating to demand management*;
 - (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*, or *SAPS options, relating to demand management* 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*.

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* ([as defined in Chapter 5A](#)) or *real estate developer* to pay a *connection charge*, for the provision of a *connection service* under Chapter 5A.
- (b) The proposed *connection policy*:
 - (1) must be consistent with:
 - (i) the *connection charge principles*; and
 - (ii) the *connection charge guidelines*; and
 - (2) must specify:
 - (i) the categories of persons that may be required to pay a *connection charge* and the circumstances in which such a requirement may be imposed; and
 - (ii) the aspects of a *connection service* for which a *connection charge* may be made; and

Example

The *Distribution Network Service Provider* might (for example) make separate *connection charges* for the provision of a *distribution connection asset* and for making a necessary *extension* to, or other *augmentation* of, the *distribution network*.

- (iii) the basis on which *connection charges* are determined; and
- (iv) the manner in which *connection charges* are to be paid (or equivalent consideration is to be given); and

Examples

The payment (or equivalent consideration) might take the form of a capital contribution, prepayment or financial guarantee.

- (v) a threshold (based on capacity or any other measure identified in the *connection charge guidelines*) below which a *retail customer* (not being a non-registered *embedded generator*, ~~or a real estate developer~~, a Registered Participant or an Intending Participant) will not be liable for a *connection charge* for an *augmentation* other than an *extension*.

Part I Distribution Pricing Rules

6.18 Distribution Pricing Rules

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, subject to subparagraphs (3) and (4);
 - (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) *retail customers connected to a regulated SAPS should be treated no less favourably than retail customers connected to the interconnected national electricity system; and*
 - (54) 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.

CHAPTER 7

7. Metering

Part E Metering Data

7.10 Metering Data Services

7.10.1 Metering Data Services

- (a) *Metering Data Providers* must provide *metering data services* in accordance with the *Rules* and procedures authorised under the *Rules*, including:
 - (1) collecting *metering data* by local access or by *remote acquisition*;
 - (2) the validation and substitution of *metering data* for a type 1, 2, 3 and 4 *metering installation*;
 - (3) the validation, substitution and estimation of *metering data* for a type 4A, 5 and 6 *metering installation*;
 - (4) the calculation, estimation and substitution of *metering data* for a type 7 *metering installation*;
 - (4A) the calculation, validation, estimation and substitution of *metering data* for a *metering installation* in a regulated SAPS;
 - (5) establishing and maintaining a *metering data services database* associated with each *metering installation* and providing access to the *metering data services database* in accordance with clause 7.10.2;
 - (6) delivery of *metering data* and relevant *NMI Standing Data* for a *metering installation* in accordance with clause 7.10.3;
 - (7) the delivery of *metering data* and relevant *NMI Standing Data* to AEMO for *settlements*;
 - (8) ensuring the *metering data* and other data associated with the *metering installation* is protected from local access or remote access while being collected and while held in the *metering data services database* and that *data* is provided only in accordance with the *Rules*;
 - (9) maintaining the standard of accuracy of the time setting of the *metering data services database* and the *metering installation* in accordance with clause 7.10.6;
 - (10) notifying the *Metering Coordinator* of any *metering installation malfunction* of a *metering installation* within 1 *business day*; and
 - (11) management and storage of *metering data* in accordance with clause 7.10.2.
- (b) Despite anything to the contrary in the *Rules*, AEMO may obtain *energy data* directly from a *metering installation* for the *settlements* process.

7.10.2 Data management and storage

- (a) *Metering Data Providers* must:

- (1) retain *metering data* for all relevant *metering installations* in the *metering data services database*:
 - (i) online in an accessible format for at least 13 months;
 - (ii) following the retention under subparagraph (1)(i), in an accessible format for an overall period of not less than 7 years; and
- (2) archive in an accessible format for a period of 7 years:
 - (i) *metering data* in its original form collected from the *metering installation*;
 - (ii) records of each substitution to *metering data* in respect of a *metering installation*; and
- (3) if required in procedures authorised by AEMO under this Chapter 7, provide the persons referred to in clause 7.15.5(c) ~~clauses 7.15.5(e)(1) to 7.15.5(e)(5a)~~ with access to the *metering data* and *NMI Standing Data* in the *metering data services database*; and

Note

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

- (4) except for the persons referred to in clause 7.15.5(c) ~~clauses 7.15.5(e)(1) to 7.15.5(e)(5a)~~, ensure that no other person has access to the *metering data services database*.

Note

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

- (b) *Metering Data Providers* accredited for type 7 *metering installations* must maintain techniques for determining *calculated metering data* for type 7 *metering installations* that are *market loads* under Schedule 7.4 in accordance with the *metrology procedure*.

(b1) *Metering Data Providers* accredited for *metering installations* in a regulated SAPS must maintain techniques for determining *calculated metering data* for *metering installations* for *market generating units* that supply electrical energy to a stand-alone distribution system in a regulated SAPS in accordance with the *metrology procedure*.

- (c) *Metering Data Providers* must maintain *electronic data transfer* facilities in order to deliver *metering data* from the *metering data services database* to the *metering database* in accordance with the relevant *service level procedures*.
- (d) *Check metering data*, where available, and appropriately adjusted for differences in *metering installation* accuracy, where applicable, must be used by the *Metering Data Provider* to validate *metering data*.
- (e) If the *Metering Data Provider* becomes aware that the *metering data* that has been delivered into the *metering database* from a *metering data services database* is incorrect, then the *Metering Data Provider* must provide

corrected *metering data* to the persons referred to in ~~clause 7.15.5(c)~~clauses 7.15.5(e)(1) to 7.15.5(e)(5a).

- (f) *Metering data* may only be altered by a *Metering Data Provider* except in the preparation of *settlements ready data*, in which case *AEMO* may alter the *metering data* in accordance with clause 7.11.2(c).
- (g) A *Metering Data Provider* may only alter *metering data* in the *metering data services database* in accordance with the *metrology procedure*.
- (h) *Metering Data Providers* must maintain *electronic data transfer* facilities in order to deliver *metering data* from the *metering data services database* in accordance with clause 7.10.3.
- (i) The *Metering Data Provider's* rules and protocols for supplying the *metering data services* must be approved by *AEMO* and *AEMO* must not unreasonably withhold such approval.
- (j) The *Metering Data Provider* must arrange with the *Metering Coordinator* to obtain the relevant *metering data* if *remote acquisition* becomes unavailable.

7.10.3 Provision of metering data to certain persons

- (a) The *Metering Data Provider* must provide *metering data* and relevant *NMI Standing Data* to the persons referred to in ~~clause 7.15.5(c)~~clauses 7.15.5(e)(1) to 7.15.5(e)(5a) as required by and in accordance with the *Rules* and procedures authorised by *AEMO* under this Chapter 7.

Note

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

- (b) *AEMO* must ensure that the procedures it authorises under this Chapter 7 do not require the *Metering Data Provider* to provide *metering data* or relevant *NMI Standing Data* to a person under paragraph (a) except to the extent that such *metering data* or relevant *NMI Standing Data* is required by that person to perform its obligations under the *Rules*, the *National Energy Retail Rules* or *jurisdictional electricity legislation*.

7.10.5 Periodic energy metering

- (a) The *Metering Data Provider* must, for:
 - (1) types 1, 2 and 3 *metering installations*; ~~and~~
 - (2) types 4, 4A and 5 *metering installations* that are capable of providing *trading interval energy data*; ~~;~~ and
(2A) *metering installations for market generating units that supply electrical energy to a stand-alone distribution system in a regulated SAPS,*collate *metering data* relating to:
 - (3) the amount of *active energy*; and
 - (4) *reactive energy* (where relevant) passing through a *connection point*, in *trading intervals* within a *metering data services database* unless it has been agreed between *AEMO*, the *Local Network Service Provider*, *Embedded*

Network Manager in relation to *child connection points* and the *financially responsible Market Participant* that *metering data* may be recorded in sub-multiples of a *trading interval*.

Note

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

- (b) For type 6 *metering installations* and types 4, 4A and 5 *metering installations* that are not capable of providing *trading interval energy data*, *metering data* relating to the amount of *active energy* passing through a *connection point* must be converted into *trading intervals* in the *profiling* process undertaken by *AEMO* in accordance with the *metrology procedure* and the *metrology procedure* must specify:
 - (1) the parameters to be used in preparing the *trading interval metering data* for each *market load*, including the algorithms;
 - (2) the *metering data* from *first-tier loads* that is to be used in the conversion process;
 - (3) the quality and timeliness of the *metering data* from the *first-tier loads*;
 - (4) the party responsible for providing the *metering data* from the *first-tier loads*; and
 - (5) if required, the method of cost recovery in accordance with clause 7.5.2.

Note

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

- (c) The *Metering Data Provider* must, for type 7 *metering installations*, prepare *metering data* relating to the amount of *active energy* passing through a *connection point* in accordance with clause 7.10.1(a)(4) in *trading intervals* within a *metering data services database*.

Note

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

7.11 Metering data and database

7.11.1 Metering database

- (a) *AEMO* must create, maintain and administer a *metering database* (either directly or under a contract for provision of the database) containing information for each *metering installation* registered with *AEMO*.
- (b) *AEMO* must ensure that the *metering database* has the capability for remote access.
- (c) The *metering database* must include *metering data*, *settlements ready data*, and information for each *metering installation* registered with *AEMO* in accordance with rule 7.12.

- (d) *AEMO* must:
 - (1) enable the persons referred to in ~~clause 7.15.5(c)~~~~clauses 7.15.5(e)(1) to 7.15.5(e)(5a)~~ and clause 7.15.5(e) to access or receive data in the *metering database*; and
 - (2) except as specified in subparagraph (1), ensure that no other person has access to the *metering database*.
- (e) For all types of *metering installations*, the *metering database* must contain *metering data* that is:
 - (1) retained online in an accessible format for at least 13 months; and
 - (2) following the retention under subparagraph (1), archived in an accessible format for an overall period of not less than 7 years.
- (f) The *settlements ready data* held in the *metering database* must be used by *AEMO* for *settlements* purposes.
- (g) The *settlements ready data* held in the *metering database* may be used by *Distribution Network Service Providers* for the purpose of determining *distribution service charges* in accordance with clause 6.20.1.
- (h) *AEMO* must retain *settlements ready data* for all *metering installations* for a period of 7 years.
- (i) Despite anything to the contrary in this *Rule*, *AEMO* may provide an *energy ombudsman* with *metering data* relating to a *Registered Participant* from a *metering installation*, the *metering database*, or the *metering register*, if the *energy ombudsman* has received a complaint to which the data is relevant from a *retail customer* of the *Registered Participant*.
- (j) *AEMO* must notify the relevant *Registered Participant* of any information requested by the *energy ombudsman* under paragraph (i) and, if it is requested by that *Registered Participant*, supply the *Registered Participant* with a copy of any information provided to the *energy ombudsman*.
- (k) *AEMO* must, acting jointly with the *energy ombudsman*, develop procedures for the efficient management of timely access to data by the *energy ombudsman*.

Part F Security of metering installation and energy data

7.15 Security of metering installation and energy data

7.15.5 Access to data

- (a) Access to *energy data* recorded by a *metering installation* must only be provided where passwords are allocated in accordance with rule 7.15.

Note

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

- (b) The *Metering Coordinator* must ensure that access to *energy data* from the *metering installation* is scheduled appropriately to ensure that congestion does not occur.

(c) Except as specified in paragraphs ~~(c1)~~, (d) or (e), only the following persons may access or receive *metering data*, *settlements ready data*, *NMI Standing Data*, and data from the *metering register* for a *metering installation*:

- (1) *Registered Participants* with a financial interest in the *metering installation* or the *energy* measured by that *metering installation*;
- (2) the *Metering Coordinator* appointed in respect of the *connection point* for that *metering installation*, or a person who was previously appointed as the *Metering Coordinator* in respect of that *connection point*, as required in connection with a *Metering Coordinator default event* in accordance with procedures authorised under the *Rules*;
- (3) the *Metering Provider* appointed with respect to that *metering installation*;
- (4) the *Metering Data Provider* appointed with respect to that *metering installation*, or who was previously appointed with respect to a *metering installation* as required in accordance with the *Rules* and procedures authorised under the *Rules*;

(4a) in relation to a *metering installation* at a *connection point* in a *regulated SAPS*, in addition to the *Metering Data Provider* referred to in subparagraph (4), a *Metering Data Provider* appointed with respect to a *metering installation* at a *market connection point* for a *market generating unit* in the *regulated SAPS*, or who was previously appointed with respect to such a *metering installation* as required in accordance with the *Rules* and procedures authorised under the *Rules*;

(5) *AEMO* and its authorised agents; and

~~(6)(5a)~~ in relation to a *metering installation* at a *child connection point*, an *Embedded Network Manager*;

~~(6) the *AER* or *Jurisdictional Regulators* upon request to *AEMO*.~~

(c1) The *AER* or *Jurisdictional Regulators* upon request to *AEMO* may access or receive *metering data*, *settlements ready data*, *NMI Standing Data*, and data from the *metering register* for a *metering installation*.

(d) In addition to the persons listed in paragraph (c), the following persons may access or receive *metering data* in accordance with the *Rules* and procedures authorised under the *Rules*:

- (1) a *retail customer* or *customer authorised representative*, upon request by that *retail customer* or its *customer authorised representative* to the *retailer* or *Distribution Network Service Provider* in relation to that *retail customer's metering installation* in accordance with the *metering data provision procedures*;
- (2) if a *small customer* has consented to a person accessing the *metering data* from its *small customer metering installation* in accordance with clause 7.15.4(b)(3), to that person;
- (3) a *large customer* or a *customer authorised representative*, in relation to *metering data* from the *metering installation* in respect of the *connection point* of the *large customer*;

- (4) the *energy ombudsman* in accordance with paragraphs 7.11.1(i) – (k); and
 - (5) an *Exempt Embedded Network Service Provider* in relation to a *metering installation* at a *child connection point* on its network.
- (e) In addition to the persons listed in paragraphs (c) and (d), a *retailer* may access and receive *NMI Standing Data*.
- (f) Without limiting this clause 7.15.5 or clause 7.13.3:
- (1) a *retailer* may access and receive *NMI Standing Data*;
 - (2) a *customer authorised representative* may receive *metering data*;
 - (3) a *retailer* or a *Distribution Network Service Provider* may access, receive or provide *metering data* to a *customer authorised representative*; and
 - (4) *Exempt Embedded Network Service Provider* and its *Embedded Network Manager* may access or receive *metering data*,
- after having first done whatever may be required or otherwise necessary, where relevant, under any applicable privacy legislation (including if appropriate making relevant disclosures or obtaining relevant consents from *retail customers*).

Part G Procedures

7.16 Procedures

7.16.3 Requirements of the metrology procedure

- (a) *AEMO* must establish, maintain and *publish* the *metrology procedure* that will apply to *metering installations* in accordance with this clause 7.16.3 and this Chapter 7.
- (b) The *metrology procedure* must include a minimum period of 3 months between the date when the *metrology procedure* is *published* and the date the *metrology procedure* commences unless the change is made under clause 7.16.7(e) in which case the effective date may be the same date as the date of *publication*.
- (c) The *metrology procedure* must include:
 - (1) information on the devices and processes that are to be used to:
 - (i) measure, or determine by means other than a device, the flow of electricity in a power conductor;
 - (ii) convey the measured or determined data under subparagraph (i) to other devices;
 - (iii) prepare the data using devices or algorithms to form *metering data*; and
 - (iv) provide access to the *metering data* from a *telecommunications network*;

- (2) the requirements for the provision, installation and maintenance of *metering installations*;
- (3) the obligations of *Metering Coordinators, financially responsible Market Participants, Local Network Service Providers, Metering Providers, Metering Data Providers and Embedded Network Managers*;
- (4) details on:
 - (i) the parameters that determine the circumstances when *metering data* must be delivered to *AEMO* for the purposes of Chapter 3 and such parameters must include, but are not limited to, the volume limit per annum below which *AEMO* will not require *metering data* for those purposes;
 - (ii) the timeframe obligations for the delivery of *metering data* relating to a *metering installation* for the purpose of *settlements*; and
 - (iii) the performance standards for *metering data* required for the purpose of *settlements*;
- (5) subject to clause 7.16.4(d)(2), zero MWh as the specification for the *type 5 accumulation boundary*;
- (6) procedures for:
 - (i) the validation and substitution of *metering data*;
 - (ii) the estimation of *metering data*;
 - (iii) the method:
 - (A) by which *interval metering data* for types 4A and 5 *metering installations* and type 4 *metering installations* that do not provide *trading interval energy data*, and *accumulated metering data* is to be converted by *AEMO* into *trading interval metering data*; and
 - (B) of managing the *first-tier load metering data* that is necessary to enable the conversion referred to in subparagraph (A) to take place; and
 - (iv) the method to be used by a *Metering Data Provider* to determine the *calculated metering data* for a *market connection point* for a *market generating unit* in a *regulated SAPS*, that will result in the *allocation of electrical energy losses and unaccounted for energy in the regulated SAPS to the market generating units in the regulated SAPS on a reasonable basis*; and
- (7) other matters in the *Rules* required to be included in the *metrology procedure*.

Schedule 7.3 Metering Data Provider

S7.3.2 Categories of registration

Categories of registration are set out in Table S7.3.2.1.

Table S7.3.2.1 Categories of registration for accreditation

| <i>Metering installation type</i> | Categories of registration | |
|--|--|--|
| 1, 2 3 and/or 4 | <p>Category 1D, 2D, 3D and/or 4D (for <i>remote acquisition</i>, processing and delivery of <i>metering data</i> for <i>connection points</i>)</p> <p><u>Category 1SAPD, 2SAPD, 3SAPD and/or 4SAPD (for remote acquisition, calculation, processing and delivery of <i>calculated metering data</i> for <i>market connection points</i> for <i>market generating units</i> in a <i>regulated SAPS</i>)</u></p> | <p>Category 4S (for <i>small customer metering installations</i> in relation to <i>remote acquisition</i>, processing and delivery of <i>metering data</i> for <i>connection points</i>)</p> |
| 4A, 5 and/or 6 | <p>Category 4AC, 5C and/or 6C (for manual collection or <i>remote acquisition</i> of <i>metering data</i>)</p> | <p>Category 4AD, 5D and/or 6D (for manual collection, processing and delivery of <i>metering data</i> or for <i>remote acquisition</i>, processing and delivery of <i>metering data</i>)</p> |
| 7 | <p>Category 7D (for processing and delivery of <i>calculated metering data</i> <u>for a type 7 metering installation</u>)</p> | |

CHAPTER 10

10. Glossary

adoptive SAPS network

A distribution network in a participating jurisdiction in respect of which the law of the participating jurisdiction provides for a particular stand-alone power system, or a class of stand-alone power systems, to form part of the national electricity system.

calculated metering data

The *trading interval* data corresponding to the calculation of consumed energy for a type 7 metering installation in accordance with the *metrology procedure*.

For a market connection point for a market generating unit in a regulated SAPS, the trading interval data calculated by the Metering Data Provider in accordance with method specified by AEMO in the metrology procedure in accordance with clause 7.16.3(c)(6)(iv).

Calculated metering data is held in the metering data services database and the metering database.

distribution system

A distribution network, together with the connection assets associated with the distribution network, which is:

- (a) connected to another transmission or distribution system; or
- (b) comprised in a regulated SAPS.

Connection assets on their own, and dedicated connection assets in respect of which a Primary Transmission Network Services Provider is registered, do not constitute a distribution system.

DNSP-led SAPS project

A project undertaken by a Distribution Network Service Provider to address system limitations (as defined in clause 5.10.2) and that involves the planning, development, construction and commissioning of a stand-alone power system.

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 national electricity system ~~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.

In this definition, the ‘national electricity system’ includes regulated SAPS.

market

Any of the markets or exchanges described in the *Rules*, for so long as the market or exchange is conducted by AEMO.

A market includes the arrangements in rule 3.21 for the sale and purchase of SAPS energy.

Market Participant

A person who is registered by AEMO as a Market Generator, Market Customer, Market Small Generation Aggregator, Market Ancillary Service Provider, Market SAPS Resource Provider or Market Network Service Provider under Chapter 2.

Market SAPS Resource Provider

A person who:

- (a) has classified one or more generating units connected to a regulated SAPS as a market generating unit; and
- (b) is registered by AEMO as a Market SAPS Resource Provider under Chapter 2.

national grid

The sum of all *connected transmission systems and distribution systems* and regulated SAPS within the *participating jurisdictions*.

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*, but excluding a SAPS option.

For the purposes of this definition, **transmission asset** and **distribution asset** has the same meaning as in clause 5.10.2.

non-network option

A means by which an *identified need* can be fully or partly addressed other than by a *network option* or a SAPS option.

power system

The electricity power system of the *national grid* including associated *generation and transmission and distribution networks* for the *supply of electricity* but excluding regulated SAPS, operated as an integrated arrangement.

regulated SAPS, regulated stand-alone power system

A stand-alone power system:

- (a) implemented as a DNSP-led SAPS project; or
- (b) of a Distribution Network Service Provider designated by a law of a participating jurisdiction as a part of the national electricity system.

SAPS energy

Electrical energy flowing at a connection point (including a child connection point) in a regulated SAPS.

SAPS facility

A facility comprised in or connected, directly or indirectly, to a regulated SAPS.

SAPS option

A means by which an identified need can be fully or partly addressed by converting a part of a distribution network to a regulated SAPS.

SAPS Participant

A Registered Participant in its capacity as:

- (a) the owner, operator or controller of a SAPS facility; or
- (b) the financially responsible Market Participant in respect of a connection point in a regulated SAPS.

SAPS performance and supply standards

The standards for performance and quality of supply applicable to a regulated SAPS of a Distribution Network Service Provider developed and published by the Distribution Network Service Provider in accordance with clause 5.13B.1.

SAPS Resource Provider

A person who:

- (a) intends to supply, or supplies, electricity from one or more generating units that are connected to a regulated SAPS; and
- (b) is registered by AEMO as a SAPS Resource Provider under Chapter 2.

SAPS settlement price

For a trading interval, the price determined in accordance with clause 3.21.2 to be the SAPS settlement price for the financial year in which the trading interval falls.

stand-alone distribution system

A distribution system that does not form part of the interconnected national electricity system.

stand-alone power system

A stand-alone distribution system and the generating systems and other facilities connected to the stand-alone distribution system.

transmission or distribution system

A transmission system or distribution system that:

- (a) is used to convey, and control the conveyance of, electricity to customers (whether wholesale or retail); and
- (b) is connected to another such system or is a regulated SAPS.

CHAPTER 11

11. Savings and Transitional Rules

Part [XXX] Distributor-led SAPS

11.[xxx] Rules consequential on the making of the National Electricity Amendment ([Name of rule]) Rule 2020

11.[xxx].1 Definitions

(a) In this rule 11.[xxx]:

Amending Rule means the National Electricity Amendment ([Name of rule]) Rule 2020.

effective date means the date of commencement of Schedules [x, y and z] of the Amending Rule.

industry engagement document has the same meaning as in new clause 5.10.2.

industry engagement strategy means has the same meaning as in new clause 5.10.2.

net generation revenue for a SAPS generating system for a period is the total of the *trading amounts* received under Chapter 3 for electricity from the SAPS generating system in that period less the total of the *trading amounts* paid under Chapter 3 for electricity consumed by the SAPS generating system in that period.

new Chapter 10 means Chapter 10 as in force immediately after the effective date.

new clause 5.10.2 means clause 5.10.2 as in force immediately after the effective date.

new clause 5.13B.2 means clause 5.13B.2 as in force immediately after the effective date.

SAPS application date means the date from which a network becomes an *adoptive SAPS network*.

SAPS customer engagement document has the same meaning as in new clause 5.10.2.

SAPS customer engagement strategy has the same meaning as in new clause 5.10.2.

SAPS generating system means a *generating system connected to a stand-alone distribution system in a regulated SAPS*.

(b) Italicised terms used in this rule 11.[xxx] have the same meaning as in new Chapter 10.

11.[xxx].2 Amendments to AEMO documents

(a) By the effective date, AEMO must review and where necessary amend and *publish* the following documents to take into account the Amending Rule:

- (1) the generator registration exemption guidelines made by AEMO under clause 2.2.1(c);
 - (2) the credit limit procedures made by AEMO under clause 3.3.8(c);
 - (3) the *Market Management Systems Access Procedures*;
 - (4) the *PoLR costs procedures*;
 - (5) the *Reliability Forecast Guidelines*;
 - (6) the *metrology procedure*; and
 - (7) the *service level procedures*.
- (b) Amendments made in accordance with paragraph (a) must take effect on and from the effective date.
- (c) By the effective date, AEMO must review guidelines made for the purposes of clause 7.16.8 and if necessary consult with the National Measurement Institute about amendments to the guidelines to take into account the Amending Rule.

11.[xxx].3 Amendments to AER documents

- (a) By the effective date, the AER must review and where necessary amend and publish the following documents to take into account the Amending Rule:
 - (1) the regulatory investment test for distribution application guidelines made by the AER under clause 5.17.2;
 - (2) the connection charge guidelines made by the AER under clause 5A.E.3
 - (3) the *Distribution Service Classification Guidelines*;
 - (4) the *Asset Exemption Guidelines*;
 - (5) the *Cost Allocation Guidelines*;
 - (6) the *Distribution Ring-Fencing Guidelines*;
 - (7) the *Distribution Reliability Measures Guidelines*;
 - (8) the Forecasting Best Practice Guidelines made by the AER under clause 4A.B.5;
 - (9) the Contracts and Firmness Guidelines made by the AER in accordance with clause 4A.E.8;
 - (10) the Reliability Compliance Procedures and Guidelines (as defined in the *National Electricity Law*); and
 - (11) the MLO Guidelines made by the AER under clause 4A.G.25.
- (b) Amendments made in accordance with paragraph (a) must take effect on and from the effective date.

11.[xxx].4 Shared Asset Guidelines

- (a) By 1 July 2025, the AER must review and where necessary amend and publish the *Shared Asset Guidelines* to take into account the Amending Rule.
- (b) Amendments made in accordance with paragraph (a):

- (1) must take effect on and from the date specified in that paragraph or any earlier time specified by the AER when it makes the *Shared Asset Guidelines*; and
 - (2) may take effect at different times in relation to different *Distribution Network Service Providers* to take into account the timing of distribution determinations.
- (c) Paragraph (d):
- (1) applies in relation to a *Distribution Network Service Provider* if at any time after the effective date the *regulatory asset base* of the *Distribution Network Service Provider* includes a SAPS generating system; and
 - (2) ceases to apply in relation to a *Distribution Network Service Provider* referred to in subparagraph (1) when the amendments made in accordance with paragraph (a) take effect in relation to the *Distribution Network Service Provider*.
- (d) If this paragraph applies in relation to a *Distribution Network Service Provider*, the AER must, for in each distribution determination for the *Distribution Network Service Provider* made after the effective date:
- (1) determine the net generation revenue for the previous *regulatory control period* for the SAPS generating systems included in the *Distribution Network Service Provider's regulatory asset base*; and
 - (2) if that amount is positive, deduct the amount from the *annual revenue requirement* for the *Distribution Network Service Provider* for the first *regulatory year* in the relevant *regulatory control period*.
- (e) The deduction under paragraph (d) applies in addition to any other reduction to the *annual revenue requirement* for a *Distribution Network Service Provider* made in accordance with the clause 6.4.4 and the *Shared Asset Guidelines*.

11.[xxx].5 Industry engagement obligations

- (a) A *Distribution Network Service Provider* for an *adoptive SAPS network* must, by the date determined under paragraph (c), review and where necessary amend and *publish* its industry engagement strategy and industry engagement document to take into account the Amending Rule.
- (b) A *Distribution Network Service Provider* for an *adoptive SAPS network* must, in accordance with new clause 5.13B.2 and by the date determined under paragraph (c):
 - (1) develop its initial SAPS customer engagement strategy; and
 - (2) develop and *publish* its initial SAPS customer engagement document.
- (c) The date for completion of the activities required under paragraph (a) and (b) is the later of:
 - (1) the SAPS application date for the *adoptive SAPS network*; and
 - (2) the date falling 6 months after the making of jurisdictional legislation or other instrument by reason of which the *Distribution Network Service Provider's network* became an *adoptive SAPS network*.

National Energy Retail Rules

Part 1 Preliminary

Division 1 Introduction and definitions

3 Definitions

Note—

Words and expressions used in these Rules have the same meanings as they have, from time to time, in *the Law* or relevant provisions of *the Law*, except so far as the contrary intention appears in these Rules. See clause 13 of Schedule 2 to the NGL (as applied by section 8 of *the Law*).

In these Rules—

acceptable identification, in relation to:

- (a) a residential customer—includes any one of the following:
 - (i) a driver licence (or driver's licence) issued under *the law* of a State or Territory, a current passport or another form of photographic identification;
 - (ii) a Pensioner Concession Card or other entitlement card, issued under *the law* of the Commonwealth or of a State or Territory;
 - (iii) a birth certificate; or
- (b) a business customer that is a sole trader or partnership—includes one or more of the forms of identification for a residential customer for one or more of the individuals that conduct the business or enterprise concerned; or
- (c) a business customer that is a body corporate—means Australian Company Number or Australian Business Number of the body corporate;

bill issue date means the date, included in a bill under rule 25 (1) (e), on which the bill is sent by the retailer to a small customer;

cooling off period—see rule 47 (2);

customer authorised representative means a person authorised by a:

- (a) small customer to act on its behalf under rules 56A and 56B; or
- (b) customer to act on its behalf under rule 86A.

disconnection warning notice—see rule 110;

distributor planned interruption—see rule 88;

dual fuel market contract means:

- (a) one market retail contract between a small customer and a retailer for the sale of both electricity and gas by the retailer to the small customer; or
- (b) two market retail contracts with the same small customer, one for the sale of electricity and the other for the sale of gas to the customer, where the prices or conditions of one or both contracts are contingent on the customer entering into both contracts.

e-marketing activity has the meaning given by section 109A of the *Telecommunications Act 1997* of the Commonwealth;

good electricity industry practice has the same meaning as in the NER;

interruption:

- (a) in the case of Division 9A of Part 2, means a temporary unavailability or temporary curtailment of the supply of electricity to a customer's premises; and
- (b) in all other cases, means a temporary unavailability or temporary curtailment of the supply of energy to a customer's premises, but does not include unavailability or curtailment in accordance with the terms and conditions of a customer retail contract or customer connection contract, and any applicable tariff, agreed with the customer;

Temporary unavailability or temporary curtailment of the supply of energy to a customer's premises to implement a *regulated SAPS conversion* must be treated as an *interruption* for the purposes of these Rules and the *Law* (and not a de-energisation or disconnection).

Note:

Rule 107(4) provides that Part 6 (relating to de-energisation or disconnection of premises) does not apply to *interruptions* under Division 6 of Part 4 or under Division 9A of Part 2.

life support equipment means any of the following:

- (a) an oxygen concentrator;
- (b) an intermittent peritoneal dialysis machine;
- (c) a kidney dialysis machine;
- (d) a chronic positive airways pressure respirator;
- (e) crigler najjar syndrome phototherapy equipment;
- (f) a ventilator for life support;
- (g) in relation to a particular customer—any other equipment that a registered medical practitioner certifies is required for a person residing at the customer's premises for life support;

maintenance replacement means the replacement of a small customer's existing electricity *meter* arranged by a retailer that is based on the results of sample testing of a *meter* population carried out in accordance with Chapter 7 of the NER:

- (a) which indicates that it is necessary or appropriate, in accordance with *good electricity industry practice*, for the *meter* to be replaced to ensure compliance with the *metering rules*; and
- (b) details of which have been provided to the retailer under Chapter 7 of the NER, together with the results of the sample testing that support the need for the replacement;

meter, in relation to a customer, means the device that measures the quantity of energy passing through it or records the consumption of energy at the customer's premises;

metering coordinator, in the case of electricity—has the same meaning as "*Metering Coordinator*" in the NER;

metering data has the same meaning as:

- (a) in the case of electricity—in the NER; or

(b) in the case of gas—in the applicable Retail Market Procedures;

metering data provision procedures has the same meaning as in the NER.

metering installation malfunction has the same meaning as in the NER;

metering rules:

(a) for electricity—means the applicable Retail Market Procedures and Chapter 7 of the NER;

(b) for gas—means the applicable Retail Market Procedures;

NEM Representative means a related body corporate (within the meaning of the *Corporations Act 2001* of the Commonwealth) of an electricity retailer that is registered with AEMO as a market customer under the NER and that, directly or indirectly, sells electricity to the retailer for on-sale to customers;

new meter deployment means the replacement of the existing electricity *meter* of one or more small customers which is arranged by a retailer other than where the replacement is:

(a) at the request of the relevant small customer or to enable the provision of a product or service the customer has agreed to acquire from the retailer or any other person;

(b) a *maintenance replacement*;

(c) as a result of a *metering installation malfunction*; or

(d) required under section 59(2) of *the Law*;

pay-by date—see rule 26;

regulated SAPS conversion means the conversion of a part of a distribution system to a regulated stand-alone power system.

relevant authority means:

(a) AEMO; or

(b) State or federal police; or

(c) a person or body who has the power under law to direct a distributor to de-energise premises;

reminder notice—see rule 109;

responsible person, in the case of gas - means the person who, under the applicable Retail Market Procedures, is responsible for *meter* reading;

retailer planned interruption—see rule 59B;

security deposit means an amount of money paid or payable, in accordance with the Rules, to a retailer as a security against non-payment of a bill;

telemarketing call has the same meaning as in the *Telecommunications Act 1997* of the Commonwealth;

the Law means the National Energy Retail Law;

unplanned interruption—see rule 88.

void transfer means the transfer of a small customer from a retailer to another retailer which is void under section 41(1) of *the Law*.

void transfer date means the date of the *void transfer*.

Part 4

Relationship between distributors and customers

Division 6

Distributor interruption to supply

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Definitions

In this Division:

distributor planned interruption means an *interruption* of the supply of energy for:

- (a) the planned maintenance, repair or augmentation of the transmission system or a regulated SAPS conversion; or
- (b) the planned maintenance, repair or augmentation of the distribution system, including planned or routine maintenance of *metering* equipment (excluding a *retailer planned interruption*); or
- (c) the installation of a new connection or a connection alteration;

transmission system:

- (a) for electricity—means a transmission system within the meaning of the NEL; or
- (b) for gas—means a transmission pipeline within the meaning of the NGL;

unplanned interruption means an *interruption* of the supply of energy to carry out unanticipated or unplanned maintenance or repairs in any case where there is an actual or apprehended threat to the safety, reliability or security of the supply of energy, and includes:

- (a) an *interruption* in circumstances where, in the opinion of the distributor, a customer's installation or the distribution system poses an immediate threat of injury or material damage to any person, any property or the distribution system; or
- (b) an *interruption* in circumstances where:
 - (i) there are health or safety reasons warranting an *interruption*; or
 - (ii) there is an emergency warranting an *interruption*; or
 - (iii) the distributor is required to *interrupt* the supply at the direction of a *relevant authority*; or
- (c) an *interruption* to shed demand for energy because the total demand for energy at the relevant time exceeds the total supply available; or
- (d) an *interruption* to restore supply to a customer.