NATIONAL ELECTRICITY RULES  $\,$  ERC0294 DCA RULE CHANGE – EXCERPTS OF CHAPTERS 2, 3, 5, 6A, 7, 8 AND 10  $\,$  VERSION 150  $\,$ 

ERC0294 DCA Rule Change – excerpts of Chapters 2, 3, 5, 6A, 7, 8 and 10				

## DRAFT DETERMINATION VERSION

Indicative markup of the National Electricity Rules showing changes made by the Draft National Electricity Amendment (Connection to dedicated connection assets) Rule 2021.

Note: This is an indicative consolidated version of the National Electricity Rules as amended by the Draft National Electricity Amendment (Connection to dedicated connection assets) Rule 2021. It includes a markup of amendments made to relevant extracts of Chapters 2, 3, 5, 6A, 7, 8 and 10 of the National Electricity Rules. This document is provided for information purposes only. The Australian Energy Market Commission does not guarantee the accuracy, reliability or completeness of this indicative consolidated version of the National Electricity Rules.

CHAPTER 2		

## **Registered Participants and Registration**

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## 2.5 Network Service Provider

## 2.5.1 Registration as a Network Service Provider

- (a) Subject to clause 2.5.1(d), a person must not engage in the activity of owning, controlling or operating a *transmission or distribution system* unless that person is registered by *AEMO* as a *Network Service Provider*.
- (b) [Deleted]
- (c) [Deleted]
- (d) The AER may, in accordance with the guidelines issued from time to time by the AER, exempt any person or class of persons who is or are required to register as a Network Service Provider from:
  - (1) the requirement to register as a *Network Service Provider*; or
  - (2) the operation of Chapter 5,

where (in the AER's opinion) an exemption is not inconsistent with the national electricity objective.

- (d1) An exemption granted by the AER under paragraph (d):
  - (1) is, if the exemption relates to a person who owns, controls or operates an *embedded network*, deemed to be subject to the *ENM conditions* unless:
    - (i) the *embedded network* the subject of the exemption is located in a *participating jurisdiction* in which persons *connected*, or proposed to be *connected*, to the *embedded network* are not afforded the right to a choice of *retailer*; or
    - (ii) the AER has made a determination under paragraph (d2); and
  - (2) may be subject to such other conditions as the AER deems appropriate.
- (d2) If the *AER* considers that the likely costs of complying with *ENM conditions* outweigh the likely benefits to persons *connected*, or proposed to be *connected*, to the *embedded network*, the *AER* may, when granting an exemption under paragraph (d), determine to exempt that person or class of persons from the requirement to comply with the *ENM conditions* until such time as an *ENM conditions trigger* occurs.
- (d3) [Deleted] An exemption granted by the *AER* under paragraph (d) is, if the exemption relates to a person who owns, controls or operates a *large dedicated connection asset*, deemed to be subject to the condition that the person must comply with clause 5.2A.6(c), clause 5.2A.8 and rule 5.5, as if that person were a *Dedicated Connection Asset Service Provider*.
- (d4) A person granted an exemption under paragraph (d3) must comply with the deemed conditions and any other conditions imposed by the AER for that exemption.[Deleted]

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

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

## 2.5.1A Dedicated Connection Asset Service Provider[Deleted]

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

#### Note

- A third party DCA is defined for the purposes of Chapter 2 to be a transmission system.
- (c) A Transmission Network Service Provider wishing to classify a dedicated connection asset must apply to do so in its application under rule 2.9 or separately by submitting a notice to AEMO in the form prescribed for this purpose by AEMO. The Transmission Network Service Provider must provide sufficient evidence to satisfy AEMO that the dedicated connection asset is appropriately classified as a large dedicated connection asset or small dedicated connection asset (as applicable).
- (d) If AEMO receives an application for classification under paragraph (c), it may approve or reject the application. AEMO must approve the classification of a dedicated connection asset if it is satisfied, based on the evidence that it is provided by the Transmission Network Service Provider, that the part of the transmission system is a large dedicated connection asset or small dedicated connection asset (as applicable).

- (e) Nothing in paragraph (b) requires the classification of any *dedicated* connection asset which forms part of a *transmission system* in respect of which an exemption under paragraph 2.5.1(d) applies.
- (f) A Dedicated Connection Asset Service Provider is:
  - (1) only required to comply with a rule that is expressed to apply to a Network Service Provider or a Transmission Network Service Provider in those capacities where the rule expressly provides that it applies to a Dedicated Connection Asset Service Provider; and
  - (2) required to comply with all rules which are expressed to apply to a *Registered Participant*.
- (g) A Transmission Network Service Provider is taken to be a Dedicated Connection Asset Service Provider only in so far as its activities relate to any of its dedicated connection assets.

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## 2.12 Interpretation of References to Various Registered Participants

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

- (4A) a "*Trader*" applies to a person only in so far as it is applicable to matters connected with the person's activities as a *Trader*;
- (4B) a "*Reallocator*" applies to a person only in so far as it is applicable to matters connected with the person's activities as a *Reallocator*;
- (5) subject to clause 2.5.1A(f), a "Network Service Provider" applies to a person registered as a Network Service Provider only in so far as it is applicable to matters connected with the person's network services, including market network services and scheduled network services;
- (5A) a "Dedicated Connection Asset Service Provider" applies to a person only in so far as it is applicable to matters connected with the person's dedicated connection assets; [Deleted];
- (6) a "Market Network Service Provider" or "Scheduled Network Service Provider" applies to a person only in so far as it is applicable to matters connected with the person's market network services or scheduled network services respectively;
- (7) a "Market Participant" applies to a person who is a Market Participant and:
  - (i) where that person is registered as a *Market Generator*, in so far as it is applicable to matters connected with the person's *market generating units* or *ancillary services generating units*; and
  - (i1) where that person is registered as a *Market Small Generation Aggregator*, in so far as it is applicable to matters connected with the person's *market generating units*; and
  - (i2) where that person is registered as a *Market Ancillary Service Provider*, in so far as it is applicable to matters connected with the person's *ancillary service load*; and
  - (ii) where that person is registered as a *Market Customer*, in so far as it is applicable to matters connected with the person's *market loads* or *market ancillary service loads*; and
  - (iii) where that person is registered as a *Market Network Service Provider*, in so far as it is applicable to matters connected with the person's *market network services*; and
  - (iv) where that person is registered in any category of *Market Participant* additional to a *Market Generator* and/or a *Market Customer* and/or a *Market Network Service Provider*, to the extent to which the reference would otherwise apply to the person if it were not taken to be a *Market Generator*, *Market Customer* or *Market Network Service Provider*; and
- (8) a "Registered Participant" applies to a person who is registered under Chapter 2 and:
  - (i) where that person is registered as a *Generator*, in so far as it is applicable to matters connected with any of the *Generator's scheduled generating units*, semi-scheduled generating units, non-scheduled generating units, market generating units and non-market generating units;

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

CHAPTER 3		

## 3.6.2 Intra-regional losses

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

- AEMO will, if two intra-regional loss factors apply to a transmission network connection point, apply two intra-regional loss factors in central dispatch and spot market transactions. The procedure determined under this paragraph (d1) must describe how AEMO will identify and measure the generation and load at each transmission network connection point and apply the relevant intra-regional loss factor against that generation or load.
- (e) In preparing the methodology referred to in clause 3.6.2(d), *AEMO* must implement the following principles:
  - (1) Intra-regional loss factors are to apply for a financial year.
  - (2) An *intra-regional loss factor* must, as closely as is reasonably practicable, describe the average of the *marginal electrical energy losses* for electricity transmitted between a *transmission network connection point* and the *regional reference node* in the same *region* for each *trading interval* of the *financial year* in which the *intra-regional loss factor* applies.
  - (2A) *Intra-regional loss factors* must aim to minimise the impact on the *central dispatch* process of *generation* and *scheduled load* compared to that which would result from a fully optimised dispatch process taking into account the effect of losses.
  - (3) Forecast *load* and *generation* data for the *financial year* for which the *intra-regional loss factor* is to apply must be used. The forecast *load* and *generation* data used must be that *load* and *generation* data prepared by *AEMO* pursuant to clause 3.6.2A.
  - (4) The *load* and *generation* data referred to in clause 3.6.2(e)(3) must be used to determine *marginal loss factors* for each *transmission network connection point* for the *financial year* to which the *load* and *generation* data relates.
  - (5) An intra-regional loss factor for a transmission network connection point is determined using a volume weighted average of the marginal loss factors for the transmission network connection point.
- (f) *AEMO* must calculate *intra-regional loss factors* for each *transmission network connection point* for each *financial year* in accordance with the methodology prepared and published by *AEMO* under clause 3.6.2(d).
- (f1) By 1 April in each year, *AEMO* must *publish* the *intra-regional loss factors* revised under clause 3.6.2(f) and to apply for the next *financial year*.
- (g) AEMO must, in accordance with the Rules consultation procedures, determine, publish and maintain the methodology which is to apply to the calculation of average intra-regional loss factors, determined in accordance with clause 3.6.2(b)(3), for each virtual transmission node proposed by a Distribution Network Service Provider.
- (h) As soon as practicable after the *publication* of the methodology referred to in clause 3.6.2(g), and thereafter by 1 April in each year, *AEMO* must calculate and *publish* the *intra-regional loss factors* for each *virtual transmission node*, determined in accordance with clause 3.6.2(b)(3), that are to apply for the next *financial year*.

- (i) Notwithstanding clauses 3.6.2(a) to (f1), AEMO must:
  - (1) determine an *intra-regional loss factor* in the *financial year* in which an *intra-regional loss factor* is to apply for a *transmission network connection point* which is established in that *financial year* in accordance with the procedure for establishing *connection* set out in rule 5.3, provided that *AEMO* did not determine an *intra-regional loss factor* for the *transmission network connection point* pursuant to clause 3.6.2(f1) in the *financial year* preceding that in which the *connection point* is established; or
  - (2) revise an *intra-regional loss factor* in the *financial year* in which an *intra-regional loss factor* is to apply for a *transmission network* connection point which is modified in that *financial year* in accordance with the procedure for modifying connection set out in rule 5.3, provided that, in *AEMO's* reasonable opinion, the modification to that connection point results in a material change in the capacity of the connection point.
- (j) *AEMO* must, where required to determine an *intra-regional loss factor* for an established or modified *transmission network connection point* under clause 3.6.2(i), do so as far as practicable in accordance with the methodology *published* by *AEMO* pursuant to clause 3.6.2(d).
- (k) For the purposes of clause 3.6.2(j), the forecast *load* and *generation* data used to calculate an *intra-regional loss factor* for the *transmission network connection point* must be determined using the forecast *load* and *generation* data determined by *AEMO* under clause 3.6.2A for other *transmission network connection points* in the same *region* for that *financial year* adjusted to take into account the effect of the established or modified *connection point*. Notwithstanding this clause 3.6.2(k), *Registered Participants* must comply with their obligations with respect to the provision of information to *AEMO*, for the purpose of determining new or revised *intra-regional loss factors* for *connection points* that are established or modified during the *financial year* in which the *intra-regional loss factors* are to apply, specified by the methodology developed and *published* by *AEMO* under clause 3.6.2A.
- (l) In the case of a *connection point* that is established in the *financial year* in which an *intra-regional loss factor* is to apply:
  - (1) an *intra-regional loss factor* determined by *AEMO* in accordance with clause 3.6.2(i) will apply from the time an *intra-regional loss factor* is determined and *published* by *AEMO*; and
  - (2) AEMO must use reasonable endeavours to determine and *publish* an *intra-regional loss factor* at least 45 *business days* prior to the commencement of operation of the established *connection point*, where the relevant *Registered Participants* comply with any applicable requirements and deadlines for the provision of information to *AEMO* specified by the methodology *published* by *AEMO* under clause 3.6.2A.
- (m) In the case of a *connection point* that is modified in the *financial year* in which an *intra-regional loss factor* is to apply:

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

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

- (a) AEMO must prepare load and generation data for each financial year to be used in both the determination of inter-regional loss factor equations under clause 3.6.1 and intra-regional loss factors under clause 3.6.2 in accordance with the methodology determined, published and maintained by AEMO for this purpose, under clause 3.6.2A(b).
- (b) *AEMO* must determine, *publish* and maintain, in accordance with the *Rules* consultation procedures, a methodology for:
  - (1) forecasting the *load* and *generation* data to be used in both the determination of *inter-regional loss factor* equations and *intra-regional loss factors*, including new or revised *intra-regional loss factors* for *connection points* that are established or modified, respectively, during the *financial year* in which the *intra-regional loss factors* are to apply;
  - (2) modelling additional *load* and *generation* data, where required, to be used in determining *inter-regional loss factor* equations; and
  - (3) the collection of relevant data from *Registered Participants*, including without limitation deadlines for the provision of that data by *Registered Participants*.
- (c) The methodology developed and *published* by *AEMO* under clause 3.6.2A(b) must specify information reasonably required by *AEMO* to fulfil its obligations under clause 3.6.2A, including without limitation historic *load* and *generation* data, forecast *energy* and *maximum demand* data for a *connection point* and forecast data for any new *loads*. In particular, the methodology must specify information to be provided by *Registered Participants* that is in addition to the information provided by those *Registered Participants* under other provisions of the *Rules*.

- (d) In preparing the methodology for forecasting and modelling *load* and *generation* data under clause 3.6.2A(b), *AEMO* must implement the following principles:
  - (1) The forecast *load* and *generation* data must be representative of expected *load* and *generation* in the *financial year* in which the *interregional loss factor* equations or *intra-regional loss factors* are to apply having regard to:
    - (i) actual *load* and *generation* data available for a 12 month period defined by the methodology with the objective to use the most recent *load* and *generation* data practicable;
    - (ii) projected *load* growth between each calendar month to which the actual *load* and *generation* data referred to in clause 3.6.2A(d)(1)(i) relates and the same calendar month in the *financial year* for which the forecast *load* and *generation* data is determined; and
    - (iii) the projected *network* configuration and projected *network* performance for the *financial year* in which the *inter-regional loss factor* equation or *intra-regional loss factor*, as the case may be, is to apply.
  - (2) Additional modelled *load* and *generation* data sets must only be used:
    - (i) in the determination of *inter-regional loss factor* equations under clause 3.6.1; and
    - (ii) where the range of forecast *load* and *generation* data is not sufficient to derive *inter-regional loss factor* equations to apply over the full range of transfer capability of the *regulated interconnector*.
- (e) Registered Participants must comply with the obligations to provide information set out in the methodology developed and published by AEMO under this clause 3.6.2A, including the deadlines for the provision of that information and any other obligations with respect to the provision of that information set out in the methodology.

## 3.6.2B Boundary point losses

- (a) Boundary point losses are electrical energy losses that occur due to the transfer of electricity between a regional reference node and a boundary point in the same region.
- (b) Boundary point loss factors:
  - (1) notionally describe the *marginal electrical energy losses* for electricity transmitted between a *regional reference node* and a *boundary point* in the same *region* for a defined time period and associated set of operating conditions; and
  - (2) apply for a *financial year*.
- (c) AEMO must determine boundary point loss factors for each boundary point for each financial year having regard to the following:

- (1) the methodology prepared and *published* by *AEMO* under clauses 3.6.2(d) and 3.6.2(d1) as it relates to *intra-regional losses* to the extent *AEMO* determines they are relevant to the calculation of *boundary point losses*;
- (2) the need for the *boundary point loss factors* determined by *AEMO* must be in a form that can be used by *Primary Transmission Network Service Providers* to facilitate the calculation of the *settlements residues* that accrue on a *designated network asset*; and
- (3) forecast *load* and *generation* data for the *financial year* relevant to a <u>boundary point loss factor</u> that is prepared by *AEMO* pursuant to clause 3.6.2A.
- (d) By 1 April in each year, AEMO must publish the boundary point loss factors determined under paragraph (c) and to apply for the next financial year.

#### (e) If:

- (1) a new *boundary point* is established during the *financial year*, for which there is no *boundary point loss factor published* by *AEMO* pursuant to paragraph (d); or
- (2) a transmission network connection point located behind the boundary point is established or modified in accordance with rule 5.3, that in AEMO's reasonable opinion results in a material change to the boundary point losses, then,
- AEMO must determine and publish the boundary point loss factor that applies for that financial year for that boundary point asso far as practicable in accordance paragraph (c).

CHAPTER 5			

# 5. Network Connection Access, Planning and Expansion

## Part A Introduction

## 5.1 Introduction to Chapter 5

## 5.1.1 Structure of this Chapter

- (a) This Chapter deals with matters relating to *networks*.
- (b) It is divided into the following Parts:
  - (1) this Part is introductory;
  - (2) Part B provides a framework for *connection* and access to a *transmission network* or a *distribution network* and to the *national grid*;
  - (3) Part C addresses the *network* related issues following the negotiation of a *connection agreement* under Part B, namely the design of *connected* equipment, inspection and testing, commissioning and *disconnection* and reconnection; and
  - (4) Part D deals with the planning and expansion of *networks* and the *national grid*.

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

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

	Connection Applicant	Process
1	person intending to become a  Registered Participant for a  generating plant connecting to a	Rule 5.3 applies  If the person is connecting to part of a transmission network which is a designated network asset, then rule 5.3 applies

	Connection Applicant	Process
		subject to the relevant <i>access</i> policy (see clause 5A.2.8)
2	A Registered Participant or a person intending to become a Registered Participant (or a person pursuant to clause 5.1A.1(c)) for a load connecting to a transmission network	Rule 5.3 applies  If the person is connecting to part of a transmission network which is a designated network asset, then rule 5.3 applies subject to the relevant access policy (see clause 5A.2.8)
<u>3</u>	A load connecting to a distribution network where the Connection Applicant is a Registered Participant or a person intending to become a Registered Participant (and is not acting as the agent of a retail customer)	Rule 5.3 applies
4	A distribution network (including an embedded network) connecting to another distribution network or to a transmission network where the Connection Applicant is a Registered Participant, intending to become a Registered Participant or will obtain an exemption from registration	Rule 5.3 applies
<u>5</u>	A Market Network Service Provider or person intending to register as one seeking connection to a distribution network or a transmission network	Rule 5.3 applies
<u>6</u>	An embedded generating unit connecting to a distribution network where the Connection Applicant is a Registered Participant or a person intending to become a Registered Participant	Rules 5.3 and 5.3A apply (see clause 5.3.1A for the interaction between the two rules)
7	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)

	Connection Applicant	Process
<u>8</u>	A Generator wishing to alter a connected generating plant in the circumstances set out in clause 5.3.9	Clause 5.3.9 applies
9	A Connection Applicant for prescribed transmission services or negotiated transmission services that do not require the establishment or modification of a connection or alteration of a connected generating plant in the circumstances set out in clause 5.3.9	Rule 5.3 applies as modified by clause 5.2A.3(c)
10	An Embedded Generator or Market Network Service Provider applying for distribution network user access	Rule 5.3 or 5.3A (as applicable) and rule 5.3AA apply
<u>11</u>	A load or generating plant connecting to a declared shared network	Rule 5.3 as modified by clause 5.1A.1(d) to (g) and rule 5.3B apply
12	A load connecting to a distribution network where the Connection Applicant is not a Registered Participant and is not intending to become a Registered Participant (unless it is acting as the agent of a retail customer)  A non-registered embedded generator who does not make an election for Rule 5.3A to apply	Chapter 5A applies
	instead of Chapter 5A	
<u>13</u>	A retail customer (or a retailer on behalf of that customer) connecting a micro embedded generator to a distribution network	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;
- 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 <u>Primary Transmission Network Service Provider</u>

  Dedicated Connection Asset Service Provider to have an access policy for a <u>large dedicated connection asset</u> designated <u>network asset</u> and for commercial arbitration under rule 5.5 to apply to a <u>DNA large DCA</u> services access dispute.

#### Part B Network Connection and Access

#### 5.1A Introduction to Part B

## 5.1A.1 Purpose and Application

- (a) This Part B:
  - (1) [**Deleted**]
  - (2) has the following aims:
    - (i) to detail the principles and guidelines governing *connection* and access to a *network*;
    - (ii) to establish the process to be followed by a *Registered Participant* or a person intending to become a *Registered Participant* for establishing or modifying a *connection* to a *network* or for altering *generating plant connected* to a *network*;

- (iii) to address a *Connection Applicant's* reasonable expectations of the level and standard of *power transfer capability* that the relevant *network* should provide; and
- (iv) to establish processes to ensure ongoing compliance with the technical requirements of this Part B to facilitate management of the *national grid*.
- (b) [Deleted].
- (c) If a person who is not a *Registered Participant* or a person intending to become a *Registered Participant* requests *connection* of a *load* to a *transmission network* and agrees to comply with this Part B as if that person was a *Registered Participant*, the relevant *Transmission Network Service Provider* must comply with this Part B as if that person was a *Registered Participant*.
- (d) Subject to paragraphs (e) and (g), the following *Rules* apply in the application of this Part B to *transmission services* provided by means of, or in connection with, the *declared transmission system* of an *adoptive jurisdiction*:
  - (1) a reference to a *Network Service Provider* is, in relation to the provision of *connection services*, to be read as a reference to a *declared transmission system operator*; and
  - (2) a reference to a *Network Service Provider* is, in relation to the provision of *shared transmission services*, to be read as a reference to *AEMO*.
- (e) A reference in any of the following provisions to a *Network Service Provider* will, in relation to the *declared transmission system* of an *adoptive jurisdiction*, be construed as a reference to *AEMO*:
  - (1) clause 5.2.3(b);
  - (2) clause 5.2.6;
  - (3) clause 5.3A.12;
  - (4) clause 5.7.6;
  - (5) clause 5.7.7 (except clause 5.7.7(c));
  - (6) rule 5.11;
  - (7) clause 5.12.1;
  - (8) clause 5.12.2 (except clause 5.12.2(c)(2));
  - (9) clause 5.14.1;
  - (10) schedule 5.1, clause S5.1.2.3;
  - (11) schedule 5.3, clause S5.3.5.
- (f) Subject to clause (f1) a reference in:
  - (1) the definition of RIT-T proponent in clause 5.10.2;
  - (2) clause 5.14.3;
  - (3) clause 5.16.4;
  - (3A) clause 5.16A.4;

- (4) rule 5.16B;
- (5) rule 5.18;
- (6) rule 5.19;
- (7) rule 5.20B; and
- (8) rule 5.20C,

to a *Transmission Network Service Provider* will, in relation to the *declared transmission system* of an *adoptive jurisdiction*, be construed as a reference to *AEMO*.

- (f1) A reference in:
  - (1) the definition of RIT-T proponent in clause 5.10.2;
  - (2) clause 5.16.4; and
  - (2A) clause 5.16A.4; and
  - (3) rule 5.16B,

to a *Transmission Network Service Provider* will, in relation to the *declared transmission system* of an *adoptive jurisdiction*, be construed as a reference to the relevant *declared transmission system operator* where:

- (4) the relevant RIT-T project (as defined in clause 5.10.2) is to address an *identified need* that arises from the retirement or de-rating of *network* assets; and
- (5) a credible option (as defined in clause 5.10.2) for that RIT-T project (as defined in clause 5.10.2) is replacement of *network* assets.
- (g) A reference in any of the following provisions to a *Network Service Provider* will, in relation to the *declared transmission system* of an *adoptive jurisdiction*, be construed as a reference to the relevant *declared transmission system operator*:
  - (1) clause 5.2.3(d)(12), (e) and (e1)(except 5.2.3(e1)(2));
  - (2) clause 5.3.4A(c) and (d);
  - (3) clause 5.9.3;
  - (4) clause 5.9.4;
  - (5) clause 5.9.6;
  - (6) Schedule 5.1, clause S5.1.10.3(a);
  - (7) Schedule 5.2 clause S5.2.3(a)(8).

## 5.1A.2 Principles

This Part B is based on the following principles relating to *connection* to the *national grid*:

(a) all *Registered Participants* should have the opportunity to form a *connection* to a *network* and have access to the *network services* provided by the *networks* forming part of the *national grid*, except that if the *connection* is to a part of

a *network* that is a *designated network asset* then that *connection* and access will be subject to the relevant access *policy*;

- (b) the terms and conditions on which *connection* to a *network* and provision of *network service* is to be granted are to be set out in commercial agreements on reasonable terms entered into between a *Network Service Provider* and other *Registered Participants*;
- (c) the technical terms and conditions of *connection agreements* regarding standards of performance must be established at levels at or above the *minimum access standards* set out in schedules 5.1, 5.2, 5.3 and 5.3a, with the objective of ensuring that the *power system* operates securely and reliably and in accordance with the *system standards* set out in schedule 5.1a;
- (d) [Deleted]
- (e) the operation of the *Rules* should result in the achievement of:
  - (1) long term benefits to *Registered Participants* in terms of cost and *reliability* of the *national grid*; and
  - (2) open communication and information flows relating to *connections* between *Registered Participants* themselves, and between *Registered Participants* and *AEMO*, while ensuring the security of *confidential information* belonging to competitors in the *market*.

## [...]

## 5.2.3 Obligations of network service providers

- (a) To be registered by *AEMO* as a *Network Service Provider*, a person must satisfy the relevant requirements specified in Chapter 2 and submit an application to *AEMO* in such form as *AEMO* may require.
- (b) A *Network Service Provider* must comply with the *power system* performance and quality of *supply* standards:
  - (1) described in schedule 5.1;
  - (2) in accordance with any connection agreement with a Registered Participant,

and if there is an inconsistency between schedule 5.1 and such a *connection* agreement:

- (3) if compliance with the relevant provision of the *connection agreement* would adversely affect the quality or security of *network service* to other *Network Users*, schedule 5.1 is to prevail;
- (4) otherwise the *connection agreement* is to prevail.

#### Note

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

(c) Where the provisions of the *connection agreement* vary the technical requirements set out in the schedules to this Chapter, the relevant *Network Service Provider* must report on such variations to *AEMO* on an annual basis.

AEMO must allow access to such information to all other Network Service Providers and the Network Service Providers must keep such information confidential.

#### Note

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

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

#### Note

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

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

#### Note

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

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

#### Note

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

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

#### Note

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

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

#### Note

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

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

#### Note

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

(e1) A *Network Service Provider* must, except in so far as its *market network* services and parts of its *network* which are used solely for the provision of *market network services* are concerned, arrange for:

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

This clause is classified as a 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.

This clause is classified as a 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*.

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

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

## 5.2.7 [Not used] Obligations of Dedicated Connection Asset Service Providers

- (a) A Dedicated Connection Asset Service Provider must classify its dedicated connection asset as a small dedicated connection asset or a large dedicated connection asset in accordance with Chapter 2.
- (b) A Dedicated Connection Asset Service Provider must plan and design its dedicated connection assets and ensure that they are operated to comply with:
- (1) the *performance standards* applicable to those *facilities connected* to those *dedicated connection assets*;
- (2) subject to subparagraph (1), its connection agreement applicable to those dedicated connection assets: and
- (3) subject to subparagraph (2), the system standards.

#### Note

- This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)
- (c) A Dedicated Connection Asset Service Provider for a large dedicated connection asset must prepare, maintain and publish an access policy in accordance with clause 5.2A.8.
- (d) A Dedicated Connection Asset Service Provider must:
- (1) permit and participate in inspection and testing of *facilities* and equipment in accordance with rule 5.7;
- (2) permit and participate in commissioning of *facilities* and equipment which are to be *connected* to a *network* for the first time in accordance with rule 5.8;
- (3) give notice of intended voluntary permanent *disconnection* in accordance with rule 5.9; and
- (4) in relation to a connection to an identified user shared asset, ensure that there is a connection agreement between itself and the Primary Transmission Network Service Provider.

## 5.2A Transmission network connection and access

## 5.2A.1 Application

- (a) This rule 5.2A does not apply in relation to *connection* and access to the *declared transmission system* of an *adoptive jurisdiction*.
- (b) In this rule 5.2A, a reference to ownership in relation to an asset includes a leasehold interest.

## 5.2A.2 Relevant assets

(a) The assets relevant to *connection* and access to the *transmission network* and the person who is registered for those assets are set out in the following table:

	Asset	Registered Person
1	primary transmission network in the participating jurisdictions.	Primary Transmission Network Service Provider
2	identified user sharedfunded network asset owned by the Primary Transmission Network Service Provider	Primary Transmission Network Service Provider  (forms part of that provider's broader transmission network)
3	third party IUSA funded network asset not owned by the Primary Transmission Network Service Provider	Primary Transmission Network Service Provider (as controller and operator of the third party IUSAfunded network asset under a network operating agreement)
		(forms part of that provider's broader <i>transmission network</i> )
4	dedicated connection asset	If owned, operated or controlled by a Transmission Network  Service Provider (forms part of that provider's broader transmission system) Dedicated  Connection Asset Service  Provider  For a dedicated connection asset
		that is not owned, operated or controlled by a <i>Primary Transmission Network Service Provider</i> , that asset forms part of the asset owner's <i>facility</i> .
<u>5</u>	network connection asset	Transmission Network Service Provider

	Asset	Registered Person
<u>6</u>	facility of a Transmission Network User	Transmission Network User (if registration required or obtained)

- (b) This clause sets out an overview of the framework relating to the ownership of, and *connection* and access to, a *funded network asset*:
  - (1) a funded network asset is for the benefit of specific Transmission

    Network Users and a Primary Transmission Network Service Provider
    is not entitled to receive a charge for a funded network asset under

    Chapter 6A;
  - (2) a funded network asset forms part of the Primary Transmission Network Service Provider's transmission network;
  - (3) a funded network asset may be owned by persons other than the Primary Transmission Network Service Provider;
  - (4) a funded network asset may comprise multiple components owned by different persons, who would each have a separate network operating agreement with the Primary Transmission Network Service Provider for the component that person owns;
  - (5) if the *Primary Transmission Network Service Provider* does not own a funded network asset, the *Primary Transmission Network Service*Provider controls and operates that funded network asset as part of its transmission network under the relevant network operating agreement;
  - (6) connections to a funded network asset (other than those components which comprise a designated network asset) are subject to access and connection requirements under this Chapter 5;
  - (7) a designated network asset refers to all the assets behind a boundary point and the identified user group refers to all the Transmission Network Users connected (from time to time) behind that boundary point; and
  - (8) connection to a part of a transmission network that is a designated network asset is subject to Chapter 5 as supplemented and modified by the access policy established and administered by the Primary Transmission Network Service Provider, which access policy has the objective of providing protections to the existing identified user group for that designated network asset in respect of future users of that asset.

For example, an *identified user shared asset connects* a *dedicated connection asset* to, or provides the interface for a *designated network asset* with, a part of the *transmission network* that provides *prescribed transmission services*. An *identified user shared asset* is subject to *connection* and access under Chapter 5. However, a person seeking to *connect* to a part of the *transmission network* that is a *designated network asset* is subject to the *connection* and access requirements under Chapter 5 and the relevant *access policy*.

The intention of this rule 5.2A and Chapter 2 is that there is a *Registered Participant* for each asset connecting the *transmission network* to the *facilities* of the

Transmission Network User, subject to exemptions obtained under Chapter 2.

#### 5.2A.3 Connection and access to transmission services

(a) The following *transmission services* are relevant to *connection* and access to the *transmission network*:

	Service classification	TNSP obligations in respect of the services	Assets involved
1	prescribed transmission services	Subject to access under Chapter 5 and economic regulation under Chapter 6A	transmission network and network connection assets
2	negotiated transmission services that are not DNA services	Subject to access under Chapter 5	transmission network
<u>3</u>	large DCA negotiated transmission services that are DNA services	Subject to access under Chapter 5 and the access policy established under clause 5.2A.8	large dedicated connection assets
4	non-regulated transmission services	Not subject to access under Chapter 5 or economic regulation under Chapter 6A	transmission system

- (b) A Connection Applicant may apply to a Transmission Network Service Provider for provision of a prescribed transmission service or a negotiated transmission service in accordance with rule 5.3 and the relevant Transmission Network Service Provider must comply with this Chapter 5 in negotiating a connection agreement or network operating agreement for the requested service.
- (c) If the *prescribed transmission service* or *negotiated transmission service* sought under paragraph (b) does not require the *Connection Applicant* to establish or modify a *connection* or alter a *generating plant* in the circumstances set out in clause 5.3.9, the processes in rules 5.3, 5.4 and 5.5 will apply with such modifications as is appropriate to the nature of the service requested.
- (d) A Transmission Network Service Provider must provide prescribed transmission services or negotiated transmission services on terms and conditions of access that are consistent with the requirements of Chapters 4, 5 and 6A of the Rules (as applicable).
- (d1) A Connection Applicant may apply to a Primary Transmission Network Service Provider for the provision of DNA services in accordance with rule

- 5.3 and relevant aspects of the *access policy* and the *Primary Transmission Network Service Provider* must provide *DNA services* on *terms and conditions of access* that are consistent with the requirements of the *access policy*.
- (e) A Transmission Network Service Provider or a person who is provided prescribed transmission services or negotiated transmission services must not engage in conduct for the purpose of preventing or hindering access to those services.

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

- (f) The *Connection Applicant* may terminate negotiations with the *Transmission Network Service Provider* at any time during the *connection* process provided under rules 5.3 and 5.3A with at least three *business days'* prior written notice.
- (g) A Transmission Network Service Provider may terminate negotiations with the Connection Applicant with at least three business days' prior written notice if:
  - (1) the *Connection Applicant* becomes insolvent or an equivalent event occurs;
  - (2) the *Connection Applicant* has, in the *Transmission Network Service Provider's* reasonable opinion, provided false or misleading information:
  - (3) the *Transmission Network Service Provider* has reasonable grounds to believe that the *Connection Applicant* is not negotiating in good faith; or
  - (4) the *Transmission Network Service Provider* has formed the reasonable opinion that the *Connection Applicant* does not intend to obtain the service.

#### 5.2A.4 Transmission services related to connection

- (a) If a service related to assets relevant for *connection* in the following table is classified as:
  - (1) contestable then the Primary Transmission Network Service Provider may (but is not obliged to) provide that service as a non-regulated transmission service on request from a Connection Applicant.
  - (2) non-contestable then the *Primary Transmission Network Service Provider* has the exclusive right to provide that service and must negotiate under rule 5.3 to do so as a *negotiated transmission service* on request from a *Connection Applicant*.

	Asset	Service	Example of service	Classification
1.	transmission network including identified user shared	Functional specification for <i>WSAfunded network assets</i>	<ul> <li>preferred equipment suppliers;</li> </ul>	non-contestable
	assetfunded network assets		• preferred equipment;	
			• land/access requirement s;	
			• design specificatio ns;	
			<ul> <li>single line diagrams;</li> </ul>	
			• remote monitoring and communicat ion requirement s;	
			<ul> <li>protection, control and metering requirement s;</li> </ul>	
			<ul> <li>minimum operating conditions;</li> </ul>	
			• supervisory control and data acquisition system interface requirement s;	
			• equipment ratings;	

	Asset	Service	Example of service	Classification
			<ul><li>equipment protection ratings; and</li><li>spare parts itineraries</li></ul>	
2	identified user shared assetfunded network assets	Detailed design for funded network assets IUSA	Provision of:  site plan;  asset layout and configuration;  the specification for vendor equipment;  civil, structural, mechanical and electrical detailed design;  issued for construction drawings;  as built drawings;  tender specifications;  cable schedules;  protection settings;  applicable technical studies;  earthing design;	contestable
			• the design of lightning	

	Asset	Service	Example of service	Classification
			protection; and  the design of insulation co-ordination, consistent with the functional specification.	
3	transmission network (including funded network assets)	Cut-in works	Interface works which that cut into the existing shared transmission network, these which may include tower realignment, protection control and communications requirements	non-contestable
4	contestable <u>FNA HUSA</u> components	Construction <u>-and</u> ownership	Construction and/or ownership of a substation and/-or power lines	contestable
5.	non- contestable FNA IUSA components	Construction - and ownership	Construction or Hinstallation and ownership of supervisory control and data acquisition systems and cabling forming part of the Primary Transmission Network Service Provider's control system	non-contestable

	Asset	Service	Example of service	Classification
6.	identified user shared assetfunded network assets owned by the Primary Transmission Network Service Provider	Control, operation and maintenance	Primary Transmission Network Service Provider provides operation and maintenance services	non-contestable
	third party IUSA	Control, operation and maintenance under a network operating agreement	See clause 5.2A.7	non-contestable
7	Funded network assets owned by a person who is not the Primary Transmission Network Service Provider	Control, operation and maintenance under a network operating agreement	See clause 5.2A.7	non-contestable
8.	designated network asset	DNA services	See clause 5.2A.8	non-contestable
9	dedicated connection assets	All development aspects	Design, construction, maintenance and ownership of a power line connecting a facility	contestable

- (b) If the capital cost of all the components that make up an identified user shared asset is reasonably expected by the Primary Transmission Network Service Provider to be \$10 million or less, the Primary Transmission Network Service Provider must undertake the detailed design, construction and ownership of the identified user shared asset as a negotiated transmission service.
- (be) If the capital cost of all the components that make up an *identified user shared* asset is reasonably expected by the *Primary Transmission Network Service*

**Provider** to exceed \$10 million, the The detailed design, construction and ownership of each component of a the funded network asset identified user shared asset is a non-regulated transmission service to the extent that it satisfies the following criteria:

- (1) the component being constructed is new or a complete replacement of existing assets (and does not involve the reconfiguration of existing assets); and
- (2) the detailed design and construction of the relevant component of the *identified user shared assetfunded network asset* is separable in that the new component will be distinct and definable from the existing *transmission network*,

## ("contestable FNA IUSA components").

(cd) To the extent that any components of an identified user shared funded network asset do not satisfy the criteria set out in paragraph (be) ("non-contestable IUSA\_FNA\_components"), the Primary Transmission Network Service Provider must negotiate under rule 5.3 to undertake the detailed design, construction and ownership of the non-contestable IUSA\_FNA\_components as a negotiated transmission service.

#### Note

Parties may seek the advice of an *Independent Engineer* under rule 5.4 if the parties cannot agree on whether a component of an *identified user sharedfunded network asset* based on the criteria under <u>sub</u>paragraphs (be)(1) and (2) is a *contestable <u>FNA-FNA</u> component* or a *non-contestable <u>FNA-IUSA</u> component.* 

## 5.2A.5 Publication and provision of information

- (a) A *Primary Transmission Network Service Provider* must publish the information on its website, or provide the information to a *Connection Applicant* on request, as required by schedule 5.10.
- (b) A *Primary Transmission Network Service Provider* may charge a *Connection Applicant* a fee for providing information where specified under schedule 5.10, the amount of which must not be more than necessary to cover the reasonable costs of work required to prepare that information.
- (c) A *Transmission Network Service Provider* and a *Connection Applicant* must provide information (including commercial information) reasonably required by the other party that would facilitate effective negotiation for the provision of a *negotiated transmission service* in a timely manner.
- (d) The *Connection Applicant* must procure that any persons it engages to undertake services which are specified to be *contestable* in the table in clause 5.2A.4(a) provide information reasonably requested by the *Primary Transmission Network Service Provider*.
- (e) Information required to be provided under paragraphs (c) and (d) that is confidential may be provided subject to a condition that the receiving party must not provide any part of that information to any other person without the consent of the party who provided the information.

## 5.2A.6 Negotiating principles

- (a) If a Connection Applicant seeks access to negotiated transmission services, including in relation to an identified user shared asset funded network asset, the Transmission Network Service Provider and the Connection Applicant must, in negotiating pursuant to rule 5.3 and other relevant Rules, negotiate in accordance with the negotiating principles.
- (b) A Transmission Network Service Provider must, in accordance with the negotiating principles:
  - (1) on request, identify and inform a *Connection Applicant* of the reasonable costs and/or the increase or decrease in costs (as appropriate) of providing a *negotiated transmission service*;
  - (2) on request, demonstrate to a *Connection Applicant* that the charges for providing a *negotiated transmission service* reflect those costs and/or the cost increment or decrement (as appropriate);
  - (3) determine the potential impact on other *Transmission Network Users* of the provision of a *negotiated transmission service*; and
  - (4) notify and consult with any affected *Transmission Network Users* and ensure that the provision of a *negotiated transmission service* does not result in non-compliance with obligations in relation to other *Transmission Network Users* under the *Rules*.
- (c) If an applicant seeks <u>large DCADNA</u> services, the <u>Primary Transmission</u> <u>Network Service Provider Dedicated Connection Asset Service Provider</u> must comply with its <u>access policy</u> and the negotiating principles in schedule 5.12.

#### Note

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

## 5.2A.7 Funded network assets Third party IUSAs

- (a) This clause applies only to those components of a funded network assets that are not owned or leased by the Primary Transmission Network Service Provider. A reference to funded network asset in this clause includes a component of a funded network asset.
- (b) A person must not commission, or permit the commissioning of, a *third party HUSAfunded network asset* unless there is a *network operating agreement* between the owner of that *third party IUSAfunded network asset* and the *Primary Transmission Network Service Provider*.

#### Note

- (bc) The person who owns, or is intending to own, a *third party IUSAfunded* network asset and the *Primary Transmission Network Service Provider* must:
  - (1) include terms and conditions in the *network operating agreement* which give effect to the requirements of paragraphs (de) and (ed);

- (2) include terms and conditions in the *network operating agreement* of the kind set out in Part B of schedule 5.6; and
- (3) negotiate the *network operating agreement* in accordance with the *negotiating principles* (where applicable).
- (ed) The term of the *network operating agreement* must be for a period which is at least equal to the term of the longest *connection agreement* of a member of the initial *identified user group* for the *third party IUSA funded network asset*.
- (ed) Subject to the access policy (where applicable), the network operating agreement must provide for the Primary Transmission Network Service Provider to:
  - (1) have operation and control of the *third party IUSA funded network asset* (including the rights and obligations to maintain that asset) for an agreed charge or based on an agreed charging methodology;
  - (2) have an option to purchase the *third party IUSAfunded network asset* at fair market value at the expiry or early termination of the *network operating agreement*;
  - (3) alter, replace or augment the third party HUSA funded network asset;
  - (4) have the right to connect other persons to the *third party IUSA funded* network asset in accordance with the *Rules*;
  - (5) have unrestricted use of, and access to, the *third party IUSAfunded* network asset; and
  - (6) treat the third party IUSA funded network asset as forming part of the Primary Transmission Network Service Provider's transmission network in all material respects and provide transmission services to any Transmission Network User in accordance with the Rules; and
  - (7) distribute to the owner of the *designated network asset* any:
    - (i) relevant amounts that the *Primary Transmission Network Service*Provider has collected from Connection Applicants for connection to the designated network asset in accordance with the access policy; and
    - (ii) settlement residues accrued on the designated network asset, in accordance with the methodology to be developed by the *Primary Transmission Network Service Provider*.
  - (e) A person who owns a third party IUSA must not:
- (1) own, operate or control a generating system;
- (2) own, operate or control a facility utilising electrical energy; or
- (3) be a related entity of a person owning, operating or controlling a *generating* system or facility utilising electrical energy,

that is connected to that third party IUSA.

**Note** 

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

related entity means, in relation to an entity, an entity that controls, or is controlled by, that first mentioned entity;

entity has the meaning given in the *Corporations Act 2001* (Cth) subject to section 64A of the *Corporations Act 2001* (Cth) not applying to such meaning; and control has the meaning given in the *Corporations Act 2001* (Cth).

## 5.2A.8 Access framework for large dedicated connection assets designated network assets

- (a) This clause 5.2A.8 applies only to *large dedicated connection* assets.
- (b) A <u>Dedicated Connection Asset Service ProviderPrimary Transmission</u>
  <u>Network Service Provider</u>—must prepare, maintain and publish an access
  policy on its website to provide a framework for applicants to obtain access
  to <u>DNA large DCA services</u>. An access policy may apply different terms to
  different <u>DNA services</u> or to different components of a <u>designated network</u>
  asset.
- (c) An access policy must include, as a minimum, the following information:
  - (1) a description of the routes, tenure arrangements and main components of the *large dedicated connection asset* and the *facilities connected* to it:
  - (2) any material regulatory limitations relating to the development and operation of the *large dedicated connection asset*;
  - (13) the pricing principles and the key terms which are proposed to apply to the provision of <u>DNA large DCA</u> services where such principles and terms must be consistent with schedule 5.12;
  - (24) the process by which an applicant may seek access to *large DCA* services, which must include a right for an applicant to obtain sufficient information to enable it to prepare a request for the *large DCA services* it requires and contact details for access enquiries the extent to which the processes in rule 5.3 are supplemented or modified by the access policy; and
  - (35) advice on the availability of commercial arbitration under rule 5.5 in the case of a dispute;
  - (4) the processes and mechanisms that the *Primary Transmission Network*Service Provider will implement to protect the rights of the existing users of a designated network asset (which may contemplate cost sharing from subsequent applicants who are seeking *DNA services* from that asset); and
  - (5) the process by which a *Primary Transmission Network Service*Provider will notify existing persons who have a *connection agreement*

in respect of that *designated network asset* of new applicants who are seeking *DNA services* from that asset.

- (de) The AER has the function of:
  - (1) approving an access policy and variations to it; and
  - (2) enforcing compliance with an access policy.
- (e) In preparing or varying the *access policy*, the *Primary Transmission Network*Service Provider must:
  - (1) publish a proposed *access policy* on its website and publicly consult on its proposed *access policy* for at least 30 days;
  - (2) prepare and publish on its website a report that:
    - (i) summarises each of the submissions received during consultation on the *access policy*;
    - (ii) sets out the *Primary Transmission Network Service Provider's* response to each of the submissions; and
    - (iii) describes the relevant amendments made to the *access policy* in response to submissions and provides explanations for each of those amendments.
- (f) The *Primary Transmission Network Service Provider* may make minor and administrative amendments to the *access policy* without complying with the consultation process set out in paragraph (e).
- (g) The *Primary Transmission Network Service Provider* must submit the *access policy* (as amended following consultation in accordance with paragraph (e)(1), as well as copies of submissions received during consultation on the *access policy*, to the *AER* for approval.
- (d) Within 30 days of an asset being classified as a large dedicated connection asset under Chapter 2, a Dedicated Connection Asset Service Provider must submit an access policy for approval by the AER.

#### Note

- (he) A <u>Dedicated Connection Asset Service ProviderPrimary Transmission Network Service Provider</u> may seek approval of a variation to an <u>access policy</u> from the <u>AER</u> at any time and must do so where required to keep the <u>access policy</u> up to date <u>and compliant with requirements under the <u>Rules</u>. Except to the extent paragraph (f) applies, a variation must comply with the consultation process set out in paragraph (e).</u>
- (if) Within 60 days of receiving the access policy submitted under paragraphs (g) or (h), tThe AER must approve an access policy, or a variation to an access policy, if it is reasonably satisfied that it complies with paragraph (cb) or propose an access policy. If the AER does not intend to approve an access policy submitted under paragraphs (gd) or (h), the AER must notify of the changes required for it to be approved. If the AER and the Primary Transmission Network Service Provider are unable to agree on the terms of

- the access policy within 60 days of receiving the access policy submitted under paragraphs (g) or (h), the AER must itself propose an access policy. If an access policy is not approved within 6 months of the AER's notification of required changes, the AER may itself propose an access policy.
- (jg) The AER's proposal for an access policy is to be formulated with regard to:
  - (1) the minimum requirements set out in paragraph (cb);
  - (2) the <u>Dedicated Connection Asset Service Provider's Primary</u> <u>Transmission Network Service Provider's</u> proposed access policy; and
  - (3) the AER's reasons for refusing to approve the proposed access policy.
- (ki) The AER must give a copy of its decision to either approve or reject the access policy submitted by the Primary Transmission Network Service Provider under paragraphs (g) or (h) and if:
  - (1) If the AER decides to approves an access policy proposed by the AER submitted by the Primary Transmission Network Service Provider, it must give the decision to the Primary Transmission Network Service Provider of its approval of the access policy; or
  - (2) the AER does not approve an access policy submitted by the Primary Transmission Network Service Provider and proposes its own access policy under paragraph (i), it must give the decision and proposed access policy to the Primary Transmission Network Service Provider outlining the reasons for the proposed access policy.
- (1) Within 7 days after the AER provides the Primary Transmission Network

  Service Provider with its decision under paragraph (k), the Primary

  Transmission Network Service Provider must publish on its website:
  - (1) the approved or the AER proposed access policy;
  - (2) the AER's decision for that access policy; and
  - (3) submissions as between the *Primary Transmission Network Service Provider* and the *AER* on the *access policy* (as relevant).—\_:
  - (1) give a copy of the decision to the *Dedicated Connection Asset Service*Provider: and
  - (2) publish the decision on the AER's website and make it available for inspection, during business hours, at the AER's public offices.
- (mj) An access policy, or a variation to it, takes effect on a date fixed in the AER's decision to approve it.
- (k) A Dedicated Connection Asset Service Provider must report on requests for connection and access to a large dedicated connection asset to the AER when such requests are made and when an agreement for access is entered into, in the manner and form notified by the AER.
- (nl) A <u>Dedicated Connection Asset Primary Transmission Network Service</u> Provider or a person who is provided <u>DNA large DCA</u> services must not engage in conduct for the purpose of preventing or hindering access to <u>DNA large DCA</u> services.

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

(mo) A <u>Primary Transmission Network Service Provider Dedicated Connection</u>
<u>Asset Service Provider may, but is not required to, give access to an applicant for large DCADNA services if doing so would mean the large dedicated designated network-connection asset would no longer constitute a designated networkdedicated connection asset.</u>

#### Note

An example of where clause 5.2A.8(mo) may apply is where the applicant for access to large DCA-DNA services is a Distribution Network Service Provider or a person not seeking access to those services as part of the identified user group. The creation of a new connection point could change the nature of the services being provided by the large dedicated connection asset and therefore change its regulatory treatment seeks to connect assets which would mean tresult in the designated network asset forms forming part of a network loop.

## 5.3 Establishing or Modifying Connection

## 5.3.1 Process and procedures

- (a) For the purposes of this rule 5.3:
  - (1) establish a connection includes:
    - modify an existing *connection* or alter *plant* but does not include alterations to *generating plant* in the circumstances set out in clause 5.3.9; or
    - (ii) incorporating a funded network asset into a transmission network.
  - (2) **connect, connected, connection** includes the incorporation of a *funded network asset* to a *transmission network*.
- (b) Subject to paragraph (b1), aA Registered Participant or person intending to become a Registered Participant who wishes to establish a connection to a network must follow the procedures in this rule 5.3.
- (b1) If a Registered Participant, or person intending to become a Registered Participant, wishes to establish a connection to a part of a network that is a designated network asset, then that person and the Primary Transmission Network Service Provider must also comply with rule 5.3 as supplemented or modified by the relevant access policy.
- (c) A *Generator* wishing to alter *connected generating plant* must comply with clause 5.3.9.
- (d) *AEMO* must comply with clause 5.3.11 in relation to requests to change *normal voltage*.
- (e) For connection to a transmission network, there may be more than one Connection Applicant in relation to a connection where there are different persons developing and owning contestable <u>FNA</u>tUSA components, dedicated connection assets and Transmission Network User facilities in relation to that connection.

## 5.3.1A Application of rule to connection of embedded generating units

(a) For the purposes of this clause 5.3.1A;

**non-registered embedded generator** has the same meaning as in clause 5A.A.1.

- (b) If a Connection Applicant wishes to connect an embedded generating unit, then:
  - (1) unless otherwise provided, rule 5.3A applies to the proposed connection and clauses 5.3.2, 5.3.3, 5.3.4 and 5.3.5 do not apply to the proposed *connection*; and
  - (2) for the avoidance of doubt, the application of the balance of Chapter 5, Part B to the *Connection Applicant* is otherwise unaffected by this clause 5.3.1A.
- (c) A reference to a *Connection Applicant* in paragraph (b) is to a:
  - (1) person who intends to be an *Embedded Generator*;
  - (2) person who is required to apply to *AEMO* for an exemption from the requirement to register as a *Generator* in respect of an *embedded generating unit*; or
  - (3) non-registered embedded generator who has made an election under clause 5A.A.2(c),

and who makes a *connection* enquiry under clause 5.3A.5 or an *application* to connect under clause 5.3A.9 in relation to any *generating systems*, or any *network elements* used in the provision of a *network service*, as the case may be.

## 5.3.2 Connection enquiry

- (a) A person referred to in clause 5.3.1(b) who wishes to make an *application to* connect must first make a *connection* enquiry by advising the *Local Network* Service Provider of the type, magnitude and timing of the proposed connection to that provider's network.
- (b) If the information submitted with a *connection* enquiry is inadequate to enable the *Local Network Service Provider* to process the enquiry the provider must within 5 *business days*, advise the *Connection Applicant* what other relevant preliminary information of the kind listed in schedule 5.4 is required before the *connection* enquiry can be further processed.

#### Note

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

(c) The *Local Network Service Provider* must advise the *Connection Applicant* within 10 *business days* of receipt of the *connection* enquiry and the further information required in accordance with paragraph (b) if the enquiry would be more appropriately directed to another *Network Service Provider*.

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

(d) The *Connection Applicant*, notwithstanding the advice received under paragraph (c), may if it is reasonable in all the circumstances, request the *Local Network Service Provider* to process the *connection* enquiry and the provider must meet this request.

#### Note

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

- (e) Where the *Local Network Service Provider* considers that the *connection* enquiry should be jointly examined by more than one *Network Service Provider*, with the agreement of the *Connection Applicant*, one of those *Network Service Providers* may be allocated the task of liaising with the *Connection Applicant* and the other *Network Service Providers* to process and respond to the enquiry.
- (f) A *Network Service Provider* must to the extent that it holds technical information necessary to facilitate the processing of a *connection* enquiry made in accordance with paragraph (a) or an *application to connect* in accordance with clause 5.3.4(a), provide that information to the *Connection Applicant* in accordance with the relevant requirements of schedule 5.1, 5.2, 5.3 or 5.3a.

#### Note

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

(g) If applicable, a *Primary Network Service Provider* may charge a *Connection Applicant* an enquiry fee, the amount of which must not be more than necessary to cover the reasonable costs of work required to provide the information in clauses 5.3.3(b)(5A) and (7) to (10).

### 5.3.3 Response to connection enquiry

- (a) In preparing a response to a *connection* enquiry, the *Network Service Provider* must liaise with other *Network Service Providers* with whom it has *connection agreements*, if the *Network Service Provider* believes, in its reasonable opinion, that compliance with the terms and conditions of those *connection agreements* will be affected. The *Network Service Provider* responding to the *connection* enquiry may include in that response the reasonable requirements of any such other *Network Service Providers* for information to be provided by the *Connection Applicant*.
- (b) The Network Service Provider must:
  - (1) within 30 *business days* after receipt of the *connection* enquiry and all such additional information (if any) advised under clause 5.3.2(b); or

(2) within 30 business days after receipt of a request from the Connection Applicant to the Local Network Service Provider to process the connection enquiry under clause 5.3.2(d),

provide the following information in writing to the *Connection Applicant*:

- (3) the identity of other parties that the *Network Service Provider* considers:
  - (i) will need to be involved in planning to make the *connection*; and
  - (ii) must be paid for *transmission services* or *distribution services* in the appropriate jurisdiction;
- (4) whether it will be necessary for any of the parties identified in subparagraph (3) to enter into an agreement with the *Connection Applicant* in respect of the provision of *connection* or other *transmission services* or *distribution services* or both, to the *Connection Applicant*;
- (5) in relation to *Distribution Network Service Providers* and *Network Service Providers* for *declared transmission systems*, whether any service the *Network Service Provider* proposes to provide is *contestable* in the relevant *participating jurisdiction*;
- (5A) whether any service a *Transmission Network Service Provider* proposes to provide in relation to the *connection* enquiry is a *prescribed transmission service*, a *negotiated transmission service* or a *non-regulated transmission service* including, if applicable whether the components that make up a *funded network asset* satisfy the criteria set out in clause 5.2A.4(b) and if so the *contestable FNA components* and *non-contestable FNA components*;
- (i) whether the capital cost of any *identified user shared asset* is reasonably expected to exceed \$10 million; and
  - (ii) if so, the contestable IUSA components and non-contestable IUSA components;
- (5B) whether the connection enquiry relates (in whole or in part) to connection to components of a funded network asset that comprise a designated network asset such that the Transmission Network Service Provider is providing DNA services that are subject to an access policy;
- (5C) if the *Transmission Network Service Provider* will be providing *DNA services* in relation to the *connection* enquiry, the tenure arrangements and main components of the *designated network asset* and the *facilities connected* to it;
- (6) a *preliminary program* showing proposed milestones for *connection* and access activities which may be modified from time to time by agreement of the parties, where such agreement must not be unreasonably withheld;
- (7) the specification of the interface required to provide the *connection*, including plant and equipment requirements for the *connection* of a *dedicated connection asset* or *funded network asset* to the *transmission*

- network and of the interface between the transmission network and any contestable <u>HUSA-FNA</u> components;
- (8) if applicable, the scope of work for any *non-contestable FNAIUSA* components;
- (9) if the response to the *connection enquiry* specifies the need for an *identified user shared asset* the capital cost of which is reasonably expected to exceed \$10 million, a functional specification specifies that there are *contestable FNA components*, a functional specification:
  - (i) setting out the technical parameters for those at assets as described in the table in clause 5.2A.4 with sufficient detail to enable the *Connection Applicant* to obtain binding tenders for the provision of detailed design, construction and ownership services for the *contestable tusa-fna components*;
  - (ii) at the *Primary Transmission Network Service Provider's* option, that is above those minimum requirements in subparagraph (i) subject to the *Primary Transmission Network Service Provider* separately identifying the additional requirements and agreeing to fund the additional works related to those requirements;
- (10) an indicative costing for operation and maintenance services for any *identified user shared assetfunded network assets*, based on the functional specification provided pursuant to subparagraph (9); and
- (11) the amount of any enquiry fee under clause 5.3.2(g).

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

- (b1) The Network Service Provider must:
  - (1) within 30 *business days* after receipt of the *connection* enquiry and all such additional information (if any) advised under clause 5.3.2(b); or
  - (2) within 30 business days after receipt of a request from the Connection Applicant to the Local Network Service Provider to process the connection enquiry under clause 5.3.2(d),

provide the *Connection Applicant* with the following written details of each technical requirement relevant to the proposed *plant*:

- (3) the automatic access standards;
- (4) the minimum access standards;
- (5) the applicable *plant standards*;
- (6) the *negotiated access standards* that will require *AEMO's* involvement in accordance with clause 5.3.4A(c); and
- (7) the *normal voltage* level, if that is to change from the *nominal voltage* level.

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

- (b2) A Registered Participant, AEMO or interested party may request the Reliability Panel to determine whether, in respect of one or more technical requirements for access, an existing Australian or international standard, or a part thereof, may be adopted as a plant standard for a particular class of plant.
- (b3) Where, in respect of a technical requirement for access, the *Reliability Panel* determines a *plant standard* for a particular class of *plant* in accordance with clause 8.8.1(a)(8) as an acceptable alternative to a particular *minimum access standard* or *automatic access standard*, a *plant* which meets that *plant standard* is deemed to meet the applicable *automatic access standard* or *minimum access standard* for that technical requirement.
- (b4) In making a determination in accordance with clause 5.3.3(b2) the *Reliability Panel* must consult *Registered Participants* and *AEMO* using the *Rules consultation procedures*.
- (b5) For a *connection point* for a proposed new *connection* of a *generating system* or *market network service facility*, within the time applicable under paragraph (b1), the *Network Service Provider* must provide the *Connection Applicant* with the following written details:
  - (1) the minimum three phase fault level at the connection point; and
  - (2) the results of the *Network Service Provider's* preliminary assessment of the impact of the new *connection* undertaken in accordance with the *system strength impact assessment guidelines* and clause 5.3.4B.

#### Note

- (c) Within 30 business days after receipt of the connection enquiry and all such additional information (if any) advised under clause 5.3.2(b) or, if the Connection Applicant has requested the Local Network Service Provider to process the connection enquiry under clause 5.3.2(d), within 20 business days after receipt of that request, the Network Service Provider must provide to the Connection Applicant written advice of all further information which the Connection Applicant must prepare and obtain in conjunction with the Network Service Provider to enable the Network Service Provider to assess an application to connect including:
  - (1) details of the *Connection Applicant's connection* requirements, and the *Connection Applicant's* specifications of the *facility* to be connected, consistent with the requirements advised in accordance with clause 5.3.3(b1);
  - (2) details of the *Connection Applicant's* reasonable expectations of the level and standard of service of *power transfer capability* that the *network* should provide;

- (3) a list of the technical data to be included with the *application to connect*, which may vary depending on the *connection* requirements and the type, rating and location of the *facility* to be *connected* and will generally be in the nature of the information set out in schedule 5.5 but may be varied by the *Network Service Provider* as appropriate to suit the size and complexity of the proposed *facility* to be *connected*;
- (4) commercial information to be supplied by the *Connection Applicant* to allow the *Network Service Provider* to make an assessment of the ability of the *Connection Applicant* to satisfy the prudential requirements set out in rules 6.21 and 6A.28;
- (4a) the *DER generation information* that the *Network Service Provider* requires;
- (5) the amount of the application fee which is payable on lodgement of an *application to connect*, such amount:
  - (i) not being more than necessary to cover the reasonable costs of all work anticipated to arise from investigating the *application to connect* and preparing the associated offer to *connect* and to meet the reasonable costs anticipated to be incurred by *AEMO* and other *Network Service Providers* whose participation in the assessment of the *application to connect* will be required; and
  - (ii) must not include any amount for, or in anticipation of, the costs of the person using an *Independent Engineer*; and
- (6) any other information relevant to the submission of an *application to* connect.

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

## 5.3.4 Application for connection

- (a) A person who has made a *connection* enquiry under clause 5.3.2 may, following receipt of the responses under clause 5.3.3, make an *application to connect* in accordance with this clause 5.3.4, clause 5.3.4A and clause 5.3.4B.
- (b) To be eligible for *connection* the *Connection Applicant* must submit an *application to connect* containing:
  - (1) the information specified in clause 5.3.3(c);
  - (2) the relevant application fee to the relevant *Network Service Provider*;
  - (3) for services related to *contestable HUSA—FNA components* that the *Connection Applicant* has not obtained from the *Primary Transmission Network Service Provider* (as applicable):
    - (i) the *Connection Applicant*'s process for how the *Primary Transmission Network Service Provider* will undertake a review of the detailed design and inspect the construction of those components and how risks of defects will be addressed;

- (ii) the detailed design of those components <u>and assets (as relevant)</u>; and
- (iii) if the *Primary Transmission Network Service Provider* will not own the *contestable FNA HUSA*—components, the *Connection Applicant*'s proposed changes (if any) to the form of *network operating agreement* published pursuant to schedule 5.10; and
- (4) if the *Connection Applicant* has obtained services related to *contestable HUSA-FNA* components other than from the *Primary Transmission Network Service Provider*, all information reasonably required for the *Primary Transmission Network Service Provider* to properly provide operation and maintenance services for the life of those components, including details of the *contestable HUSA-FNA* components' construction, instructions for operation and maintenance and health safety and asset management manuals.
- (b1) The Connection Applicant's detailed design under paragraph (b)(3)(ii):
  - (1) must be consistent with the minimum functional specification provided by the *Primary Transmission Network Service Provider* under clause 5.3.3(b)(9)(i);
  - (2) must not unreasonably inhibit the capacity for future expansion of the <u>identified user shared asset</u> or preclude the possibility of future <u>connections</u> to those at assets; and
  - (3) subject to the *Connection Applicant* considering the *Primary Transmission Network Service Provider's* additional requirements under clause 5.3.3(b)(9)(ii) in good faith, may be (but is not required to be) consistent with those additional requirements.
- (c) In relation to Distribution Network Service Providers and Network Service Providers for declared transmission systems, the Connection Applicant may submit applications to connect to more than one Network Service Provider in order to receive additional offers to connect in respect of facilities to be provided that are contestable.
- (d) To the extent that an application fee includes amounts to meet the reasonable costs anticipated to be incurred by any other *Network Service Providers* or *AEMO* in the assessment of the *application to connect*, a *Network Service Provider* who receives the *application to connect* and associated fee must pay such amounts to the other *Network Service Providers* or *AEMO*, as appropriate.
- (e) For each technical requirement where the proposed arrangement will not meet the *automatic access standards* nominated by the *Network Service Provider* pursuant to clause 5.3.3(b1), the *Connection Applicant* must submit with the *application to connect* a proposal for a *negotiated access standard* for each such requirement to be determined in accordance with clause 5.3.4A.
- (f) The Connection Applicant may:
  - (1) lodge separate *applications to connect* and separately liaise with the other *Network Service Providers* identified in clause 5.3.3(b) who may require a form of agreement;

- (2) lodge one *application to connect* with the *Network Service Provider* who processed the *connection* enquiry and require it to liaise with those other *Network Service Providers* and obtain and present all necessary draft agreements to the *Connection Applicant*; or
- (3) lodge a combined application to connect with the Primary Network Service Provider where the connection involves more than one Connection Applicant due to different persons developing and owning contestable <u>HUSA-FNA</u> components, dedicated connection assets and Transmission Network User facilities in relation to that connection.
- (g) A Connection Applicant who proposes a system strength remediation scheme under clause 5.3.4B must submit its proposal with the application to connect.

### [...]

## 5.3.5 Preparation of offer to connect

- (a) The *Network Service Provider* to whom the *application to connect* is submitted:
  - (1) at the automatic access standard under clause 5.3.4; or
  - (2) at a *negotiated access standard* that the provider has accepted under clause 5.3.4A(e),

must proceed to prepare an offer to connect in response.

- (b) The *Network Service Provider* must use its reasonable endeavours to advise the *Connection Applicant* of all risks and obligations in respect of the proposed *connection* associated with planning and environmental laws not contained in the *Rules*.
- (c) The Connection Applicant must provide such other additional information in relation to the application to connect as the Network Service Provider reasonably requires to assess the technical performance and costs of the required connection (including the details of any person undertaking the construction, detailed design and/or ownership of contestable FNAIUSA components) to enable the Network Service Provider to prepare an offer to connect.
- (d) So as to maintain levels of service and quality of *supply* to existing *Registered Participants* in accordance with the *Rules*, the *Network Service Provider* in preparing the offer to *connect* must consult with *AEMO* and other *Registered Participants* with whom it has *connection agreements*, if the *Network Service Provider* believes in its reasonable opinion, that compliance with the terms and conditions of those *connection agreements* will be affected, in order to assess the *application to connect* and determine:
  - (1) the technical requirements for the equipment to be *connected*;
  - (2) the extent and cost of *augmentations* and changes to all affected *networks*;
  - (3) any consequent change in *network service* charges; and
  - (4) any possible material effect of this new *connection* on the *network* power transfer capability including that of other networks.

(e) The *Network Service Provider* preparing the offer to *connect* must specify in reasonable detail any *system strength connection works* to be undertaken by the *Network Service Provider*.

#### (f) [Deleted]

(g) The Network Service Provider preparing the offer to connect must include provision for payment of the reasonable costs associated with remote control equipment and remote monitoring equipment as required by AEMO and it may be a condition of the offer to connect that the Connection Applicant pay such costs.

#### Note

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

#### 5.3.6 Offer to connect

- (a) A Network Service Provider processing an application to connect must make an offer to connect the Connection Applicant's facilities or <u>funded network</u> <u>asset</u> to the <u>network</u> within the following timeframes:
  - (1) where the *application to connect* was made under clause 5.3.4(a), the timeframe specified in the *preliminary program*, subject to clause 5.3.3(b)(6); and
  - (2) where the *application to connect* was made under clause 5.3A.9(b), a period of time no longer than 4 months from the date of receipt of the *application to connect* and any additional information requested under clause 5.3A.9(d), unless agreed otherwise.

#### Note

- (a1) The *Network Service Provider* may amend the time period referred to in paragraph (a)(1) to allow for any additional time taken in excess of the period allowed in the *preliminary program* for the negotiation of *negotiated access standards* in accordance with clause 5.3.4A or a *system strength remediation scheme* in accordance with clause 5.3.4B or any time taken by *AEMO* to respond under clause 5.3.4B(j) in excess of 20 *business days*.
- (a2) In relation to the timeframes fixed in paragraph (a)(2), for the purposes of calculating elapsed time, the following periods shall be disregarded:
  - (1) the period that commences on the day when a dispute is initiated under clause 8.2.4(a) and ends of the day on which the dispute is withdrawn or is resolved in accordance with clauses 8.2.6D or 8.2.9(a);
  - (2) any time taken to resolve a distribution services access dispute; and
  - (3) any time taken by *AEMO* to respond under clause 5.3.4B(j) in excess of 20 *business days*.

- (b) In relation to an *application to connect* made under clause 5.3.4(a), the offer to *connect* must contain the proposed terms and conditions for *connection* to the *network* including:
  - (1) for each technical requirement identified by the *Network Service Provider* under clause 5.3.3(b1), the *automatic access standard* or the *negotiated access standard* as determined in accordance with clauses 5.3.4 and 5.3.4A; and
  - (2) the terms and conditions of the kind set out in Part A and (where applicable) Part B of schedule 5.6,

and must be capable of acceptance by the *Connection Applicant* so as to constitute a *connection agreement* and (where applicable) a *network operating agreement*.

#### Note

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

(b1) The proposed terms and conditions detailed in the offer to *connect* must be no lower than the applicable *minimum access standards*.

#### Note

- (b2) An offer to *connect* made under paragraph (a)(2), must be accompanied by:
  - (1) so far as is relevant, and in relation to services the *Distribution Network Service Provider* intends to provide, an itemised statement of *connection* costs including:
    - (i) connection service charges;
    - (ii) costs associated with *metering* requirements contained in the offer to *connect*;
    - (iii) costs of network extension;
    - (iv) details of *augmentation* required to provide the *connection* and associated costs;
    - (v) details of the interface equipment required to provide the *connection* and associated costs;
    - (vi) details of any ongoing operation and maintenance costs and charges by the *Distribution Network Service Provider*; and
    - (vii) other incidental costs and their basis of calculation;
  - (2) if any item in the statement of costs in subparagraph (1) differs substantially from the estimate provided under clause S5.4B(h), an explanation of the differences;
  - (3) a *connection agreement* capable of execution by the *Connection Applicant*, which must contain the proposed terms and conditions for *connection* to the *distribution network* (of the kind set out in Part A of

schedule 5.6) including, for each technical requirement identified by the *Distribution Network Service Provider* in the detailed response provided under clause 5.3A.8(c), the *automatic access standard* or the negotiated access standard as determined in accordance with clause 5.3.4A; and

- (4) an explanation:
  - (i) of how the offer to *connect* can be accepted; and
  - (ii) that the offer to *connect* remains open for 20 *business days*, unless otherwise agreed.
- (b3) An offer to *connect* made under paragraph (a)(2) must remain open for acceptance for 20 *business days* from the date it is made and, if not accepted within that period, lapses unless the *Connection Applicant* has sought an extension of the period of time from the *Distribution Network Service Provider*. The *Distribution Network Service Provider* may not unreasonably withhold consent to the extension.
- (b4) An offer to *connect* by a *Primary Transmission Network Service Provider* made under paragraph (a)(1) must include:
  - (1) the *Primary Transmission Network Service Provider's* requirements in relation to the matters proposed in clause 5.3.4(b)(3) and (b)(4); and
  - (2) the costs of the services proposed to be provided by the *Primary Transmission Network Service Provider* separated between *negotiated transmission services* and *non-regulated transmission services* (if applicable).
- (b5) A *Connection Applicant* may seek amendments to the offer to *connect* provided that the *Connection Applicant* agrees to changes to the *preliminary program* to reflect the additional time required to agree the amendments.
- (c) The offer to *connect* must be fair and reasonable and must be consistent with the safe and *reliable* operation of the *power system* in accordance with the *Rules*. Without limitation, unless the parties otherwise agree, to be fair and reasonable an offer to *connect* must offer *connection* and *network services* consistent with schedule 5.1 and (as applicable) schedules 5.2, 5.3 and 5.3a and must not impose conditions on the *Connection Applicant* which are more onerous than those contemplated in schedules 5.1, 5.2, 5.3 or 5.3a.

#### Note

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

#### (c1) [Deleted]

- (d) The *Network Service Provider* must use its reasonable endeavours to provide the *Connection Applicant* with an offer to *connect* in accordance with the reasonable requirements of the *Connection Applicant*, including without limitation, the location of the proposed *connection point* and the level and standard of *power transfer capability* that the *network* will provide.
- (e) An offer to *connect* may contain options for *connection* to a *network* at more than one point in a *network* and/or at different levels of service and with

- different terms and conditions applicable to each *connection point* according to the different characteristics of *supply* at each *connection point*.
- (f) Both the *Network Service Provider* and the *Connection Applicant* are entitled to negotiate with each other in respect of the provision of *connection* and any other matters relevant to the provision of *connection* and, if negotiations occur, the *Network Service Provider* and the *Connection Applicant* must conduct such negotiations in good faith.
- (g) An offer to *connect* must define the basis for determining *transmission* service charges in accordance with Chapter 6A, including the prudential requirements set out in that Chapter.

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

(h) An offer to *connect* must define the basis for determining *distribution service* charges in accordance with Chapter 6, including the prudential requirements set out in Part K of Chapter 6.

#### Note

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

- (i) [Deleted]
- (j) An offer to *connect* in respect of a *distribution network* made to an *Embedded Generator* or a *Market Network Service Provider*, must conform with the relevant access arrangements set out in rule 5.3AA.

#### Note

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

(k) [**Deleted**]

## 5.3.7 Finalisation of connection agreements and network operating agreements

- (a) If a *Connection Applicant* wishes to accept an offer to *connect*, the *Connection Applicant* must negotiate and enter into:
  - (1) a connection agreement with each relevant Network Service Provider identified in accordance with clauses 5.3.3(b)(3) and (4) or clauses \$5.4.A(d) and (e); and
  - (2) if applicable, a network operating agreement with the Primary Transmission Network Service Provider,

and in doing so must use its reasonable endeavours to negotiate in good faith with all parties with which the *Connection Applicant* must negotiate such a *connection agreement* and (if applicable) *network operating agreement*.

(b) The *connection agreement* must include proposed *performance standards* with respect to each of the technical requirements identified in schedules 5.2,

- 5.3 and 5.3a and each proposed *performance standard* must have been established in accordance with the relevant technical requirement.
- (c) The proposed *performance standards* must be based on the *automatic access standard* or, if the procedures in clause 5.3.4A have been followed, the *negotiated access standard*.
- (d) The provision of *connection* by any *Network Service Provider* may be made subject to gaining environmental and planning approvals for any necessary *augmentation* or *extension* works to a *network* or any *system strength connection works*.
- (e) Where permitted by the applicable law in the relevant *participating jurisdiction*, the *connection agreement* may assign responsibility to the *Connection Applicant* for obtaining the approvals referred to in paragraph (d) as part of the project proposal and the *Network Service Provider* must provide all reasonable information and may provide reasonable assistance for a reasonable fee to enable preparation of applications for such approvals.
- (f) Subject to paragraph (e), each *connection agreement* must be based on the offer to *connect* as varied by agreement between the parties.
- (f1) [Deleted] The parties may agree to have one connection agreement between a Primary Transmission Network Service Provider, Dedicated Connection Asset Service Provider and a Transmission Network User for a connection.
- (f2) A *network operating agreement* must be based on the offer to *connect* as varied by agreement between the parties.
- (g) Within 20 business days of execution of the connection agreement, the Network Service Provider responsible for the connection point and the Registered Participant must jointly notify AEMO that a connection agreement has been entered into between them and forward to AEMO relevant technical details of the proposed plant and connection, including as applicable:
  - (1) details of all *performance standards* that form part of the terms and conditions of the *connection agreement*;
  - (2) if a *Generator*, the arrangements for:
    - (i) updating the *releasable user guide* and other information required under clause S5.2.4(b); and
    - (ii) informing *AEMO* when the *connection agreement* expires or is terminated;
  - (3) the proposed *metering installation*;
  - (4) arrangements to obtain physical access to the *metering installation* for the *Metering Provider* and the *Metering Data Provider* for *metering installations* type 4A, 5 and 6;
  - (5) the terms upon which a *Registered Participant* is to supply any *ancillary services* under the *connection agreement*; and
  - (6) the details of any *system strength remediation scheme* agreed, determined or modified under clause 5.3.4B.

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

(h) AEMO must, within 20 business days of receipt of the notice under paragraph (g), advise the relevant Network Service Provider and the Registered Participant of whether the proposed metering installation is acceptable for those metering installations associated with those connection points which are classified as metering installation types 1, 2, 3 and 4 as specified in schedule 7.4.

#### 5.3.8 Provision and use of information

- (a) The data and information provided under rules 5.2A, 5.3 and 5.3A is *confidential information* and must:
  - (1) be prepared, given and used in good faith; and
  - (2) not be disclosed or made available by the recipient to a third party except as set out in rule 3.7F, clause 3.13.3, this clause 5.3.8 or in accordance with rule 8.6.
- (a1) The data and information provided to a *Primary Transmission Network Service Provider* in relation to its provision of non-contestable services as specified under clause 5.2A.4(a) must not be used by the *Primary Transmission Network Service Provider* for the purpose of tendering for, or negotiating, *contestable* services specified under clause 5.2A.4(a) in the *connection* process in which the data or information was given, or in future *connection* processes, without the consent of the *Connection Applicant*.
- (b) The data and information to be provided under this rule 5.3 may be shared between a *Network Service Provider* and *AEMO* for the purpose of enabling:
  - (1) the *Network Service Provider* to advise *AEMO* of *ancillary services*; and
  - (2) either party to:
    - (i) assess the effect of a proposed *facility* or proposed alteration to *generating plant* (as the case may be) on:
      - (A) the performance of the *power system*; or
      - (B) another proposed *facility* or another proposed alteration;
    - (ii) assess proposed negotiated access standards;
    - (iii) determine the extent of any required *augmentation* or *extension* or *system strength connection works*; or
    - (iv) assess system strength remediation scheme proposals.
- (c) A *Network Service Provider* may disclose the data and information to be provided under rules 5.2A, 5.3 and 5.3A to another *Network Service Provider* if the *Network Service Provider* considers the information or data is materially relevant to that provider for *connection*.

- (d) A person intending to disclose information under paragraphs (b) or (c) must first advise the relevant *Connection Applicant* of the extent of the disclosure, unless the information may be disclosed in accordance with rule 8.6.
- (d1) If a *Connection Applicant* becomes aware of any material change to information contained in or relevant to a *connection* enquiry under rule 5.3 following receipt of the response from the *Network Service Provider* under clause 5.3.3, that *Connection Applicant* must promptly notify the *Network Service Provider* of that change.
- (e) If a *Connection Applicant* or *Network Service Provider* becomes aware of any material change to any information contained in or relevant to an *application to connect*, it must promptly notify the other party in writing of that change.

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

(f) A *Registered Participant* must, within 5 *business days* of becoming aware that any information provided to *AEMO* in relation to a *performance standard* or other information of a kind required to be provided to *AEMO* under clause 5.3.7 is incorrect, advise *AEMO* of the correct information.

#### Note

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

## 5.3.9 Procedure to be followed by a Generator proposing to alter a generating system

- (a) Subject to paragraph (a1), this clause 5.3.9 applies where a *Generator* proposes to alter a *connected generating system* or a *generating system* for which *performance standards* have been previously accepted by the *Network Service Provider* and *AEMO* (in relation to *AEMO advisory matters*) and that alteration:
  - (1) will affect the performance of the *generating system* relative to any of the technical requirements set out in clauses S5.2.5, S5.2.6, S5.2.7 and S5.2.8; or
  - (2) will, in *AEMO's* reasonable opinion, have an *adverse system strength impact*; or
  - (3) will, in *AEMO*'s reasonable opinion, adversely affect *network* capability, power system security, quality or reliability of supply, interregional power transfer capability or the use of a *network* by another *Network User*.
- (a1) This clause 5.3.9 does not apply in relation to any modifications made to a generating system by a Scheduled Generator or Semi-Scheduled Generator in order to comply with the Primary Frequency Response Requirements as applicable to that generating system.
- (b) A *Generator* to which this clause applies, must submit to the *Network Service Provider* with a copy to *AEMO*:

- (1) a description of the nature of the alteration and the timetable for implementation;
- (2) in respect of the proposed alteration to the *generating system*, details of the *generating unit* design data and *generating unit* setting data in accordance with the *Power System Model Guidelines*, *Power System Design Data Sheet* and *Power System Setting Data Sheet*;

- (3) in relation to each relevant technical requirement for which the proposed alteration to the equipment will affect the performance of the *generating system*, the proposed amendments to the *plant's* existing corresponding *performance standard* for that technical requirement; and
- (4) where relevant, the *Generator's* proposed system strength remediation scheme.
- (c) Clause 5.3.4A applies to a submission by a *Generator* under subparagraph (b)(3).
- (c1) Clause 5.3.4B applies to a submission by a *Generator* under subparagraph (b)(4). A *Generator* may request the *Network Service Provider* to undertake a preliminary assessment in accordance with the *system strength impact assessment guidelines* before making a submission under paragraph (b).
- (d) Without limiting paragraph (a), a proposed alteration to the equipment specified in column 1 of the table set out below is deemed to affect the performance of the *generating system* relative to technical requirements specified in column 2, thereby necessitating a submission under subparagraph (b)(3), unless *AEMO* and the *Network Service Provider* otherwise agree.

Column 1 (altered equipment)	Column 2 (clause)
machine windings	S5.2.5.1, S5.2.5.2, S5.2.8
power converter	\$5.2.5.1, \$5.2.5.2, \$5.2.5.5, \$5.2.5.12, \$5.2.5.13, \$5.2.8
reactive compensation plant	\$5.2.5.1, \$5.2.5.2, \$5.2.5.5, \$5.2.5.12, \$5.2.5.13
excitation control system	\$5.2.5.5, \$5.2.5.7, \$5.2.5.12, \$5.2.5.13
voltage control system	\$5.2.5.5, \$5.2.5.7, \$5.2.5.12, \$5.2.5.13
governor control system	S5.2.5.7, S5.2.5.11, S5.2.5.14
power control system	S5.2.5.11, S5.2.5.14

Column 1 (altered equipment)	Column 2 (clause)
protection system	\$5.2.5.3, \$5.2.5.4, \$5.2.5.5, \$5.2.5.7, \$5.2.5.8, \$5.2.5.9, \$5.2.5.10
auxiliary supplies	S5.2.5.1, S5.2.5.2, S5.2.7
remote control and monitoring system	S5.2.5.14, S5.2.6.1, S5.2.6.2

- (e) The *Network Service Provider* may as a condition of considering a submission made under paragraph (b), require payment of a fee to meet the reasonable costs anticipated to be incurred by the *Network Service Provider*, other *Network Service Providers* and *AEMO*, in the assessment of the submission.
- (f) The *Network Service Provider* must require payment of a fee under paragraph (e) if so requested by *AEMO*.
- (g) On payment of the required fee referred to in paragraph (e), the *Network Service Provider* must pay such amounts as are on account of the costs anticipated to be incurred by the other *Network Service Providers* and *AEMO*, as appropriate.
- (h) If the application of this clause 5.3.9 leads to a variation to an existing *connection agreement* the *Network Service Provider* and the *Generator* must immediately jointly advise *AEMO*, including the details of any *performance standards* amended pursuant to this clause 5.3.9.

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

## 5.3.10 Acceptance of performance standards for generating plant that is altered

(a) A *Generator* must not commission altered *generating plant* until the *Network Service Provider* has advised the *Generator* that the provider and *AEMO* are satisfied in accordance with paragraph (b).

#### Note

- (b) In relation to altered *generating plant*, the *Network Service Provider* and *AEMO*, to the extent of *AEMO's* advisory role under clause 5.3.4A and clause 5.3.4B, must be satisfied that:
  - (1) the *Generator* has complied with clause 5.3.9; and
  - (2) each amended *performance standard* submitted by the *Generator* either meets:

- (i) the *automatic access standard* applicable to the relevant technical requirement; or
- (ii) the *negotiated access standard* under clause 5.3.4A as applied in accordance with clause 5.3.9(c); and
- (3) any system strength remediation scheme satisfies clause 5.3.4B.
- (c) For the purposes of paragraph (a), *AEMO* must advise the *Network Service Provider* as to whether it is satisfied with the matters referred to paragraph (b).

## 5.3.11 Notification of request to change normal voltage

- (a) On receipt of a request from a *Network Service Provider* to change *normal* voltage, AEMO must publish a notice to Registered Participants advising:
  - (1) the change in *normal voltage* requested; and
  - (2) the *connection point* to which the request relates.
- (b) Within a reasonable period after publication of the notice in paragraph (a), *AEMO* must *publish* a further notice to *Registered Participants* advising:
  - (1) whether the *normal voltage* at the relevant *connection point* will change; and
  - (2) the nature of, and reasons for, any such change.

## 5.4 Independent Engineer

## 5.4.1 Application

- (a) This rule 5.4 does not apply to the *declared transmission system* of an *adoptive jurisdiction*.
- (b) This rule 5.4 applies only if a relevant *Transmission Network Service Provider* or a *Connection Applicant* requires independent advice in order to reach agreement on or resolve:
  - (1) a technical issue in relation to *negotiated transmission services* related to a *connection* sought by the *Connection Applicant*;
  - (2) whether assets or components form part of a *dedicated connection asset* or form part of an *identified user shared asset* the *network* (including a *designated network asset*);
  - (3) whether or not a component of an identified user shared funded network asset is a contestable <u>FNAHUSA</u> component pursuant to clause 5.2A.4(b)c)(1) and (2); or
  - (4) whether the detailed design of a *contestable FNA USA component* is consistent with the functional specification for the relevant *identified* user sharedfunded network asset,

## ("technical matter").

- (c) A technical matter does not include issues relating to:
  - (1) the cost or commercial terms of;

- (2) the process relating to; or
- (3) the timing of,

the *connection*.

## 5.4.2 Establishment of a pool

- (a) The *Adviser* must establish and maintain a pool of persons (who may be individuals or firms) from whom the *Independent Engineer* may be selected in accordance with clauses 5.4.3(d)(2) or 5.4.4(a)(4).
- (b) In selecting persons for the pool, the *Adviser* must have regard to the need for the person to have sufficient experience and expertise in technical matters involved in *connections* to the *transmission network*.
- (c) The *Adviser* must review the composition of the pool at least every two years.

## 5.4.3 Initiating the Independent Engineer process

- (a) If a technical matter arises that requires independent advice in order to reach an agreement or resolution, a *Transmission Network Service Provider* or a *Connection Applicant* may serve a notice on the other party that:
  - (1) requires the parties to engage an *Independent Engineer*;
  - (2) includes a statement setting out the technical matter; and
  - (3) may request the receiving party to provide information about the technical matter.
- (b) If another *Transmission Network Service Provider*:
  - (1) has the task of liaising with the *Connection Applicant* under clause 5.3.2(e); or
  - (2) has been identified as a party with whom the *Connection Applicant* must enter into an agreement with under clause 5.3.3(b)(4),

and has an interest in the technical issue under clause 5.4.1(b)(1), that *Transmission Network Service Provider* must also be served with a copy of the notice under paragraph (a) and must participate in the *Independent Engineer* process.

- (c) If the technical matter involves a matter that relates to an *AEMO advisory* matter, then *AEMO* must also be served with a copy of the notice under paragraph (a) and may participate in the *Independent Engineer* process.
- (d) Within 10 business days of service of a notice under paragraph (a), a party may:
  - (1) agree that the technical matter be resolved through an alternative means as agreed by the parties on the terms agreed between the parties; or
  - (2) agree to appoint an *Independent Engineer* from the pool and the scope of work the *Independent Engineer* is to undertake.
- (e) If the parties appoint an *Independent Engineer* in accordance with subparagraph (d)(2), the parties are not required to notify the *Adviser* of the agreed selection in which case clauses 5.4.5 and 5.4.6 apply.

#### 5.4.4 Referral to the Adviser

- (a) If the parties do not reach an agreement under clause 5.4.3(d) within 10 business days of service of a notice under clause 5.4.3(a), any party may refer the technical matter to the Adviser by serving on the Adviser a notice, which must:
  - (1) be in a form approved and published by the *Adviser*;
  - (2) contain the names of the parties who seek advice on the technical matter;
  - (3) contain a statement setting out the technical matter;
  - (4) if the parties have agreed on an *Independent Engineer*, the name of that *Independent Engineer* or in the absence of such agreement, contain a request for the *Adviser* to select an *Independent Engineer*;
  - (5) contain the scope of advice required in respect of the technical matter, as agreed by the parties and in the absence of such agreement, request the *Adviser* to assist in determining the scope (which the *Adviser* may do in consultation with the parties and the *Independent Engineer* once appointed); and
  - (6) specify a time frame by which the advice from the *Independent Engineer* is required so as to allow the *Adviser* to consider the availability of potential *Independent Engineers*.
- (b) If the *Adviser* is requested to select an *Independent Engineer* from the pool under clause 5.4.2, it must:
  - (1) use reasonable endeavours to ensure the cost, availability, independence and expertise and experience of the selected *Independent Engineer* is appropriate to the technical matter;
  - (2) consult with the parties prior to appointment, and
  - (3) unless the parties otherwise agree, make the appointment within 15 business days of the notice under paragraph (a).
- (c) Despite the requirement to consult set out in subparagraph (b)(3), a selection of the *Adviser* is final and binding upon all parties.

## 5.4.5 Proceedings and decisions of the Independent Engineer

- (a) The *Independent Engineer* may request documents and information from the parties that it reasonably considers is required to provide advice on the technical matter and a party must comply with such a request.
- (b) As a condition of providing documents and information, a party may require the *Independent Engineer* to agree to be bound to the confidentiality obligations under rule 8.6 as if the *Independent Engineer* was a *Registered Participant*.
- (c) The *Independent Engineer* must provide its written advice on a technical matter promptly, and in any case must do so within 30 *business days* after the *Independent Engineer* is appointed unless the parties otherwise agree.

- (d) The *Transmission Network Service Provider* may amend the time period referred to in any stage of the *connection* process under the *preliminary program* to allow for the additional time reasonably required for the *Independent Engineer* process under this rule 5.4.
- (e) The *Independent Engineer* must have regard to the following matters in forming their advice:
  - (1) the technical requirements of the *connection* proposed by either of the parties;
  - (2) the requirement under clause 5.3.4(b1)(2) that the technical requirements of the *connection* must not unreasonably inhibit the capacity for future expansion of an *identified user sharedfunded* network asset or preclude the possibility of future connections;
  - (3) the technical requirements of the *connection* should be consistent with *good electricity industry practice* and contribute to a safe, reliable and secure *transmission system*;
  - (4) any submissions made by AEMO on an AEMO advisory matter; and
  - (5) any relevant requirements and obligations under the applicable *jurisdictional electricity legislation*.
- (f) The *Independent Engineer* is not bound by the rules of evidence and may inform itself in any manner it thinks fit.
- (g) The *Independent Engineer* is a person who facilitates the resolution of disputes on technical matters, and is a protected person for the purposes of section 120B of the *National Electricity Law* in relation to the exercise of its powers and functions carried out under this clause 5.4.5.
- (h) The *Independent Engineer's* advice is not binding on the parties.

## 5.4.6 Costs of the Independent Engineer

The costs of any *Independent Engineer*, including any costs incurred by the *Adviser* in performing the functions of the *Adviser* in clause 5.4.4 are to be borne equally by the parties, unless otherwise agreed by the parties.

## 5.4A [Deleted]

#### Note

In the transitional rules, rule 5.4A and its associated definitions will be preserved in relation to the *declared transmission system* of an *adoptive jurisdiction*.

## 5.4AA [Deleted]

## 5.5 Commercial arbitration for prescribed and negotiated transmission services and large DCADNA services

### 5.5.1 Application

(a) This rule 5.5 does not apply to the *declared transmission system* of an *adoptive jurisdiction*.

- (b) This rule 5.5 applies to any dispute which may arise between a *Transmission Network Service Provider* (including a *Dedicated Connection Asset Service Provider* for a *large dedicated connection asset*) (a **provider**) and a *Connection Applicant* or a person seeking *large DCADNA* services (an **applicant**) as to *terms and conditions of access*, for the provision of *prescribed transmission services*, the provision of *negotiated transmission services* that are not *DNA services* (each a *transmission services access dispute*); or the provision of *large DCADNA* services (a *large DCADNA services access dispute*) (as applicable).
- (c) For the purposes of *prescribed transmission services*, *negotiated transmission services* and *large DCADNA services*, the *terms and conditions of access*:
  - (1) in relation to negotiated transmission services, are:
    - (i) the price of those services; and
    - (ii) other terms and conditions for the provision of those *negotiated* transmission services,

under Chapters 4 and 5 of the Rules;

- (2) in relation to prescribed transmission services, are:
  - (i) the price of those services as determined under the *pricing* methodology of the relevant Transmission Network Service Provider; and
  - (ii) other terms and conditions for the provision of those *prescribed* transmission services,

under Chapters 4, 5 and 6A of the Rules; and

(3) in relation to <u>large DCADNA</u> services, are the price of, and the other terms and conditions for, the provision of those <u>DNAlarge DCA</u> services, as determined under <u>Chapters 4 and 5 of the Rules</u> (as <u>applicable</u>) and the access policy.

## 5.5.2 Notification of dispute

- (a) A provider or an applicant may notify the *AER* in writing that a *transmission* services access dispute or <u>DNAlarge DCA</u> services access dispute exists.
- (b) On receiving a notification under paragraph (a), the *AER* must give notice in writing of the dispute to the other party to the dispute.
- (c) A provider or an applicant who has given notice of a dispute under paragraph (a) may withdraw notification of the dispute at any time by written notice to the *AER* and the other party to the dispute.
- (d) If the notification of a dispute is withdrawn under paragraph (c), it is taken for the purposes of this clause 5.5.2 to never have been given.

## 5.5.3 Appointment of commercial arbitrator

(a) On receiving a notification under clause 5.5.2(a), the *AER* must request the provider and the applicant, by a time specified by the *AER*, to nominate to the *AER* two persons each for appointment as the *commercial arbitrator* to determine the *transmission services access dispute* or *DNA large DCA* 

services access dispute. The provider and applicant may make the nominations.

- (b) As soon as practicable after the expiry of the time specified by the AER under paragraph (a), the AER must appoint:
  - (1) one of the persons (if any) nominated to the *AER* by the provider or the applicant under paragraph (a); or
  - (2) if neither the provider or the applicant nominate any such person within the time specified by the *AER* under paragraph (a) or all of the persons so nominated do not qualify for appointment under paragraph (d) or (e), a person determined by the *AER*,

as the *commercial arbitrator* to determine the dispute, and must refer the dispute to that *commercial arbitrator*.

- (c) A decision of the *AER* as to the appointment of the *commercial arbitrator* is final and binding on the provider and the applicant.
- (d) The AER may only appoint a person as the *commercial arbitrator* if that person is experienced or trained in dispute resolution techniques.
- (e) A person is not eligible for appointment as the *commercial arbitrator* if that person has any interest that may conflict with, or which may be seen to conflict with, the impartial resolution of the dispute. Where the person who is appointed as the *commercial arbitrator* becomes aware of such conflict after that person commences the hearing of the dispute, the person must advise the parties to that effect.
- (f) Where:
  - (1) the provider or the applicant believes that the person appointed as the *commercial arbitrator* has an interest which may conflict with the impartial resolution of the dispute; or
  - (2) the person appointed as the *commercial arbitrator* discloses the existence of such an interest.

the person must not continue to hear and determine the dispute, except with the written consent of the provider and the applicant.

#### 5.5.4 Procedures of commercial arbitrator

- (a) The *commercial arbitrator* may give to the parties such directions as it considers necessary:
  - (1) for the proper conduct of the proceedings, including in relation to the provision of documents and information to the other party and the making of oral and written submissions;
  - (2) relating to the use and disclosure of information obtained from the other party to the dispute (including a direction to keep information confidential); and
  - (3) in relation to the participation (if any) of legal representatives of the parties in the proceedings.

(b) The *commercial arbitrator* must observe the rules of procedural fairness, but is not bound by the rules of evidence and may inform itself in any manner it thinks fit.

## 5.5.5 Powers of commercial arbitrator in determining disputes

- (a) In determining a *transmission services access dispute* in relation to the *terms* and conditions of access for the provision of prescribed transmission services the *commercial arbitrator* must apply:
  - (1) in relation to price, the *pricing methodology* of the relevant *Transmission Network Service Provider* approved by the *AER* under Part E and Part J of Chapter 6A of the *Rules*;
  - (2) in relation to other terms and conditions, Chapters 4, 5 and 6A of the *Rules*; and
  - (3) in relation to all *terms and conditions of access* (including price) the decision of *AEMO* or the *AER* where those decisions relate to those terms and conditions and are made under Chapters 4, 5 and 6A of the *Rules*.
- (b) In determining a *transmission services access dispute* in relation to the *terms* and conditions of access for the provision of a negotiated transmission service the commercial arbitrator must apply:
  - (1) in relation to price for the provision of that service by the provider, the *negotiating principles* that are applicable to that dispute;
  - (2) in relation to other terms and conditions, the *negotiating principles* that are applicable to that dispute and Chapters 4 and 5 of the *Rules*;
  - (3) in relation to all *terms and conditions of access* (including price) the decision of *AEMO* or the *AER* where those decisions relate to those terms and conditions and are made under Chapters 4 and 5 of the *Rules*.
- (c) In determining a <u>DNA large DCA</u> services access dispute in relation to the terms and conditions of access for the provision of <u>DNA large DCA</u> services, the commercial arbitrator must:
  - (1) apply <u>Chapters 4 and 5 of the Rules (as applicable) and the access policy</u> of the <u>Dedicated Connection Asset Service Provider Primary Transmission Network Service Provider</u>;
  - (2) apply the relevant negotiating principles in schedule 5.12;
  - (3) have regard to the legitimate business interests of the *Dedicated Connection Asset Service ProviderPrimary Transmission Network Service Provider* and any owner of the *designated network asset*;
  - (4) have regard to the interests of all persons who have rights to use the *large DCADNA services*; and
  - (5) have regard to the operational and technical requirements necessary for the safe and reliable operation of the *large dedicated connection* asset designated network asset and any facility connected to it.

- (d) In determining a *transmission services access dispute* in relation to the *terms* and conditions of access for the provision of negotiated transmission services a commercial arbitrator may:
  - (1) have regard to other matters which the *commercial arbitrator* considers relevant.
  - (2) hear evidence or receive submissions from *AEMO* and *Transmission Network Users* who may be adversely affected.
- (e) In determining a *transmission services access dispute* in relation to the *terms* and conditions of access for the provision of prescribed transmission services a commercial arbitrator may:
  - (1) have regard to other matters which the *commercial arbitrator* considers relevant.
  - (2) hear evidence or receive submissions from *AEMO* in relation to *power* system security matters and from *Transmission Network Users* who may be adversely affected.

## 5.5.6 Determination of disputes

- (a) Subject to paragraph (c), the *commercial arbitrator* must determine the dispute as quickly as possible, and in any case it must do so within 30 *business days* after the dispute is referred to the *commercial arbitrator*.
- (b) The determination of the *commercial arbitrator*:
  - (1) may direct the provision of *prescribed transmissions services* and *negotiated transmission services* in accordance with Chapters 4, 5 and 6A of the *Rules*;
  - (2) may specify, for a *negotiated transmission service* or a <u>DNA large DCA</u> service, a price or charge in such a way that it is or is to be adjusted over time;
  - (3) may direct the provision of <u>DNA large DCA</u> services in accordance with the access policy of the <u>Primary Transmission Network Service</u> <u>Provider Dedicated Connection Asset Service Provider</u>; and
  - (4) only where the dispute is a <u>DNA large DCA</u> services access dispute, may require the enlargement or increase in capacity of, or alterations to, a <u>designated network</u> asset in accordance with the <u>access policylarge</u> <u>dedicated connection asset</u>.

### Note

An adjustment as referred to in subparagraph (2) may, for example, be appropriate where the cost of providing the *negotiated transmission service* to a *Connection Applicant* or person seeking <u>DNA large DCA services</u> changes because the assets used to provide that service are subsequently used to provide a service to another person and the payment for the service by that other person enables the *Transmission Network Service Provider* or <u>Dedicated Connection Asset Service Provider</u> to recoup some of those costs from that other person.

- (c) The *commercial arbitrator* may extend the period referred to in paragraph (a) if the provider and the applicant so agree in writing.
- (d) The *commercial arbitrator* may at any time terminate the proceedings without making a decision if it considers that:

- (1) the dispute is misconceived or lacking in substance;
- (2) the notification of the dispute to the *AER* under clause 5.5.2(a) was vexatious; or
- (3) the party who notified the dispute to the *AER* under clause 5.5.2(a) has not negotiated in good faith or has notified the dispute prematurely or unreasonably.
- (e) The *commercial arbitrator* must terminate the proceedings without making a decision if at any time, whether on application by the provider or the applicant or otherwise, the arbitrator determines that the *transmission service* or *large*\*\*DCADNA\*\* service is capable of being provided on a genuinely competitive basis by a person other than the provider or an entity which is associated with the provider.

## 5.5.7 Costs of dispute

- (a) The fees and costs of the *commercial arbitrator* must be borne equally by the provider and the applicant unless:
  - (1) paragraph (b) applies; or
  - (2) otherwise agreed between the provider and the applicant.
- (b) The costs of determining the dispute (including the legal costs of either of the parties) may be allocated by the *commercial arbitrator* for payment as between the parties as part of any determination.
- (c) In deciding to allocate costs against one of the parties to the dispute, the *commercial arbitrator* may have regard to any relevant matters including (but not limited to) whether the conduct of that party unreasonably prolonged or escalated the dispute or otherwise increased the costs of resolving the dispute.

## 5.5.8 Enforcement of agreement or determination and requirement for reasons

- (a) Where the provider and the applicant reach agreement (whether or not the matter is before a *commercial arbitrator*), the parties may execute a written agreement recording their resolution of that dispute.
- (b) The *commercial arbitrator* must give its decision determining the dispute, together with its reasons for that decision, in writing and must provide a copy of its determination:
  - (1) to the provider and to the applicant; and
  - (2) (except to the extent that it contains confidential information) to the *AER* for publication.
- (c) An agreement that is executed under paragraph (a) and a determination of the *commercial arbitrator* under paragraph (b) are binding on the provider and the applicant, and any failure to comply with such an agreement or determination is a breach of the *Rules* in respect of which the *AER* may take action in accordance with the *National Electricity Law*.

#### 5.5.9 Miscellaneous

- (a) To the extent permitted by law, a person who is appointed as a *commercial* arbitrator is not liable for any loss, damage or liability suffered or incurred by any person as a consequence of any act or omission of that person which was done in good faith in connection with the dispute
- (b) A person who is appointed as a *commercial arbitrator* may, before acting in relation to the dispute, require the parties to the dispute (and any one of them) to execute a release and indemnity in relation to any loss, damage or liability that that person would, but for the release or indemnity, suffer or incur as a consequence of any act or omission done in good faith in connection with the dispute.

## 5.5A [Deleted]

[…]

### 5.7.8 Contestable FNAIUSA components

- (a) Before commissioning, the *Primary Transmission Network Service Provider* must ensure that *contestable <u>IUSA-FNA</u> components* are built to the standards specified in the functional specification provided under clause 5.3.3(b)(9) and the *Connection Applicant* for the *identified user shared assetfunded network* <u>asset</u> must provide access to the *Primary Transmission Network Service Provider* to make inspections, and agree to such tests, as is reasonably required for that purpose.
- (b) The *Connection Applicant* for the *identified user shared assetfunded network asset* must pay the reasonable costs of inspections and tests which are reasonably required by the *Primary Transmission Network Service Provider* under paragraph (a).

## Schedule 5.6 Terms and Conditions of Connection agreements and network operating agreements

## Part A Connection agreements

The *connection agreements* must contain the specific conditions that have been agreed to for *connection* and access to the *transmission* or *distribution network*, including but not limited to:

- (a) details of the *connection point* including the *distribution network* coupling points where appropriate;
- (b) *metering* arrangements and adjustments for losses where the point of *metering* is significantly different to the *connection point*;
- -(c) authorised demand which may be taken or supplied at the *connection point* (under specified conditions);
- (c1) details of each *access standard* agreed between the *Network Service Provider* and the *Registered Participant* and all related conditions of agreement

- resulting from the application of any access provisions contained in schedule 5.1 for *Network Service Providers*, or schedule 5.2 for *Generators*, or schedule 5.3 for *Customers*, or schedule 5.3a for *Market Network Service Providers*;
- (c2) details of any *system strength remediation scheme* agreed, determined or modified in accordance with clause 5.3.4B and associated terms and conditions;
- (c3) details of any system strength connection works;
- (d) connection service charges;
- (e) payment conditions;
- (f) duration and termination conditions of the *connection agreement*;
- (g) terms, conditions and *constraints* that have been agreed to for *connection* to the *network* to protect the legitimate interest of the *Network Service Providers* including rights to *disconnect* the *Registered Participant* for breach of commercial undertakings;
- (h) details of any agreed standards of *reliability* of *transmission service* or *distribution service* at the *connection points* or within the *network*;
- (i) testing intervals for *protection systems* associated with the *connection point*;
- (j) agreed protocols for maintenance co-ordination;
- (k) where an expected *load*, to be connected to a *network*, has a *peak load* requirement in excess 10 MW, the provision, installation, operation and maintenance of automatic *load* shedding facilities for 60 percent of the *load* at anytime;
- (1) terms and conditions of access to the *metering installation* for the *Metering Provider* and access to *metering installations* type 4A, 5 and 6 for the *Metering Data Provider*;
- (m) the arrangements for the provision of services relating to *non-contestable HUSA-FNA components* (if applicable);
- (n) the functional specifications for the *contestable FNAHUSA* components; and
- (o) if the Connection Applicant has obtained services related to—a contestable FNAHUSA components other than from the Primary Transmission Network Service Provider and intends to transfer ownership of some or all of those components to the Primary Transmission Network Service Provider, arrangements for the transfer of ownership of those components upon energisation of the identified user sharedfunded network asset to the Primary Transmission Network Service Provider (if applicable) and how any defects liabilities will be managed.

The *connection agreements* may include other technical, commercial and legal conditions governing works required for the *connection* or *extension* to the *network* which the parties have negotiated and agreed to. The circumstances under which the terms of the *connection agreement* would require renegotiation may also be included.

## Part B Network Operating Agreements

A network operating agreement between the Primary Transmission Network Service Provider and the owner of contestable <u>FNA+USA</u> components must include provisions relating to:

- (a) (a) agreed boundaries and physical connection obligations and interface between the *identified user sharedfunded network* asset and the *transmission network*;
- -(b) conditions to transfer operational control of the asset to the *Primary Transmission Network Service Provider*;
- (c) the standard of care to apply to the *Primary Transmission Network Service Provider* in providing operation and maintenance services;
- (d) insurance obligations;
- (e) termination, events of default and force majeure regime;
- (f) liability and indemnity;
- (g) defect warranties; and
- (h) for a *designated network asset*, metering arrangements at the *boundary point* to facilitate the calculation of *electricity energy losses* over the *designated network asset*.

## [...]

# Schedule 5.10 Information requirements for Primary Transmission Network Service Providers (clause 5.2A.5)

Information	Via website or direct enquiry	Additional fee <sup>1</sup>	Comments		
Technical specification					
Generic interface works	Website	No	Typical standards and layouts must be published. This information:  (a) may be generic but should provide a high level overview of the components of a <i>connection</i> ; and		
Generic substation layouts	Website	No			
Typical overhead line structures	Website	No			

This refers to the right for the *Primary Transmission Network Service Providers* to charge an additional fee for the provision of this information to the *connection* enquiry under clause 5.3.2(g) and the *connection* application fee under clause 5.3.4.(b)(2).

Information	Via website or direct enquiry	Additional fee <sup>1</sup>	Comments		
Typical underground cable arrangements	Website	No	(b) must provide  Connection  Applicants with a high level understanding of what a connection consists of.  Primary Transmission Network  Service Providers must provide the design standards which are specific to their network.		
Typical primary plant	Website	No			
Design standards	Website	No			
Typical secondary systems	Website	No			
Detailed technical requirements for a particular connection	Direct enquiry	No	Functional specification to describe the requirements that must be met by the detailed design.		
			The functional specifications must include:		
			(a) description of any proposed augmentation; and		
			(b) references to typical plant including primary and secondary equipment so that the detailed design will interface to the existing network and be able to be adopted by the Primary Transmission Network Service Provider.		
Operation and maintenance					
Typical operation and maintenance scheduling	Website	No	Operation and maintenance intervals for specific items of <i>plant</i> used regularly by the <i>Primary Transmission Network</i>		

Information	Via website or direct enquiry	Additional fee <sup>1</sup>	Comments
			Service Provider must be published. These are routine activities irrespective of whether assets are unregulated or regulated and should be in line with good electricity industry practice.
Timescales			
Easement acquisition (site specific)	Direct enquiry	Yes	Site specific timescales may be discussed and negotiated on a project by project basis as part of the <i>connection enquiry / connection application</i> process if the <i>Connection Applicant</i> requests it at their election.
Commissioning (generic)	Website	No	Generic timescales must be published.
Commission- ing (site specific)	Direct enquiry	Yes	Site specific timescales may be provided as part of the connection enquiry / connection application process if the Connection Applicant requests it at their election.
Legal			
Standard connection agreements	Website	No	Standard forms of these agreements and deeds to be published.
Standard network operating agreement	Website	No	The standard form construction agreement must cover the construction of any interface works.
Standard interface works construction	Website	No	The standard form connection agreement must cover the connection of the asset to the transmission network.
Standard relocation deeds	Website	No	The standard form <i>network</i> operating agreement must cover those aspects referred to in clause 5.2 <u>A</u> .7( <u>e</u> <del>b</del> ).

Information	Via website or direct enquiry	Additional fee <sup>1</sup>	Comments
Environmental approvals (generic)	Website	No	Standard forms or lists of required approvals must be published.
Environment- al approvals (site specific)	Direct enquiry	Yes	Site specific information may be provided as part of the connection enquiry / connection application process if
Development approvals (generic)	Website	No	Connection Applicant requests it at their election.
Development approvals (site specific)	Direct enquiry	Yes	
Financial	1	1	
Amount and terms and conditions of the connection application charge <sup>2</sup>	Website	No	A guide to the structure of the application fee under clause 5.3.4, and the terms and conditions under which the charge is paid, must be published.
Relocation of existing assets	Direct enquiry	Yes	Specific information about relocation of existing assets may be provided by the <i>Primary Transmission Network Service Provider</i> , if the <i>Connection Applicant</i> requests it at their election.
			The Connection Applicant would be required to pay for any costs associated with the relocation of assets.

# Schedule 5.11 Negotiating principles for negotiated transmission services (clause 5.2A.6)

This Schedule does not apply to DNA services.

2

For clarification, information about the structure, terms and conditions of the charge should be made available free of charge on the *Primary Transmission Network Service Provider's* website, but the *Connection Applicant* would still be required to pay the *connection* application fee under clause 5.3.4(b)(2).

- The price for a *negotiated transmission service* should be based on the costs incurred in providing that service, determined in accordance with the principles and policies set out in the *Cost Allocation Methodology* for the relevant *Transmission Network Service Provider*.
- 2 Subject to paragraphs (3) and (4), the price for a *negotiated transmission service* should be at least equal to the avoided cost of providing it but no more than the cost of providing it on a stand-alone basis.
- 3 If the *negotiated transmission service* is the provision of a *shared transmission service* that:
  - (1) exceeds the *network* performance requirements (if any) which that *shared transmission service* is required to meet under any *jurisdictional electricity legislation*; or
  - (2) exceeds the *network* performance requirements set out in schedules 5.1a and 5.1,

then the differential between the price for that service and the price for the *shared transmission service* which meets (but does not exceed) the *network* performance requirements under any *jurisdictional electricity legislation* or as set out in schedules 5.1a and 5.1 (as the case may be) should reflect the increase in the *Transmission Network Service Provider's* incremental cost of providing that service.

- If the *negotiated transmission service* is the provision of a *shared transmission service* that does not meet (and does not exceed) the *network* performance requirements set out in schedules 5.1a and 5.1, the differential between the price for that service and the price for the *shared transmission service* which meets (but does not exceed) the *network* performance requirements set out in schedules 5.1a and 5.1 should reflect the amount of the *Transmission Network Service Provider's* avoided cost of providing that service.
- The price for a negotiated transmission service must be the same for all Transmission Network Users unless there is a material difference in the costs of providing the negotiated transmission service to different Transmission Network Users or classes of Transmission Network Users.
- The price for a *negotiated transmission service* should be subject to adjustment over time to the extent that the assets used to provide that service are subsequently used to provide services to another person, in which case such adjustment should reflect the extent to which the costs of that asset is being recovered through charges to that other person.
- The price for a *negotiated transmission service* should be such as to enable the *Transmission Network Service Provider* to recover the efficient costs of complying with all *regulatory obligations or requirements* associated with the provision of the *negotiated transmission service*.
- 8 The terms and conditions of access for a negotiated transmission service should be fair and reasonable and consistent with the safe and reliable operation of the power system in accordance with the Rules (for these purposes, the price for a negotiated transmission service is to be treated as

- being fair and reasonable if it complies with principles (1) to (7) of this schedule 5.11).
- The terms and conditions of access for a negotiated transmission service (including, in particular, any exclusions and limitations of liability and indemnities) must not be unreasonably onerous taking into account the allocation of risk between the *Transmission Network Service Provider* and the other party, the price for the negotiated transmission service and the costs to the *Transmission Network Service Provider* of providing the negotiated transmission service.
- The terms and conditions of access for a negotiated transmission service should be provided in a manner that does not adversely affect the safe and reliable operation of the power system in accordance with the Rules.
- 11 The *Connection Applicant* should only be required to pay the costs directly incurred as a result of its *connection*, including its share of costs associated with an *identified user sharedfunded network asset*.
- Subsequent connections to an *identified user sharedfunded network* asset by other *connecting* parties should not adversely affect the *negotiated* transmission services provided to the original *identified user group* for that <u>identified user sharedfunded network</u> asset.
- 13 Subject to principle 11, future *Connection Applicants* should pay for a proportion of the costs paid by the *identified user groups* for *negotiated transmission services*. The proportion of costs will be calculated with respect to:
  - (1) the relative capacity of the Connection Applicant's generating plant; or
  - (2) the relative number of bays; or
  - (3) respective bays,

with the applicable cost sharing methodology determined as appropriate by the nature of the *negotiated transmission services*.

## Schedule 5.12 Negotiating principles for large DCADNA services

References to 'existing connecting party' in this Schedule means a person who has a connection agreement in respect of a designated network asset.

- 1 The price for a *DNA service* should be at least equal to the avoided cost of providing it but no more than the cost of providing it on a stand-alone basis. Principles 2-7 of schedule 5.11 apply in relation to *connection* and access to large DCA services, except a reference to a negotiated transmission service and a Transmission Network Service Provider will be taken to be a reference to a large DCA service and a Dedicated Connection Asset Service Provider respectively.
- The price for a *DNA service* should be such to enable the *Primary Transmission Network Service Provide* to recover the efficient costs of complying with all regulatory obligations or requirements associated with the provision of the *DNA service*.
- An applicant for <u>DNA large DCA services</u> should pay for the cost of any enlargement or increase in capacity of (an "**upgrade**"), or alterations to, an

- existing <u>designated network asset large dedicated connection asset</u> required to provide it with <u>DNA large DCA</u> services, including the moving of metering and other related equipment, necessary for the applicant's <u>connection</u> to the <u>designated network asset large dedicated connection asset</u>.
- The connection of an applicant to an existing <u>designated network asset large</u> <u>dedicated connection asset</u> and access to <u>DNA large DCA</u> services must not adversely affect the access standards, including performance standards and power transfer capability of an existing connecting party at the time of the access application by the applicant.
- The connection of an applicant to an existing <u>designated network asset large</u> <u>dedicated connection asset</u> and access to <u>DNA large DCA</u>-services must not adversely affect contractual obligations of an existing connecting party to the <u>designated network asset large dedicated connection asset</u> with the relevant <u>Dedicated Connection Asset Service Provider Primary Transmission Network</u> Service Provider.
- To the extent that the applicant's subsequent connection to the designated network asset adversely impacts the access standards, performance standards, power transfer capability or contractual obligations of an existing connecting party, then an applicant for DNA services to an existing designated network asset must provide reasonable compensation to an existing connecting party to that designated network asset.
- An applicant must compensate the <u>assetthe Primary Transmission Network</u>
  <u>Service Provider Dedicated Connection Asset Service Provider</u> (and any existing connecting party (as relevant)) for any lost revenue incurred during an upgrade of, or alterations to, an existing <u>large dedicated connection asset designated network asset</u> and metering and other related equipment moves to provide for the <u>connection</u> and operation of the applicant's <u>facilities</u> and access to <u>DNA large DCA</u> services.
- The connection of an applicant to a <u>designated network asset</u> large dedicated connection asset and access to <u>DNA large DCA</u> services must not:
  - (a) prevent an existing connecting party at the time of the applicant's access application—from obtaining a sufficient amount of *large DCADNA* services to be able to meet that person's reasonably anticipated requirements, measured at the time of the access application by the applicant;
  - (b) result in the applicant becoming the owner (or one of the owners) of any part of the existing <u>designated network asset large dedicated</u> connection asset or upgrade of that asset without the consent of the existing owner;
  - (c) require the <u>Primary Transmission Network Service Provider</u>, —an existing connecting party or the owner of the <u>designated network asset</u> to bear all or some of the costs of an upgrade of the <u>designated network asset</u> to bear all or some of the costs of an upgrade or maintaining an upgrade;
  - (d) require an existing connecting party to the <u>designated network</u> <u>assetlarge dedicated connection asset</u> to bear all or some of the costs of

a <u>connection</u> interconnection to the <u>designated network asset</u> <u>large</u> <u>dedicated connection asset</u> or maintaining <u>an intera</u> <u>connection</u>.

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CHAPTER 6A			

## 6A.23 Pricing Principles for Prescribed Transmission Services

#### 6A.23.1 Introduction

- (a) This rule 6A.23 sets out the principles that constitute the *Pricing Principles* for *Prescribed Transmission Services*.
- (b) The *Pricing Principles for Prescribed Transmission Services* are given effect by *pricing methodologies*.

## 6A.23.2 Principles for the allocation of the aggregate annual revenue requirement

The aggregate annual revenue requirement for prescribed transmission services provided by a *Transmission Network Service Provider* is to be allocated in accordance with the following principles:

- (a) The AARR for a Transmission Network Service Provider must be allocated to each category of prescribed transmission services in accordance with the attributable cost share for each such category of services.
- (b) This allocation results in the *annual service revenue requirement (ASRR)* for that category of services.
- (c) The allocation of the AARR must be such that:
  - (1) every portion of the AARR is allocated; and
  - (2) the same portion of the AARR is not allocated more than once.
- (d) Where, as a result of the application of the *attributable cost share*, a portion of the *AARR* would be attributable to more than one category of *prescribed transmission services*, that *attributable cost share* is to be adjusted and applied such that any costs of a *transmission system* asset that would otherwise be attributed to the provision of more than one category of *prescribed transmission services*, is allocated as follows:
  - (1) to the provision of *prescribed TUOS services*, but only to the extent of the *stand-alone amount* for that *category of prescribed transmission services*:
  - (2) if any portion of the costs of a *transmission system* asset is not allocated to *prescribed TUOS services*, under subparagraph (1), that portion is to be allocated to *prescribed common transmission services*, but only to the extent of the *stand-alone amount* for that *category of prescribed transmission services*;
  - (3) if any portion of the costs of a *transmission system* asset is not attributed to *prescribed transmission services* under subparagraphs (1) and (2), that portion is to be attributed to *prescribed entry services* and/or *prescribed exit services*.

## 6A.23.3 Principles for the allocation of the annual service revenue requirement to connection points

The allocation of the annual service revenue requirement of a Transmission Network Service Provider for each category of prescribed transmission services to the relevant *connection points* (other than the *connection points* of any *Market Network Service Provider*), and the manner and sequence in which adjustments can be made to those allocations, for the relevant *regulatory year* to which the *maximum allowed revenue* relates, must be in accordance with the following principles:

- (a) The annual service revenue requirement for prescribed TUOS services is to be allocated between a locational component (pre-adjusted locational component) and a non-locational component (pre-adjusted non-locational component) either:
  - (1) as to 50% to each component; or
  - (2) an alternative allocation to each component, that is based on a reasonable estimate of future *network* utilisation and the likely need for future *transmission* investment, and that has the objective of providing more efficient locational signals to *Market Participants*, *Intending Participants* and end users.
- (b) Subject to paragraph (d), the *pre-adjusted locational component* is to be adjusted by:
  - (1) subtracting any amount estimated as proceeds from *auctions* or any portion of *settlements residue* allocated to the *directional interconnector* which is not the subject of a *SRD agreement* estimated to be receivable by the *Transmission Network Service Provider* from the *connection points* for each relevant *directional interconnector* as referred to in clause 3.18.4, with that amount including an adjustment calculated in accordance with paragraph (f); and
  - (2) adding or subtracting the amount estimated by the *Co-ordinating Network Service Provider* for the *modified load export charge* receivable by or payable to the *Transmission Network Service Provider* under clause 6A.29A.5, with that amount including an adjustment calculated in accordance with paragraph (f),

(the adjusted locational component).

- (c) If the *adjusted locational component* is a positive amount, it is to be allocated to *transmission network connection points* of *Transmission Customers* on the basis of their proportionate use of the relevant *transmission system* assets, excluding, to avoid doubt, assets which constitute a *funded network asset*. The *CRNP methodology* and the *modified CRNP methodology* are two permitted methodologies to estimate the proportionate use of the relevant *transmission system* assets as referred to in paragraph (b).
- (d) If the *adjusted locational component* is a negative amount, then the *adjusted locational component* will be deemed to be zero and the absolute value of that negative amount is to be subtracted from the *pre-adjusted non-locational component* under subparagraph (e)(1).
- (e) The *pre-adjusted non-locational component* is to be adjusted by:
  - (1) subtracting the absolute value of the amount (if any) referred to in paragraph (d);
  - (2) adding or subtracting any amount for *settlements residue* (not being any *auction* amount referred to in subparagraph (b)(1), but including any

- amount of *settlements residue* due to *intra-regional loss factors*) estimated to be receivable by or payable to the *Transmission Network Service Provider* in accordance with clause 3.6.5(a)(3);
- (3) adding or subtracting any adjustment arising as a result of the application of clauses 6A.23.4(c) and (d);
- (4) adding or subtracting any amount arising as a result of the application of prudent discounts (if any) under clauses 6A.26.1(d) to (g);
- (5) adding or subtracting any *over-recovery amount* or *under-recovery amount*, with that amount including an adjustment calculated in accordance with paragraph (f); and
- (6) adding the amount of *NTP function* fees advised to the *Co-ordinating Network Service Provider* in accordance with clause 2.11.3(ba),

(the adjusted non-locational component).

- (f) The adjustment referred to in subparagraphs (b)(1), (b)(2) and (e)(5) must be calculated as the sum of:
  - (1) the difference between:
    - (i) the estimated amount payable or receivable for a service (or component of a service) referred to in subparagraphs (b)(1), (b)(2) and (e)(5) in year t 1; and
    - (ii) the amount actually payable or receivable for that service (or that component of service) in year t 1;
  - (2) the difference between:
    - (i) the actual amount payable or receivable for that service (or that component of service) in year t 2; and
    - (ii) the estimate of the amount payable or receivable for that service (or component of a service) in year t 2 that was used for the purposes of clause (f)(1)(i) in accordance with the *Co-ordinating Network Service Provider's* or the *Transmission Network Service Provider's* (as the case may be) *pricing methodology* that applied in year t 1; and
  - (3) grossed up on the basis of the *allowed rate of return* that applies to the *Transmission Network Service Provider* at the time when the further adjustment is to be made.
- (g) For the purposes of paragraph (f):

"year t" means the *regulatory year* in which adjustments are made under paragraph (f).

"year t - 1" means the *regulatory year* immediately prior to year t or, where year t is the first year of a *regulatory control period*, the last *regulatory year* of the previous *regulatory control period*.

"year t - 2" means the *regulatory year* immediately prior to year t - 1 or, where year t is the:

- (1) first year of a *regulatory control period*, the penultimate *regulatory year* of the previous *regulatory control period*; and
- (2) second year of a *regulatory control period*, the last *regulatory year* of the previous *regulatory control period*.
- (h) The annual service revenue requirement for prescribed common transmission services is to be adjusted by adding the operating and maintenance costs incurred in the provision of those services (to the extent that those costs were subtracted from the maximum allowed revenue in accordance with clause 6A.22.1).
- (i) The whole of the annual service revenue requirement for prescribed entry services is to be allocated to transmission network connection points (other than connection points of any Market Network Service Provider) in accordance with the attributable connection point cost share for prescribed entry services that are provided by the Transmission Network Service Provider at that connection point.
- (j) The whole of the annual service revenue requirement for prescribed exit services is to be allocated to transmission network connection points (other than connection points of any Market Network Service Provider) in accordance with the attributable connection point cost share for prescribed exit services that are provided by the Transmission Network Service Provider at that connection point.

## 6A.23.4 Principles for the recovery of the Annual Service Revenue Requirement as prices

The recovery of the annual service revenue requirement for a Transmission Network Service Provider as prices for Transmission Customers (but not Market Network Service Providers) for the relevant regulatory year to which the maximum allowed revenue relates, must be made in accordance with the following principles:

- (a) The *Transmission Network Service Provider* must have separate prices for:
  - (1) prescribed TUOS services adjusted locational component;
  - (2) prescribed TUOS services adjusted non-locational component;
  - (3) prescribed common transmission services;
  - (4) prescribed entry services; and
  - (5) prescribed exit services.
- (b) Prices for recovering the *prescribed TUOS services adjusted locational component*:

- (1) must be based on demand at times of greatest utilisation of the *transmission network* by *Transmission Customers* and for which *network* investment is most likely to be contemplated;
- (2) subject to subparagraph (3) below, must not change by more than 2% on a *load* weighted average basis for the relevant *region* compared with the previous *regulatory year*; and
- (3) are not subject to the limitation in subparagraph (2):
  - (i) to the extent that the change in prices relate to the adjusted *modified load export charge* as referred to in clause 6A.23.3(b)(2); or
  - (ii) if, since the commencement of the previous regulatory year:
    - (A) the *load* at the *connection point* has materially altered;
    - (B) in connection with that alteration, the *Transmission Customer* requested a renegotiation of its *connection agreement* with the *Transmission Network Service Provider*; and
    - (C) the *AER* approved the change.
- (c) If, in the case of an increase in prices for recovering the *prescribed TUOS* services adjusted locational component, the application of paragraph (b)(2) would result in a shortfall for the *prescribed TUOS* services adjusted locational component, any shortfall may be recovered by increasing the *prescribed TUOS* services non-locational component in clause 6A.23.3(e)(3).
- (d) If, in the case of a decrease in prices for recovering the *prescribed TUOS* services adjusted locational component, the application of paragraph (b)(2) would result in a surplus for the *prescribed TUOS* services adjusted locational component, any surplus must be offset by decreasing the *prescribed TUOS* services non-locational component in clause 6A.23.3(e)(3).
- (e) Prices for recovering the *prescribed TUOS services adjusted non-locational component* must be on a *postage-stamp basis*.
- (f) Prices for recovering *prescribed common transmission services* must be on a *postage-stamp basis*.
- (g) Prices for recovering *prescribed entry services* and *prescribed exit services* must be a fixed annual amount.

# Schedule 6A.3 CRNP methodology and modified CRNP methodology

### S6A.3.1 Meaning of optimised replacement cost

For the purposes of this schedule 6A.3, references to "optimised replacement cost" include an accepted equivalent to optimised replacement cost that is referable to values contained in the accounts of the *Transmission Network Service Provider*.

## S6A.3.2 CRNP methodology

*CRNP Methodology* (or *cost reflective network pricing*) is an allocation process that involves the following steps:

- (1) Attributing network 'costs' to transmission system assets: the locational component of the ASRR allocated to prescribed TUOS services is allocated to each asset used to provide prescribed TUOS services based on the ratio of the optimised replacement cost of that asset, to the optimised replacement cost of all transmission system assets used to provide prescribed use of system services. The allocation to each transmission system asset is the 'locational network asset cost'. To avoid doubt, the optimised replacement cost of transmission system assets that are funded network assets is zero.
- (2) Determining the baseline allocation of *generation* to *loads* using a 'fault contribution matrix'.
- (3) Determining the allocation of dispatched *generation* to *loads* over a range of actual operating conditions from the previous *financial year*. The range of operating scenarios is chosen so as to include the conditions that result in most stress on the *transmission network* and for which *network* investment may be contemplated. For each operating scenario selected:
  - (i) a constrained allocation of *generation* to *loads* matrix must be developed, in which *generation* is allocated to serving *loads* on the basis of the fault contribution matrix;
  - (ii) load flow analysis techniques are used to solve for *network* flows and to calculate the sensitivity of flows on each *network element* resulting from incremental changes in each *load*;
  - (iii) the sensitivities are weighted by *load* to derive a 'flow component' magnitude in each *network* element due to each *load* for that hour;
  - (iv) the relative utilisation of each *network* element by each *load* is calculated from the 'flow component' magnitudes, using only the flow components in the direction of the prevailing line flow.
- (4) When all the selected operating scenarios have been assessed, allocating the individual locational *network* asset costs to *loads* on a pro rata basis using the maximum 'flow component' that each *load* has imposed on each *network* asset across the range of operating conditions considered. To avoid doubt, the individual locational *network* asset cost of a *network* asset that is a *funded network* asset is zero.
- (5) Summing the individual locational *network* asset costs allocated to each *load* to give the total amounts allocated to that *load*.

## S6A.3.3 Modified CRNP methodology

Modified CRNP methodology is an allocation process that involves replacing step 1 of the CRNP methodology referred to in clause S6A.3.2(1) with the following 3 steps:

- (1) Allocating the ASRR allocated to prescribed use of system services to each transmission system asset used to provide prescribed TUOS services based on the ratio of the optimised replacement cost of the that asset to the optimised replacement cost of all transmission system assets used to provide prescribed TUOS services. The amount so allocated to each asset is the asset's gross network asset cost, except, to avoid doubt, if that asset is a funded network asset, the asset cost is zero.
- (2) Adjusting individual gross *network* asset costs: the individual gross *network* asset costs determined in subparagraph (1) must each be multiplied by a factor (between 0 and 1) that depends on the utilisation of each asset. The resulting amount for each asset is the locational network asset cost while the remainder is the non-locational network asset cost.
- (3) Determining the non-locational component: the sum of the non-locational *network* asset cost represents the non-locational component of the *ASRR* for *prescribed TUOS services*.

CHAPTER 7			

## 7. Metering

#### Part A Introduction

## 7.1 Introduction to the Metering Chapter

#### 7.1.1 Contents

This Chapter sets out provisions relating to:

- (a) roles and responsibilities of *financially responsible Market Participants*, *Metering Coordinators*, and *AEMO* and *Primary Transmission Network Service Providers*;
- (b) the appointment of and the qualifications and registration requirements applying to *Metering Providers* and *Metering Data Providers*;
- (b1) the qualifications and registration requirements applying to *Embedded Network Managers*;
- (c) the appointment of *Metering Coordinators* and *Metering Coordinator* default arrangements;
- (d) metering installation requirements;
- (e) *metering data services* and the *metering database*;
- (f) *metering register* requirements, disclosure of *NMI* information and *metering data* provision to *retail customers*;
- (g) security of, and rights to access, *metering installations*, services provided by *metering installations*, *energy data* held in *metering installations* and *metering data* from *metering installations*;
- (h) procedures to be established, maintained and *published* by *AEMO* including the *metrology procedures* and *service level procedures*; and
- (i) B2B arrangements.

## 7.5A Role and Responsibility of Embedded Network Managers

## 7.5A.1 Responsibility of Embedded Network Managers for management services

The provision of *embedded network management services* must be carried out only by an *Embedded Network Manager*.

#### Note

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

#### 7.5A.2 EN information

An Embedded Network Manager must:

- (a) maintain information about the types and configuration of *metering* installations at the parent connection point and all child connection points on the Embedded Network Manager's embedded network and about the subtractive or other arrangements used in respect of those metering installations relevant to settlements; and
- (b) in accordance with the *B2B Procedures*, make that information available on request to:
  - (1) the financially responsible Market Participant for any child connection point on the embedded network or that Market Participant's Metering Coordinator;
  - (2) any Incoming Retailer or its Metering Coordinator; or
  - (3) the Exempt Embedded Network Service Provider of the relevant embedded network.

#### Note

Schedule 4 of the National Electricity Amendment (Expanding Competition in metering and related services) Rule 2015 No.12 inserts a definition for Incoming Retailer.

## 7.5B Role and Responsibility of Primary Transmission Network Service Providers

## 7.5B.1 Metering at the boundary point

- (a) Subject to paragraph (b), a *Primary Transmission Network Service Provider* must arrange for a *metering installation* at a *boundary point* to facilitate the calculation of *electrical energy losses* over a *designated network asset*.
- (b) To the extent that *AEMO* determines in the special site or technology related conditions *published* under clause 7.8.12(c)(1), that the *boundary point* and the calculation of *electrical energy losses* over the *designated network asset* requires a particular arrangement, the *Primary Transmission Network Service Provider* must implement the arrangements specified in that document.

CHAPTER 8			

## 8.2 Dispute Resolution

### 8.2.1 Application and guiding principles

- (a) This rule 8.2 applies to any dispute which may arise between two or more *Registered Participants* about:
  - (1) the application or interpretation of the *Rules*;
  - (2) the failure of any *Registered Participants* to reach agreement on a matter where the *Rules* require agreement or require the *Registered Participants* to negotiate in good faith with a view to reaching agreement;
  - (3) [Deleted]
  - (4) the proposed access arrangements or *connection agreements* of an *Intending Participant* or a *Connection Applicant*, for *connection* and access to a *distribution network* or *declared transmission system*;
  - (5) the payment of moneys under or concerning any obligation under the *Rules*;
  - (6) any other matter relating to or arising out of the *Rules* to which a contract between two or more *Registered Participants* provides that the dispute resolution procedures under the *Rules* are to apply;
  - (7) any other matter relating to or arising out of the *Rules* in respect of which two or more *Registered Participants* have agreed in writing that this rule 8.2 should apply; or
  - (8) any other matter that the *Rules* provide may or must be dealt with under this rule 8.2,

but does not apply to those disputes described in clause 8.2.1(h).

- (a1) For the purposes of this rule 8.2 only, "Registered Participant" is deemed to include not just Registered Participants but also AEMO, Connection Applicants, Metering Providers, Metering Data Providers, Embedded Network Managers and NMAS providers (including NSCAS preferred tenderers) who are not otherwise Registered Participants, except that this will not be the case where the term "Registered Participant":
  - (1) is used in clauses 8.2.2(b)(4), 8.2.2(d), 8.2.3(a), 8.2.3(b)(5) and 8.2.5(e); or
  - (2) first occurs in clauses 8.2.3(b), 8.2.3(b)(3), 8.2.3(b)(4) or 8.2.3(c); or
  - (3) last occurs in clauses 8.2.4(a) or 8.2.9(c).
- (b) [Deleted]
- (c) [Deleted]
- (d) The dispute resolution regime in this rule 8.2 provides procedures to resolve disputes between parties, not sanctions for breach of the *Rules*. The dispute resolution processes may indicate that a breach of the *Rules* has occurred and the resolution or determination of the dispute may take account of the damage

- thereby caused to a party. Any action for breach of the *Rules* may only be taken by the *AER* acting in accordance with the *National Electricity Law*.
- (e) It is intended that the dispute resolution regime set out in or implemented in compliance with the *Rules* and described in detail in this rule 8.2 should to the extent possible:
  - (1) be guided by the *national electricity objective*;
  - (2) be simple, quick and inexpensive;
  - (3) preserve or enhance the relationship between the parties to the dispute;
  - (4) take account of the skills and knowledge that are required for the relevant procedure;
  - (5) observe the rules of natural justice;
  - (6) place emphasis on conflict avoidance; and
  - (7) encourage resolution of disputes without formal legal representation or reliance on legal procedures.
- (f) Except as provided in the *National Electricity Law* and clause 8.2.1(g), where any dispute of a kind set out in clause 8.2.1(a) arises, the parties concerned must comply with the procedures set out in clauses 8.2.4 to 8.2.10 and 8.2.12 and, where the dispute is referred to a *DRP*, a determination of the *DRP* is final and binding on the parties.
- (g) Notwithstanding clause 8.2.1(f), a party may seek an urgent interlocutory injunction from a court of competent jurisdiction.
- (h) Rule 8.2 does not apply to:
  - (1) a decision by AEMO regarding an exemption under clause 2.2.1(c);
  - (2) a decision by *AEMO* under clause 2.2.2 not to approve the classification of a *generating unit* as a *scheduled generating unit*;
  - (3) a decision by *AEMO* under clause 2.2.3 not to approve the classification of a *generating unit* as a *non-scheduled generating unit*;
  - (3A) [Deleted] a decision by AEMO under clause 2.5.1A(d) not to approve the classification of a dedicated connection asset as a small dedicated connection asset or large dedicated connection asset;
  - (4) a decision by AEMO under clause 2.9.2(c);
  - (5) a decision by *AEMO* to reject a notice from a *Market Customer* under clause 2.10.1(d);
  - (5A) a decision by *AEMO* with regard to the preparation or publication of a budget;
  - (5B) the formulation by *AEMO* of its revenue methodology or an amendment to its revenue methodology;
  - (5C) a decision by *AEMO* to reject a notice from a *Market Small Generation Aggregator* under clause 2.10.1(d1);
  - (6) a determination by AEMO under clause 3.3.8 of the minimum amount of *credit support* a Market Participant must provide to AEMO for the

- relevant time period, as determined by *AEMO* in accordance with clause 3.3.8;
- (7) a decision by *AEMO* under clause 3.8.3 to refuse an application for aggregation;
- (8) a decision by *AEMO* under clause 3.15.11 to reject a *reallocation* request;
- (9) a decision by AEMO to issue a notice under clause 4.11.1(d);
- (10) a decision by *AEMO* under clause 7.2.1(b) to refuse to permit a *Market Participant* to participate in the *market* in respect of a *connection point*;
- (11) a decision by AEMO whether or not to deregister a Metering Provider, Metering Data Provider or Embedded Network Manager under clause 7.4.4(d) or to suspend a Metering Provider, Metering Data Provider or Embedded Network Manager from a category of registration under clause 7.4.4(d) or to impose agreed constraints on the continued operation of a Metering Provider, Metering Data Provider or Embedded Network Manager;
- (12) a dispute concerning the price of a *SRAS* agreement or a tender conducted by *AEMO* for the acquisition of *system restart ancillary services* under clause 3.11.9;
- (13) a dispute of a kind referred to in rule 5.16B or 5.17.5;
- (14) a transmission services access dispute and large DCADNA services access dispute to which rule 5.5 applies;
- (14A) a decision by a *Co-ordinating Network Service Provider* with regard to the provision of an estimate of the *modified load export charge* payable to each *Transmission Network Service Provider* as referred to in clause 6A.29A.2.
- (15) a distribution services access dispute to which Part L of Chapter 6 applies;
- (16) a decision by *AEMO* under clause 2.2.7 not to approve the classification of a *semi-scheduled generating unit*; or
- (17) a decision by *AEMO* regarding an exemption under clause 2.4A.1(b); or
- (18) a decision by AEMO regarding an exemption under clause 7.8.4(a).

CHAPTER	10		

## 10. Glossary

#### access policy

An access policy as required for *large DCADNA* services under clause 5.2A.8.

#### boundary point

The point of delineation between a designated network asset and an identified user shared asset:

- (a) as agreed in the relevant *network operating agreement* between the *Primary Transmission Network Service Provider* and the owner of the relevant *designated network asset*; or
- (b) where the *designated network asset* is owned or leased by the *Primary Network Service Provider* as determined by that provider.

#### **Note**

There could be multiple owners of the components of a *designated network asset* that are behind the *boundary point* and each owner will have a separate *network operating agreement* with the *Primary Transmission Network Service Provider* for the component it owns. The subsequent incorporation of additional components to the *designated network asset* with different owners will not change the *boundary point* because it describes the point of delineation between the initial component of the *designated network asset* and the *identified user shared asset*.

#### boundary point losses

Has the meaning given to it by clause 3.6.2B(a).

#### boundary point loss factors

Has the meaning given to it by clause 3.6.2B(b).

#### connect, connected, connection

To form a physical link to or through a *transmission network* (including to a *network connection asset* or <u>through</u> a *dedicated connection asset* that is physically linked to that *transmission network*) or *distribution network*.

#### Note:

In the context of Chapter 5A, the above definition has been displaced by a definition specifically applicable to that Chapter. See clause 5A.A.1.

#### **Connection Applicant**

A person who wants to establish or modify *connection* to a *transmission network* or *distribution network* and/or who wishes to receive *network services* and who makes a *connection enquiry* as described in clause 5.3.2 or clause 5.3A.5.

In respect of establishing or modifying a *connection* to a *transmission network* of a *Primary Transmission Network Service Provider*, a *Connection Applicant* includes:

- (a) a person seeking to connect its facilities to a dedicated connection asset that is or will be connected to the transmission network of that Primary Transmission Network Service Provider including through a dedicated connection asset; and
- (b) a person seeking to negotiate a *network operating agreement* for a *third party HUSAfunded network asset*.

#### Note

A person seeking access to large DCA services from a third party DCA under an access policy may also need to negotiate with the Primary Transmission Network Service Provider.

In the context of Chapter 5A, the above definition has been displaced by a definition specifically applicable to that Chapter. See clause 5A.A.1.

#### connection assets

For the declared transmission system of an adoptive jurisdiction, and a distribution system, those components of a transmission or distribution system which are used to provide connection services.

For other transmission systems, dedicated connection assets and network connection assets.

#### **Note**

A third party DCA is a connection asset but for the purpose of registration under Chapter 2 also constitutes a transmission system.

#### connection point

In relation to a *declared shared network* and a *distribution network* (other than an *embedded network*), the agreed point of supply established between *Network Service Provider*(s) and another *Registered Participant*, *Non-Registered Customer* or *franchise customer* and includes a *parent connection point*.

In relation to other *transmission networks*, the point at which power flows to or from thea person or *identified user group*-connected to the *transmission network* can be isolated from the *transmission network*. If there is more than one such point, the *Network Service Provider* and that person or *identified user group*-will agree which point is the *connection point* in their *connection agreement*.

In relation to an *embedded network*, the *child connection point*, unless otherwise specified.

#### connection service

An entry service (being a service provided to serve a Generator or a group of Generators, or a Network Service Provider or a group of Network Service Providers, at the same a single connection point) or an exit service (being a service provided to serve a Transmission Customer or Distribution Customer or a group of Transmission Customers or Distribution Customers, or a Network Service Provider or a group of Network Service Providers, at the same a single connection point).

#### Note

In the context of Chapter 5A and Part DA of Chapter 6, the above definition has been displaced by a definition specifically applicable to that Chapter. See clause 5A.A.1.

#### contestable FNA HUSA components

Those components of the <u>funded network</u> <u>identified user shared</u> asset that satisfy the criteria set out in clause 5.2A.4(be).

#### dedicated connection asset

The apparatus, equipment, *plant* and buildings that:

- (a) are used for the purpose of connecting a person at a connection point an identified user group to an existing to a transmission network and are used exclusively by that person;
- (b) are used exclusively by the *identified user* group include power lines less than 30 kilometres in route length;
- (c) can be electrically isolated from the *transmission network* without affecting the provision of *shared transmission services* to <u>other persons who are not members of the *identified user group*; and</u>
- (d) are not:
  - (1) *network connection assets*;
  - (2) part of a generating system;
  - (3) part of a distribution system;
  - (4) part of a *transmission system* for which a *Market Network Service Provider* is registered under Chapter 2;
  - (5) part of a *Transmission Customer's facility* that utilises electrical *energy*;
  - (6) part of the declared transmission system of an adoptive jurisdiction: or
  - (7) designated network assets.

#### Note

Where a *Primary Transmission Network Service Provider* is registered in respect of a *dedicated* connection asset operating at distribution voltage, it will not be a distribution system and will constitute part of its transmission system for which it is registered. See definitions of distribution system and transmission system.

**Dedicated Connection Asset Service Provider** 

A Transmission Network Service Provider to the extent that its transmission system or any part of it is classified as a dedicated connection asset in accordance with Chapter 2.

large dedicated connection asset

A dedicated connection asset where the total route length for any power lines forming part of the dedicated connection asset is 30 kilometres or longer.

#### designated network asset

The apparatus, equipment, *plant* and buildings that:

- (a) are used from the *boundary point* to convey, and control the conveyance of, electricity, for an *identified user group*;
- (b) are for the exclusive use of the *identified user group* and may be owned by different persons within that *identified user group*;
- (c) include power lines that have a route length of:
  - (1) 30 kilometres or more; or
  - (2) less than 30 kilometres where the owner of those assets has entered into a *network operating agreement* in respect of those assets; and
- (d) do not:
  - (1) provide prescribed transmission services;

- (2) form part of a *network loop*; or
- (3) form part of a declared transmission system of an adoptive jurisdiction.

#### distribution system

A distribution network, together with the connection assets associated with the distribution network, which is connected to another transmission or distribution system.

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

### large DCADNA service

A service provided by means of a *large dedicated connection* <u>designated network</u> asset.

## large DCADNA services access dispute

A dispute between a <u>Dedicated Connection Asset Service Provider Primary Transmission Network Service Provider</u> and a person seeking access to <u>large DCADNA</u> services as referred to in clause 5.5.1(c), that is for determination by a commercial arbitrator under rule 5.5.

#### entry service

A service provided to serve a *Generator* or a group of *Generators*, or a *Network Service Provider* or a group of *Network Service Providers*, at a single the same connection point.

#### exit service

A service provided to serve a *Transmission Customer* or *Distribution Customer* or a group of *Transmission Customers* or *Distribution Customers*, or a *Network Service Provider* or a group of *Network Service Providers*, at a singlethe same connection point.

#### funded network asset

The parts of a *transmission network* that:

- (a) comprise:
  - (1) a designated network asset;
  - (2) an identified user shared asset; and
- (b) do not form components of system strength connection works, a funded augmentation or part of a declared transmission system of an adoptive jurisdiction.

#### identified user group

One or more persons (other than a *Network Service Provider* who is not a *Market Network Service Provider*) who, from time to time, are *connected* to a *transmission network* atbehind the same single *connection boundary point*.

### identified user shared asset

The apparatus, equipment, *plant* and buildings that:

- (a) are used for the purpose of:
  - (1) connecting a person through a dedicated connection asset one or more identified user groups to an existing transmission network; or
  - (2) expanding the existing *transmission network* to incorporate a <u>designated network asset</u> (but does not include subsequent components that are incorporated into that <u>designated network asset</u>);
- (b) are not for the exclusive use by that person for a dedicated connection asset or identified user group for a designated network asset used exclusively by the relevant identified user groups;
- (c) <u>if used to connect that person to a transmission network through a dedicated connection asset,</u> under normal operating conditions, cannot be electrically isolated from the *transmission network* without affecting the provision of shared transmission services to <u>other</u> persons who are not members of the relevant identified user groups; and
- (d) are not part of the *declared transmission system* of an *adoptive jurisdiction* or a *designated network asset*.

#### Note:

An identified user shared asset is located at: (1) the interface between a dedicated connection asset and a transmission network (but this does not include where the interface is between a dedicated connection asset with a designated network asset); and (2) the boundary point between a designated network asset and part of a transmission network that is not a designated network asset.

There is no *identified user shared asset* where there are subsequent components that are incorporated into a *designated network asset*.

#### negotiated transmission service

Any of the following services:

- (a) a *shared transmission service* that:
  - (1) exceeds the *network* performance requirements (whether as to quality or quantity) (if any) as that *shared transmission service* is required to meet under any *jurisdictional electricity legislation*; or
  - (2) except to the extent that the *network* performance requirements which that *shared transmission service* is required to meet are prescribed under any *jurisdictional electricity legislation*, exceeds or does not meet the *network* performance requirements (whether as to quality or quantity) as are set out in schedule 5.1a or 5.1;
- (b) connection services that are provided to serve a Transmission Network User, or group of Transmission Network Users, at a single transmission network connection point, other than connection services that are provided by one Network Service Provider to another Network Service Provider to connect their networks where neither of the Network Service Providers is a Market Network Service Provider:
- (c) services specified to be *negotiated transmission services* under rule 5.2A.4; or
- (d) undertaking system strength connection works,

but does not include an *above-standard system shared transmission service*, or a *market network service* or a service provided by a *funded network asset* except as specified under paragraph (c).

## non-contestable **FNA FWSA** components

Those components of the *identified user shared assetfunded network asset* that do not satisfy the criteria set out in clause 5.2A.4(c).

#### small dedicated connection asset

A dedicated connection asset that is not a large dedicated connection asset.

### third party DCA

A dedicated connection asset for which a person other than the *Primary* Transmission Network Service Provider is registered under Chapter 2.

## third party IUSA

Those contestable IUSA components of an identified user shared asset that are not, or will not be, owned or leased by the *Primary Transmission Network Service Provider*.

#### transmission network

A *network* within any *participating jurisdiction* operating at nominal *voltages* of 220kV and above plus:

- (a) any part of a *network* operating at nominal *voltages* between 66 kV and 220 kV that operates in parallel to and provides support to the higher voltage *transmission network*;
- (b) any part of a *network* operating at nominal *voltages* between 66kV and 220 kV that is not referred to in paragraph (a) but is deemed by the *AER* to be part of the *transmission network*.

For a participating jurisdiction other than the State of Victoria Except in the case of a declared transmission system of an adoptive jurisdiction, a funded network asset an identified shared user asset owned, controlled or operated by a Primary Transmission Network Service Provider (including a third party IUSA that is the subject of under a network operating agreement) forms part of that Primary Transmission Network Service Provider's transmission network.

#### Transmission Network User

In relation to a transmission network, a Transmission Customer and:

- (a) a Generator whose generating unit; and
- (b) a Network Service Provider whose network.
- (c) to the extent that a *Dedicated Connection Asset Service Provider* is not also one of the persons listed above, a *Dedicated Connection Asset Service Provider* whose *dedicated connection asset* [Deleted],

is connected to the transmission network.

#### transmission system

A transmission network, together with the connection assets associated with the transmission network, which is connected to another transmission or distribution system.

For a participating jurisdiction other than the State of Victoria, a transmission system includes for the purposes of Chapter 2, a third party DCA, which is not a Notified Existing DCA within the meaning of clause 11.98.1.

#### **Note**

An identified user shared asset or a dedicated connection asset for which the Primary Transmission Network Service Provider is registered will form part of that provider's broader transmission system (even if the dedicated connection asset is operating at a distribution voltage) rather than constituting a separate transmission system requiring separate registration under Chapter 2. A person owning, controlling or operating a third party DCA is required to be registered under Chapter 2 as a Transmission Network Service Provider.