

# National Electricity Rules Version 60

## Status Information

This is a draft consolidation based on the latest electronically available version of the National Electricity Rules as at 1 January 2014.

This draft consolidated version of the National Electricity Rules includes mark-up of amendments that may be made to Chapters 5, 6 and 10 of the National Electricity Rules by the final *National Electricity Amendment (Connecting embedded generators) Rule 2014*, which is currently in draft form only,

This version of the National Electricity Rules is provided for information and consultative purposes only. The Australian Energy Market Commission does not guarantee the accuracy, reliability or completeness of this consolidated version.

The final *National Electricity Amendment (Connecting embedded generators) Rule 2014* will be published separately on the website of the Australian Energy Market Commission.

**CHAPTER 5**



## 5. Network Connection, Planning and Expansion

### Part A Network Connection

#### 5.1 Statement of Purpose

##### 5.1.1 [Deleted]

##### 5.1.2 Purpose [and Application](#)

- (a) This Part A:
- (1) provides the framework for *connection* to a *transmission network* or a *distribution network* and access to the *national grid*; and
  - (2) has the following aims:
    - (i) to detail the principles and guidelines governing *connection* and access to a *network*;
    - (ii) to establish the process to be followed by a *Registered Participant* or a person intending to become a *Registered Participant* for establishing or modifying a *connection* to a *network* or for altering *generating plant connected to a network*;
    - (iii) to address a *Connection Applicant's* reasonable expectations of the level and standard of *power transfer capability* that the relevant *network* should provide; and
    - (iv) to establish processes to ensure ongoing compliance with the technical requirements of this Part A to facilitate management of the *national grid*.
- (b) Any person who is not a *Registered Participant* may agree with a *Network Service Provider* to comply with this Part A as part of a *connection agreement*.
- (c) Nothing in the *Rules* is to be read or construed as preventing any person from constructing any *network* or *connection assets*.
- (d) Subject to paragraphs (e) and (g), the following *Rules* apply in the application of this Part A to *transmission services* provided by means of, or in connection with, the *declared transmission system* of an *adoptive jurisdiction*:
- (1) a reference to a *Network Service Provider* is, in relation to the provision of *connection services*, to be read as a reference to a *declared transmission system operator*; and
  - (2) a reference to a *Network Service Provider* is, in relation to the provision of *shared transmission services*, to be read as a reference to *AEMO*.
- (e) A reference in any of the following provisions to a *Network Service Provider* will, in relation to the *declared transmission system* of an *adoptive jurisdiction*, be construed as a reference to *AEMO*:
- (1) clause 5.2.3(b);
  - (2) clause 5.2.6;

- (3) rule 5.4AA;
  - (4) clause 5.7.6;
  - (5) clause 5.7.7 (except clause 5.7.7(c));
  - (6) rule 5.11;
  - (7) clause 5.12.1;
  - (8) clause 5.12.2 (except clause 5.12.2(b)(2));
  - (9) clause 5.14.1;
  - (10) schedule 5.1, clause S5.1.2.3;
  - (11) schedule 5.3, clause S5.3.5.
- (f) A reference in any of the following provisions 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*:
- (1) clause 5.16.4;
  - (2) clause 5.16.5;
  - (3) rule 5.18;
  - (4) rule 5.19.
- (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).

## 5.2 Obligations

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### 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 rule 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 rule 5.3 [or 5.3A \(as is relevant\)](#);
  - (2) ensure that, to the extent that a *connection point* relates to its part of the *national grid*, every arrangement for *connection* with a *Registered Participant* or any other arrangement involving a *connection agreement* with that *Network Service Provider* complies with all relevant provisions of the *Rules*;
  - (3) co-ordinate the design aspects of equipment proposed to be *connected* to its *networks* with those of other *Network Service Providers* in accordance with rule 5.4 in order to seek to achieve *power system* performance requirements in accordance with schedule 5.1;
  - (4) together with other *Network Service Providers*, arrange for and participate in planning and development of their *networks* and

*connection points* on or with those *networks* in accordance with Part B of Chapter 5;

- (5) permit and participate in inspection and testing of *facilities* and equipment in accordance with rule 5.7;
- (6) permit and participate in commissioning of *facilities* and equipment which are to be *connected* to its *network* in accordance with rule 5.8;
- (7) advise a *Registered Participant* or other person with whom there is a *connection agreement* upon request of any expected interruption characteristics at a *connection point* on or with its *network* so that the *Registered Participant* or other person may make alternative arrangements for *supply* during such interruptions, including negotiating for an alternative or backup *connection*;

**Note**

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

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

**Note**

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

- (9) provide to *AEMO* and other *Network Service Providers* all data available to it and reasonably required for modelling the static and *dynamic performance* of the *power system*;
- (10) forward to *AEMO* and other *Network Service Providers* subsequent updates of the data referred to in clause 5.2.3(d)(9) and, to the best of its ability and knowledge, ensure that all data used for the purposes referred to in rule 5.3 [or 5.3A \(as is relevant\)](#) is consistent with data used for such purposes by other *Network Service Providers*;

**Note**

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

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

**Note**

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

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

**Note**

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

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

**Note**

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

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

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

**Note**

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

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

**Note**

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

- (g) Each *Network Service Provider* must in respect of new or altered equipment owned, operated or controlled by it for the purpose of providing a *market network service*:

- (1) submit an *application to connect* and enter into a *connection agreement* with a *Network Service Provider* in accordance with rule 5.3 prior to

that equipment being connected to the *network* of that *Network Service Provider* or altered (as the case may be);

- (2) comply with the reasonable requirements of *AEMO* and the relevant *Network Service Provider* in respect of design requirements of equipment proposed to be *connected* to the *network* of that *Network Service Provider* in accordance with rule 5.4 and schedule 5.3a;
- (3) provide forecast information to the relevant *Network Service Provider* in accordance with Part B of Chapter 5;
- (4) permit and participate in inspection and testing of *facilities* and equipment in accordance with rule 5.7;
- (5) permit and participate in commissioning of *facilities* and equipment which are to be *connected* to a *network* for the first time in accordance with rule 5.8; and
- (6) **[Deleted]**
- (7) give notice of intended voluntary permanent *disconnection* in accordance with rule 5.9.

**Note**

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

- (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*.

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### 5.2.5 Obligations of Generators

- (a) A *Generator* must plan and design its *facilities* and ensure that they are operated to comply with:
  - (1) the *performance standards* applicable to those *facilities*;
  - (2) subject to subparagraph (1), its *connection agreement* applicable to those *facilities*; and
  - (3) subject to subparagraph (2), the *system standards*.

**Note**

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

- (b) A *Generator* must:

- (1) submit an *application to connect* in respect of new *generating plant* owned, operated or controlled by the *Generator*, or to be owned, operated or controlled by the *Generator*, and enter into a *connection agreement* with a *Network Service Provider* in accordance with rule 5.3 prior to that *generating plant* being *connected* to the *network* of that provider;
- (2) comply with the reasonable requirements of the relevant *Network Service Provider* in respect of design requirements of *generating plant* proposed to be *connected* to the *network* of that provider in accordance with rule 5.4 and schedule 5.2;
- (3) provide *generation* forecast information to the relevant *Network Service Provider* in accordance with Part B of Chapter 5;
- (4) permit and participate in inspection and testing of *facilities* and equipment in accordance with rule 5.7;
- (5) permit and participate in commissioning of *facilities* and equipment which are to be *connected* to a *network* for the first time in accordance with rule 5.8; and
- (6) give notice of intended voluntary permanent *disconnection* in accordance with rule 5.9.

## 5.3 Establishing or Modifying Connection

### 5.3.1 Process and procedures

- (a) For the purposes of this rule 5.3:  
**establish a connection** includes modify an existing *connection* or alter *plant* but does not include alterations to *generating plant* in the circumstances set out in clause 5.3.9.
- (b) A *Registered Participant* or person intending to become a *Registered Participant* who wishes to establish a *connection* to a *network* must follow the procedures in this rule 5.3.
- (c) A *Generator* wishing to alter *connected generating plant* must comply with clause 5.3.9.
- (d) *AEMO* must comply with clause 5.3.11 in relation to requests to change *normal voltage*.

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

- (a) If a *Connection Applicant* wishes to *connect an embedded generating unit*, then unless otherwise provided:
  - (1) rule 5.3A applies to the proposed *connection* and clauses 5.3.2, 5.3.3, 5.3.4 and 5.3.5 do not apply to the proposed *connection*; and
  - (2) for the avoidance of doubt, the application of the balance of Chapter 5, Part A to the *Connection Applicant* is otherwise unaffected by this clause 5.3.1A.

(b) A reference to a *Connection Applicant* in paragraph (a) is to a person who intends to be an *Embedded Generator* 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 units* or *group of generating units*, or any *network elements* used in the provision of *network service*, as the case may be.

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### 5.3.3 Response to connection enquiry

(a) In preparing a response to a *connection enquiry*, the *Network Service Provider* must liaise with other *Network Service Providers* with whom it has *connection agreements*, if the *Network Service Provider* believes, in its reasonable opinion, that compliance with the terms and conditions of those *connection agreements* will be affected. The *Network Service Provider* responding to the *connection enquiry* may include in that response the reasonable requirements of any such other *Network Service Providers* for information to be provided by the *Connection Applicant*.

(b) The *Network Service Provider* must:

- (1) within 10 *business days* after receipt of the *connection enquiry* and all such additional information (if any) advised under clause 5.3.2(b); or
- (2) within 10 *business days* after receipt of a request from the *Connection Applicant* to the *Local Network Service Provider* to process the *connection enquiry* under clause 5.3.2(d),

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

- (3) the identity of other parties that the *Network Service Provider* considers:
  - (i) will need to be involved in planning to make the *connection* or must be involved under clause 5.3.5(e); and
  - (ii) must be paid for *transmission services* or *distribution services* in the appropriate jurisdiction;
- (4) whether it will be necessary for any of the parties identified in subparagraph (3) to enter into an agreement with the *Connection Applicant* in respect of the provision of *connection* or other *transmission services* or *distribution services* or both, to the *Connection Applicant*;
- (5) whether any service the *Network Service Provider* proposes to provide is *contestable* in the relevant *participating jurisdiction*; and
- (6) a *preliminary program* showing proposed milestones for *connection* and access activities which may be modified from time to time by agreement of the parties, where such agreement must not be unreasonably withheld.

#### Note

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

- (b1) The *Network Service Provider* must:
- (1) within 20 *business days* after receipt of the *connection* enquiry and all such additional information (if any) advised under clause 5.3.2(b); or
  - (2) within 20 *business days* after receipt of a request from the *Connection Applicant* to the *Local Network Service Provider* to process the *connection* enquiry under clause 5.3.2(d),
- provide the *Connection Applicant* with the following written details of each technical requirement relevant to the proposed *plant*:
- (3) the *automatic access standards*;
  - (4) the *minimum access standards*;
  - (5) the applicable *plant standards*;
  - (6) the *negotiated access standards* that will require *AEMO*'s involvement in accordance with clause 5.3.4A(c); and
  - (7) the *normal voltage* level, if that is to change from the *nominal voltage* level.

**Note**

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

- (b2) A *Registered Participant*, *AEMO* or *interested party* may request the *Reliability Panel* to determine whether, in respect of one or more technical requirements for access, an existing Australian or international standard, or a part thereof, may be adopted as a *plant standard* for a particular class of *plant*.
- (b3) Where, in respect of a technical requirement for access, the *Reliability Panel* determines a *plant standard* for a particular class of *plant* in accordance with clause 8.8.1(a)(8) as an acceptable alternative to a particular *minimum access standard* or *automatic access standard*, a *plant* which meets that *plant standard* is deemed to meet the applicable *automatic access standard* or *minimum access standard* for that technical requirement.
- (b4) In making a determination in accordance with clause 5.3.3(b2) the *Reliability Panel* must consult *Registered Participants* and *AEMO* using the *Rules consultation procedures*.
- (c) Within 20 *business days* after receipt of the *connection* enquiry and all such additional information (if any) advised under clause 5.3.2(b) or, if the *Connection Applicant* has requested the *Local Network Service Provider* to process the *connection* enquiry under clause 5.3.2(d), within 20 *business days* after receipt of that request, the *Network Service Provider* must provide to the *Connection Applicant* written advice of all further information which the *Connection Applicant* must prepare and obtain in conjunction with the *Network Service Provider* to enable the *Network Service Provider* to assess an *application to connect* including:
- (1) details of the *Connection Applicant's connection* requirements, and the *Connection Applicant's* specifications of the *facility* to be connected,

- consistent with the requirements advised in accordance with clause 5.3.3(b1);
- (2) details of the *Connection Applicant's* reasonable expectations of the level and standard of service of *power transfer capability* that the *network* should provide;
  - (3) a list of the technical data to be included with the *application to connect*, which may vary depending on the *connection* requirements and the type, rating and location of the *facility* to be *connected* and will generally be in the nature of the information set out in schedule 5.5 but may be varied by the *Network Service Provider* as appropriate to suit the size and complexity of the proposed *facility* to be *connected*;
  - (4) commercial information to be supplied by the *Connection Applicant* to allow the *Network Service Provider* to make an assessment of the ability of the *Connection Applicant* to satisfy the prudential requirements set out in rules ~~6.6 and 6.7~~ [6.21 and 6A.28](#);
  - (5) the amount of the application fee which is payable on lodgement of an *application to connect*, such amount not being more than necessary to:
    - (i) cover the reasonable costs of all work anticipated to arise from investigating the *application to connect* and preparing the associated offer to *connect*; and
    - (ii) meet the reasonable costs anticipated to be incurred by *AEMO* and other *Network Service Providers* whose participation in the assessment of the *application to connect* will be required; and
  - (6) any other information relevant to the submission of an *application to connect*.

**Note**

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

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**5.3.4A Negotiated access standards**

- (a) For the purposes of this clause 5.3.4A:
 

**AEMO advisory matter** means a matter that relates to *AEMO's* functions under the *National Electricity Law* and a matter in which *AEMO* has a role in schedules 5.1a, 5.1, 5.2, 5.3 and 5.3a.
- (b) A *negotiated access standard* must:
  - (1) be no less onerous than the corresponding *minimum access standard* provided by the *Network Service Provider* under clauses [5.3.3\(b1\)\(4\)](#) or [S5.4B\(b\)](#);
  - (2) be set at a level that will not adversely affect *power system security*;
  - (3) be set at a level that will not adversely affect the quality of *supply* for other *Network Users*; and

- (4) in respect of *generating plant*, meet the requirements applicable to a *negotiated access standard* in clauses S5.2.5, S5.2.6, S5.2.7 and S5.2.8.
- (c) A *Network Service Provider* must following the receipt of a proposed *negotiated access standard* under clause 5.3.4(e), [paragraph \(h\)\(3\) or clause 5.3A.9\(f\)](#), ~~or paragraph (h)~~ consult with *AEMO* as soon as practicable in relation to *AEMO* advisory matters for that proposed standard.

**Note**

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

- (d) *AEMO* must within 20 *business days* following the submission of a proposed *negotiated access standard* under clause 5.3.4(e), ~~or~~ [paragraph \(h\)\(3\) or clause 5.3A.9\(f\)](#) respond to the *Network Service Provider* in writing in respect of any *AEMO* advisory matters.
- (e) A *Network Service Provider* must within 30 *business days* following the receipt of a proposed *negotiated access standard* in accordance with clause 5.3.4(e), [paragraph \(h\)\(3\) or clause 5.3A.9\(f\)](#), ~~or paragraph (h)(3)~~, accept or reject a proposed *negotiated access standard*.

**Note**

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

- (f) The *Network Service Provider* must reject the proposed *negotiated access standard* if that *connection*, or alteration of the *generating plant* (as the case may be), at the *negotiated access standard* proposed by the *Connection Applicant* would:
- (1) on *AEMO*'s reasonable advice, adversely affect *power system security*;
  - (2) in the *Network Service Provider*'s reasonable opinion, adversely affect quality of *supply* for other *Network Users*;
  - (3) in the reasonable opinion of *AEMO* or the *Network Service Provider*, in respect of a *AEMO* advisory matter or a matter allocated to the *Network Service Provider*, respectively, be lower than the corresponding *minimum access standard*; or
  - (4) in respect of *generating plant*, in *AEMO*'s reasonable opinion, not satisfy paragraph (b)(4).

**Note**

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

- (g) If a *Network Service Provider* rejects a proposed *negotiated access standard*, the *Network Service Provider* must when rejecting the proposed *negotiated access standard*, advise the *Connection Applicant* of a *negotiated access standard* that the *Network Service Provider* will accept.

**Note**

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

- (h) The *Connection Applicant* may in relation to a proposed *negotiated access standard* advised by a *Network Service Provider* in accordance with paragraph (g):
  - (1) accept the proposed *negotiated access standard*;
  - (2) reject the proposed *negotiated access standard*;
  - (3) propose an alternative *negotiated access standard* to be further evaluated in accordance with the criteria in paragraph (b); or
  - (4) elect to adopt the relevant *automatic access standard* or a corresponding *plant standard*.
- (i) An *automatic access standard* or if the procedures in this clause 5.3.4A have been followed a *negotiated access standard*, that forms part of the terms and conditions of a *connection agreement*, is taken to be the *performance standard* applicable to the *connected plant* for the relevant technical requirement.

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**5.3.6 Offer to connect**

~~(a) Subject to clause 5.3.3(b)(6), the *Network Service Provider* processing the application to connect must make an offer to connect the *Connection Applicant's facilities* to the network within the time period specified in the preliminary program.~~

**Note**

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

(a) A *Network Service Provider* processing an application to connect must make an offer to connect the *Connection Applicant's facilities* to the network within the following timeframes:

- (1) where the application to connect was made under clause 5.3.4(a), the time period specified in the preliminary program, subject to clause 5.3.3(b)(6);
- (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, unless otherwise agreed.

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

- (a1) The *Network Service Provider* may amend the time period referred to in paragraph clause 5.3.6(a)(1) and (3) 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.

(a2) In relation to the time period agreed under subparagraph (a)(2):

- (1) any period taken by the *Transmission Network Service Provider* or *AEMO* when consulted under clause 5.3A.10(b) or (c); and
- (2) the period between commencement and conclusion of any dispute initiated under clause 5.3A.11 or rule 8.2,

is to be disregarded for the purposes of calculating elapsed time.

(b) In relation to an *application to connect* made under clause 5.3.4(a), ~~t~~The offer to *connect* must contain the proposed terms and conditions for *connection* to the *network* including:

- (1) for each technical requirement identified by the *Network Service Provider* under clause 5.3.3(b1), the *automatic access standard* or the *negotiated access standard* as determined in accordance with clauses 5.3.4 and 5.3.4A; and
- (2) the terms and conditions of the kind set out in schedule 5.6,

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

**Note**

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

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

**Note**

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

(b2) An offer to *connect* made under paragraph (a)(2), must be accompanied by:

- (1) an itemised statement of *connection* costs including, so far as is relevant:
  - (i) *connection services* 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) costs of interface equipment contained in the offer to *connect*;
  - (vi) details of any ongoing operation and maintenance costs and charges for work to be undertaken by the *Distribution Network Service Provider*; and
  - (vii) other incidental costs and their basis of calculation;

- (2) if any item in the schedule 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 network (of the kind set out in Schedule 5.6) including, for each technical requirement identified by the Distribution Network Service Provider in the detailed response provided under clause 5.3A.8(c), the automatic access standard or the negotiated access standard as determined in accordance with clause 5.3.4A; and
- (4) an explanation:

  - (i) of how the offer to connect can be accepted; and
  - (ii) that the offer to connect remains open for 20 business days, unless otherwise agreed.
- (b3) An offer to connect made under paragraph (a)(2) must remain open for acceptance for 20 business days from the date it is made and, if not accepted within that period, lapses unless the period for acceptance is extended by agreement between the Connection Applicant and the Distribution Network Service Provider.
- (c) The offer to connect must be fair and reasonable and must be consistent with the safe and reliable operation of the power system in accordance with the Rules. Without limitation, unless the parties otherwise agree, to be fair and reasonable an offer to connect must offer connection and network services consistent with schedule 5.1 and (as applicable) schedules 5.2, 5.3 and 5.3a and must not impose conditions on the Connection Applicant which are more onerous than those contemplated in schedules 5.1, 5.2, 5.3 or 5.3a.

**Note**

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

- (c1) **[Deleted]**
- (d) The Network Service Provider must use its reasonable endeavours to provide the Connection Applicant with an offer to connect in accordance with the reasonable requirements of the Connection Applicant, including without limitation, the location of the proposed connection point and the level and standard of power transfer capability that the network will provide.
- (e) An offer to connect may contain options for connection to a network at more than one point in a network and/or at different levels of service and with different terms and conditions applicable to each connection point according to the different characteristics of supply at each connection point.
- (f) Both the Network Service Provider and the Connection Applicant are entitled to negotiate with each other in respect of the provision of connection and any other matters relevant to the provision of connection and, if negotiations occur, the Network Service Provider and the Connection Applicant must conduct such negotiations in good faith.

- (g) An offer to *connect* must define the basis for determining *transmission service* charges in accordance with Chapter 6A, including the prudential requirements set out in that Chapter.

**Note**

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

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

**Note**

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

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

**Note**

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

- (j) An offer to *connect* in respect of a *distribution network* made to an *Embedded Generator* or a *Market Network Service Provider*, must conform with the relevant access arrangements set out in rule 5.5.

**Note**

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

- (k) Nothing in the *Rules* is to be read or construed as imposing an obligation on a *Network Service Provider* to effect an extension of a *network* unless that extension is required to effect or facilitate the *connection* of a *Connection Applicant* and the *connection* is the subject of a *connection agreement*.

### 5.3.7 Finalisation of connection agreements

- (a) If a *Connection Applicant* wishes to accept an offer to *connect*, the *Connection Applicant* must negotiate and enter into a *connection agreement* with each relevant *Network Service Provider* identified in accordance with clauses 5.3.3(b)(3) and (4) [or clauseS5.4A\(d\) and \(e\)](#) and in doing so must use its reasonable endeavours to negotiate in good faith with all parties with which the *Connection Applicant* must negotiate such a *connection agreement*.
- (b) The *connection agreement* must include proposed *performance standards* with respect to each of the technical requirements identified in schedules 5.2, 5.3 and 5.3a and each proposed *performance standard* must have been established in accordance with the relevant technical requirement.
- (c) The proposed *performance standards* must be based on the *automatic access standard* or, if the procedures in clause 5.3.4A have been followed, the *negotiated access standard*.

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

**Note**

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

- (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 7.2.

.....

### 5.3.8 Provision and use of information

- (a) The data and information provided under ~~this~~ rules 5.3 and 5.3A is *confidential information* and must:
- (1) be prepared, given and used in good faith; and
  - (2) not be disclosed or made available by the recipient to a third party except as set out in clause 3.13.3 or this clause 5.3.8 or in accordance with rule 8.6.
- (b) The data and information to be provided under ~~this~~ rules 5.3 and 5.3A 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*; or
    - (iii) determine the extent of any required *augmentation* or *extension*.
- (c) A *Network Service Provider* may disclose the data and information to be provided under ~~this~~ rules 5.3 and 5.3A to another *Network Service Provider* if the *Network Service Provider* considers the information or data is materially relevant to that provider for *connection*.
- (d) A person intending to disclose information under paragraphs (b) or (c) must first advise the relevant *Connection Applicant* of the extent of the disclosure, unless the information may be disclosed in accordance with rule 8.6.
- (e) If a *Connection Applicant* or *Network Service Provider* becomes aware of any material change to any information contained in or relevant to an *application to connect*, it must promptly notify the other party in writing of that change.

#### Note

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

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

#### Note

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

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## 5.3A Establishing or modifying connection - embedded generation

### 5.3A.1 Application of rule 5.3A

- (a) Where a *Connection Applicant* wishes to connect an *embedded generating unit*, this rule 5.3A applies.
- (b) For the purposes of this rule 5.3A
  - (1) reference to a *Connection Applicant* is to a person who intends to be an *Embedded Generator* 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 units* or *group of generating units*, or any *network elements* used in the provision of a *network service*, as the case may be; and
  - (2) the *Distribution Network Service Provider* is the *Distribution Network Service Provider* required under clause 5.3A.5 to process and respond to a *connection enquiry* or required under clause 5.3A.10 to prepare an offer to *connect* for the establishment or modification of a *connection* to the *distribution network* owned, controlled or operated by that *Distribution Network Service Provider* or for the provision of *network service*.

### 5.3A.2 Definitions and miscellaneous

- (a) In this rule 5.3A and Schedules 5.4A and 5.4B:
  - detailed response** means the response to a connection enquiry prepared under clause 5.3A.8.
  - establish a connection** has the same meaning as in clause 5.3.1.
  - information pack** means information relevant to the making of an *application to connect* specified in clause 5.3A.3(b).
  - preliminary response** means the response to a connection enquiry prepared under clause 5.3A.7.
  - sub-transmission line** has the same meaning as in clause 5.10.2.
  - zones substation** has the same meaning as in clause 5.10.2.
- (b) To the extent a *Distribution Network Service Provider* has provided information required to be provided under this clause 5.3A by the inclusion of that information in:
  - (1) its demand side engagement document under clause 5.13.1(g); or
  - (2) a *Distribution Annual Planning Report*,  
it will comply with the relevant information provision requirements of rule 5.3A by including hyperlinks to the relevant information in information provided to a *Connection Applicant*.
- (c) Where this rule 5.3A fixes a time limit for the provision of information or a response then, for the purposes of calculating elapsed time, the period

between commencement and conclusion of any dispute initiated under rule 8.2 is to be disregarded.

### **5.3A.3 Publication of Information**

- (a) A Distribution Network Service Provider must publish the following in the same location on its website:
- (1) an enquiry form for connection of an embedded generating unit;
  - (2) a register of completed embedded generation projects under clause 5.4.5; and
  - (3) an information pack.
- (b) An information pack must include:
- (1) a description of the process for lodging an application to connect for an embedded generating unit, including:
    - (i) the purpose of each stage of the connection enquiry and application processes;
    - (ii) the steps a Connection Applicant will need to follow at each stage of the connection enquiry and application processes;
    - (iii) the information that is to be included by the Connection Applicant with a connection enquiry and the information that will be made available to the Connection Applicant by the Distribution Network Service Provider at each stage of the connection enquiry;
    - (iv) the information that is to be included with an application to connect and the type of information that will be made available to the Connection Applicant by the Distribution Network Service Provider after lodgement of the application;
    - (v) the factors taken into account by the Distribution Network Service Provider, at each stage of the connection enquiry and application, when assessing an application to connect for an embedded generating unit;
    - (vi) the process for negotiating access standards under clause 5.3.4A and a summary of the factors the Distribution Network Service Provider takes into account when considering proposed negotiated access standards;
  - (2) single line diagrams of the Distribution Network Service Provider's preferred connection arrangements, and a range of other possible connection arrangements for integration of an embedded generating unit, showing the connection point, the point of common coupling, the embedded generating unit(s), load(s), meter(s), circuit breaker(s) and isolator(s);

- (3) a sample schematic diagram of the protection system and control system relevant to the connection of an embedded generating unit to the distribution network, showing the protection system and control system, including all relevant current circuits, relay potential circuits, alarm and monitoring circuits, back-up systems and parameters of protection and control system elements;
- (4) worked examples of connection service charges, enquiry and application fees for the connection of embedded generating units, based on the preferred and possible connection arrangements set out in paragraph (b)(2);
- (5) details of any minimum access standards or plant standards the Distribution Network Service Provider considers are applicable to embedded generating units and generating plant;
- (6) technical requirements relevant to the processing of a connection enquiry or an application to connect, including information of the type, but not limited to:
  - (i) protection systems and protection schemes;
  - (ii) fault level management principles;
  - (iii) reactive power capability and power factor correction;
  - (iv) power quality and how limits are allocated;
  - (v) responses to frequency and voltage disturbances;
  - (vi) voltage control and regulation;
  - (vii) remote monitoring equipment, control and communication requirements;
  - (viii) earthing requirements and other relevant safety requirements;
  - (ix) circumstances in which aggregation may be required to facilitate integration of an embedded generating unit into the network; and
  - (x) commissioning and testing requirements; and
- (7) model connection agreements used by that Distribution Network Service Provider.

#### **5.3A.4 Fees**

- (a) A Distribution Network Service Provider may charge a Connection Applicant an enquiry fee, the amount of which must not be more than necessary to cover the reasonable costs of work required to prepare a detailed response to the enquiry.
- (b) The enquiry fee may be payable in components.
- (c) The enquiry fee, or such component of it identified by the Distribution Network Service Provider is payable either:
  - (1) on lodgement of the further information identified in S5.4A(o);
  - (2) on receipt of advice from the Distribution Network Service Provider provided pursuant to clause 5.3A.7(b).

- (d) A Distribution Network Service Provider must not charge a fee for the provision of a preliminary response.
- (e) A Distribution Network Service Provider may charge an application fee, payable on lodgement of an application to connect, provided that the fee must not:

  - (1) include an amount for cover work that was completed in preparing the detailed response to the enquiry; and
  - (2) be more than necessary to:

    - (i) cover the costs of work and expenses reasonably incurred by the Distribution Network Service Provider in assessing the application to connect and making an offer to connect; and
    - (ii) meet the reasonable costs anticipated to be incurred by AEMO and other Network Service Providers whose participation in the assessment of the application to connect will be required.

### **5.3A.5 Enquiry**

- (a) A Connection Applicant who wishes to make an application to connect must first make a connection enquiry with the Local Network Service Provider.
- (b) Subject to paragraph (c), an enquiry must be in the form determined by the Local Network Service Provider.
- (c) An enquiry form under paragraph (b) must require the Connection Applicant to provide:

  - (1) a qualitative description of the objectives of the project proposal the subject of the application to connect;
  - (2) the information specified in Schedule 5.4; and
  - (3) a list of the information required from the Local Network Service Provider in relation to its application to connect and supporting reasons for its requests.
- (d) A Local Network Service Provider must, within 5 business days after receiving an enquiry, provide written acknowledgment of receipt of the connection enquiry.
- (e) Where the Local Network Service Provider considers that the connection enquiry should be jointly examined by more than one Distribution Network Service Provider, with the agreement of the Connection Applicant, one of those Distribution Network Service Providers may be allocated the task of liaising with the Connection Applicant and the other Distribution Network Service Providers to process and respond to the enquiry.
- (f) If the enquiry is incomplete in a material respect, or the Connection Applicant has lodged an enquiry other than in accordance with the form determined by a Distribution Network Service Provider, that Distribution Network Service Provider must, within 5 business days after receipt of the enquiry, advise the Connection Applicant of the deficiency, and may require the Connection Applicant to provide the necessary information.

- (g) A Connection Applicant may request in a connection enquiry made under paragraph (a), that the Local Network Service Provider provide only a detailed response under clause 5.3A.8(c) to its enquiry. The Local Network Service Provider must, within 5 business days after receipt of the enquiry, advise the Connection Applicant if it agrees to the request.

### **5.3A.6 Response to Enquiry**

- (a) In response to a connection enquiry, the Distribution Network Service Provider must provide:
- (1) subject to clause 5.3A.5(g) or receiving any further information requested under clause 5.3A.5(f), a preliminary response; and
  - (2) subject to receiving the enquiry fee and the further information requested under clause 5.3A.8(b), if relevant, a detailed response.
- (b) In preparing either the detailed response or preliminary response, the Distribution Network Service Provider must liaise with other Network Service Providers with whom it has connection agreements, if the Distribution Network Service Provider believes, in its reasonable opinion, that compliance with the terms and conditions of those connection agreements will be affected. The Distribution Network Service Provider responding to the connection enquiry may include in its preliminary response or detailed response, the reasonable requirements of any such other Network Service Providers for information to be provided by the Connection Applicant.

### **5.3A.7 Preliminary Response to Enquiry**

- (a) Unless agreed otherwise, a preliminary response must be provided within 15 business days of receipt of a connection enquiry and include the information specified in Schedule 5.4A.
- (b) If the Distribution Network Service Provider has agreed under clause 5.3A.5(g) to not provide a preliminary response, it must advise the Connection Applicant of the:
- (1) estimate of the enquiry fee payable by the Connection Applicant for the detailed response, including details of how components of the fee were calculated; and
  - (2) the component of the estimate of the enquiry fee payable by the Connection Applicant to request the detailed response,  
within 15 business days of receipt of a connection enquiry, unless agreed otherwise.
- (c) A Distribution Network Service Provider may seek an extension of a time period specified in paragraphs (a) or (b) by giving notice, in writing to the Connection Applicant specifying the reasons required for the extension. The Connection Applicant may not unreasonably withhold consent to that extension.
- (d) Nothing in paragraph (a) or Schedule 5.4A is to be read or construed as requiring the Distribution Network Service Provider to undertake detailed

design or to perform detailed technical studies or analysis to prepare a preliminary response.

### **5.3A.8 Detailed Response to Enquiry**

- (a) Subject to clause 5.3A.5(g), a *Distribution Network Service Provider* must within 5 *business days* after receiving the further information identified in clause S5.4A(o) provide written acknowledgment of receipt of it.
- (b) If the further information provided under subparagraph (a) is incomplete in a material respect the *Distribution Network Service Provider* must within 10 *business days* after receipt of it, advise the *Connection Applicant* of the deficiency and what is required to address it.
- (c) Unless:
  - (1) agreed otherwise; or
  - (2) the proposed *connection* requires the application of the *regulatory investment test for distribution*,  
the *Distribution Network Service Provider* must provide a detailed response within 30 *business days* of the date specified under paragraph (d).
- (d) For the purposes of paragraph (c) the relevant date is the date on which the *Distribution Network Service Provider* has received all of the following:
  - (1) the enquiry fee, or any component of the enquiry fee requested by the *Distribution Network Service Provider*;
  - (2) if the *Connection Applicant* was required to remedy a deficiency in further information provided under clause 5.3A.8(b), the provision of that further information; and
  - (3) if the *Connection Applicant* was required under clause S5.4A(o) to provide further information, that information; and
- (e) A *Distribution Network Service Provider* may seek an extension of the time period specified in subparagraph (c) by giving notice, in writing to the *Connection Applicant* specifying the reasons required for the extension. The *Connection Applicant* may not unreasonably withhold consent to that extension.
- (f) Where the proposed *connection* requires the application of the *regulatory investment test for distribution*, the *Distribution Network Service Provider* and the *Connection Applicant* are to agree a timeframe for the provision of a detailed response, taking into account the status of the relevant RIT-D project (as defined in clause 5.10.2).
- (g) A detailed response must include the information specified in:
  - (1) paragraphs (f), (g) and (m) of Schedule 5.4B;  
**RECOMMENDATION:** This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)
  - (2) paragraphs (a)-(e), (h) – (l) and (n)-(o) of Schedule 5.4B.

- (h) A Connection Applicant that is a Registered Participant, AEMO or an interested party may make a request in relation to technical requirements for access to the Reliability Panel in accordance with clause 5.3.3(b2)-(b4).

### **5.3A.9 Application for connection**

- (a) Following receipt of a detailed response under clause 5.3A.8, a Connection Applicant may make an application to connect in accordance with this clause 5.3A.9 and clause 5.3.4A.
- (b) To be eligible for connection, the Connection Applicant must submit an application to connect containing the information specified in clause S5.4B(o) and the application fee specified under clause S5.4B(m) to the Distribution Network Service Provider.
- (c) The Connection Applicant may submit an application to connect to more than one Distribution Network Service Provider in order to receive additional offers to connect in respect of facilities to be provided that are contestable.
- (d) If the application to connect is incomplete in a material respect the Distribution Network Service Provider must, within 5 business days after receipt of it, advise the Connection Applicant of the deficiency, and the steps required to address it.
- (e) To the extent that an application fee includes amounts to meet the reasonable costs anticipated to be incurred by any other Network Service Providers or AEMO in the assessment of the application to connect, a Distribution Network Service Provider who receives the application to connect and associated fee must pay such amounts to the other Network Service Providers or AEMO, as appropriate.
- (f) For each technical requirement where the proposed arrangement will not meet the automatic access standards nominated by the Distribution Network Service Provider pursuant to clause S5.4B(b) and (d), the Connection Applicant must submit with the application to connect a proposal for a negotiated access standard for each such requirement to be determined in accordance with clause 5.3.4A.
- (g) The Connection Applicant may:
- (1) lodge separate applications to connect and separately liaise with the other Network Service Providers identified in clause 5.3A.5(e) who may require a form of agreement; or
  - (2) lodge one application to connect with the Distribution Network Service Provider who processed the connection enquiry and require it to liaise with those other Network Service Providers and obtain and present all necessary draft agreements to the Connection Applicant.

### **5.3A.10 Preparation of offer to connect**

- (a) The Distribution Network Service Provider to whom the application to connect is submitted under clause 5.3A.9(a):
- (1) at the automatic access standard; or
  - (2) at a negotiated access standard that the provider has accepted under clause 5.3.4A(e).

must proceed to prepare an offer to *connect* in response.

- (b) So as to maintain levels of service and quality of *supply* to existing *Registered Participants* in accordance with the *Rules*, the *Distribution Network Service Provider* in preparing the offer to *connect* must consult with *AEMO* and other *Registered Participants* with whom it has *connection agreements*, if the *Distribution Network Service Provider* believes in its reasonable opinion, that compliance with the terms and conditions of those *connection agreements* will be affected, in order to assess the *application to connect* and determine:
- (1) the technical requirements for the equipment to be *connected*;
  - (2) the extent and cost of *augmentations* and changes to all affected *networks*;
  - (3) any consequent change in *network service charges*; and
  - (4) any possible material effect of this new *connection* on the *network power transfer capability* including that of other *networks*.
- (c) If the *application to connect* involves the connection of *embedded generating units* having a nameplate rating of 10 MW or greater, the *Distribution Network Service Provider* must consult the relevant *Transmission Network Service Provider* regarding the impact of the *connection* contemplated by the *application to connect* on fault levels, line reclosure protocols, and stability aspects.
- (d) The *Transmission Network Service Provider* consulted under paragraph (c) must determine the reasonable costs of addressing those matters for inclusion in the offer to *connect* and the *Distribution Network Service Provider* must make it a condition of the offer to *connect* that the *Connection Applicant* pay these costs.
- (e) The *Distribution Network Service Provider* preparing the offer to *connect* must include provision for payment of the reasonable costs associated with *remote control equipment* and *remote monitoring equipment* as required by *AEMO* and it may be a condition of the offer to *connect* that the *Connection Applicant* pay these costs.

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

### **5.3A.11 Technical Dispute**

- (a) Rule 8.2 applies to any dispute between a *Distribution Network Service Provider* and a *Connection Applicant* as to the technical requirements to establish or modify a *connection* sought by a *Connection Applicant* in a *connection enquiry* made under clause 5.3A.5 or an *application to connect* under clause 5.3A.9.

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## 5.4 Design of Connected Equipment

### 5.4.1 Application

This rule 5.4 applies to new installations and modifications to existing installations that include alterations to existing *generating plant*, after:

- (a) 13 December 1998, in the case of installations located in *participating jurisdictions* other than Tasmania; and
- (b) 29 May 2005, in the case of installations located in Tasmania.

### 5.4.2 Advice of inconsistencies

- (a) At any stage prior to commissioning the *facility* in respect of a *connection* if there is an inconsistency between the proposed equipment and the *connection agreement* including the *performance standards*, the *Registered Participant* or the person intending to be registered as a *Generator* must:
  - (1) advise the relevant *Network Service Provider* and, if the inconsistency relates to *performance standards*, *AEMO*, in writing of the inconsistency; and
  - (2) if necessary, negotiate in good faith with the *Network Service Provider* any necessary changes to the *connection agreement*.

**Note**

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

- (b) If an inconsistency in a *connection agreement* including a *performance standard* is identified under paragraph (a), the *Registered Participant* or the person intending to be registered as a *Generator* and the *Network Service Provider* must not commission the *facility* in respect of a *connection* unless the *facility* or the *connection agreement* or *performance standard* has been varied to remove the inconsistency.

**Note**

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

- (c) **[Deleted]**

### 5.4.3 Additional information

A *Registered Participant* must provide any additional information in relation to its *plant* or associated equipment as the relevant *Network Service Provider* reasonably requests.

### 5.4.4 Advice on possible non-compliance

- (a) If the relevant *Network Service Provider* reasonably believes that the design of a proposed *facility* has potential to adversely and materially affect the performance of the *power system*, the *Network Service Provider* may require the *Registered Participant* to submit to it specified design information and

drawings to enable the *Network Service Provider* to assess the performance of the *facility* in respect of its interaction with the *power system*:

- (1) after the *Registered Participant* has entered into an agreement for the supply of *plant* or associated equipment to be connected; and
  - (2) when the relevant contractor's designs have progressed to a point where preliminary designs are available but prior to manufacture of equipment.
- (b) The *Network Service Provider* must, within 40 *business days* of receipt of such information, use its reasonable endeavours to advise the *Registered Participant* in writing of any design deficiencies which the *Network Service Provider* believes would cause the design to be inconsistent with the *connection agreement* or the *Rules*.
- (c) Notwithstanding clause 5.4.4(b), it is the *Registered Participant's* sole responsibility to ensure that all *plant* and equipment associated with the *connection* complies with the *connection agreement* and the *Rules*.

#### **5.4.5 Register of completed embedded generation projects**

- (a) For the purposes of this clause 5.4.5, **DAPR date** has the same meaning as in clause 5.13.2.
- (b) In relation to *embedded generating units* connected to its *network*, a *Distribution Network Service Provider* must establish and maintain a register of the *plant*, including but not limited to:
- (1) *technology of generating unit* (e.g. *synchronous generating unit*, *induction generator*, *photovoltaic array*, etc)
  - (2) *maximum power generation capacity of all embedded generating units comprised in the relevant generating system*;
  - (3) *contribution to fault levels*;
  - (4) *the size and rating of the relevant transformer*;
  - (5) *a single line diagram of the connection arrangement*;
  - (6) *protection systems*;
  - (7) *voltage control and reactive power capability*;
  - (8) *details specific to the location of a facility connected to the network that are relevant to any of the details in subparagraphs (1)-(7)*.
- (c) Subject to satisfying any relevant exemptions contained in clause 8.6.2, the *Distribution Network Service Provider* must not *publish confidential information* as part of, or in connection with, the register.
- (d) The *Distribution Network Service Provider* must include in the register the details contained in paragraph (b) for all *embedded generating units* connected to its *network* within the 5 year period preceding the establishment of the register and update the register by the **DAPR date** each year thereafter with details of all *embedded generating units connected to its network* in the 5 year period preceding the review date.

## 5.5 Access arrangements relating to Distribution Networks

- (a) In this rule 5.5:
- (1) the *Distribution Network Service Provider* is the *Distribution Network Service Provider* required under clauses [5.3.3](#) or [5.3A.5](#) to process and respond to a *connection* enquiry or required under clauses [5.3.5](#) or [5.3A.10](#) to prepare an offer to *connect* for the establishment or modification of a *connection* to the *distribution network* owned, controlled or operated by that *Distribution Network Service Provider* or for the provision of *network service*; and
  - (2) the references to a *Connection Applicant* are to an *Embedded Generator* or *Market Network Service Provider* who makes a *connection* enquiry under clauses [5.3.2](#) or [5.3A.5](#) or an application to *connect* under clauses [5.3.4](#) [5.3A.10](#) in relation to any *generating units* or group of *generating units*, or any *network elements* used in the provision of *network service*, as the case may be.
- (b) If requested by a *Connection Applicant*, whether as part of a *connection* enquiry, application to *connect* or the subsequent negotiation of a *connection agreement*, the *Distribution Network Service Provider* must negotiate in good faith with the *Connection Applicant* to reach agreement in respect of the *distribution network user access* arrangements sought by the *Connection Applicant*.
- (c) As a basis for negotiations under paragraph (b):
- (1) the *Connection Applicant* must provide to the *Distribution Network Service Provider* such information as is reasonably requested relating to the expected operation of:
    - (i) its *generating units* (in the case of an *Embedded Generator*); or
    - (ii) its *network elements* used in the provision of *network service* (in the case of a *Market Network Service Provider*); and
  - (2) the *Distribution Network Service Provider* must provide to the *Connection Applicant* such information as is reasonably requested to allow the *Connection Applicant* to fully assess the commercial significance of the *distribution network user access* arrangements sought by the *Connection Applicant* and offered by the *Distribution Network Service Provider*.
- (d) A *Connection Applicant* may seek *distribution network user access* arrangements at any level of *power transfer capability* between zero and:
- (1) in the case of an *Embedded Generator*, the *maximum power input* of the relevant *generating units* or group of *generating units*; and
  - (2) in the case of a *Market Network Service Provider*, the *power transfer capability* of the relevant *network elements*.
- (e) The *Distribution Network Service Provider* must use reasonable endeavours to provide the *distribution network user access* arrangements being sought by the *Connection Applicant* subject to those arrangements being consistent with *good electricity industry practice* considering:

- (1) the *connection assets* to be provided by the *Distribution Network Service Provider* or otherwise at the *connection point*; and
  - (2) the potential *augmentations* or *extensions* required to be undertaken on all affected *transmission networks* or *distribution networks* to provide that level of *power transfer capability* over the period of the *connection agreement* taking into account the amount of *power transfer capability* provided to other *Registered Participants* under *transmission network user access* or *distribution network user access* arrangements in respect of all affected *transmission networks* and *distribution networks*.
- (f) The *Distribution Network Service Provider* and the *Connection Applicant* must negotiate in good faith to reach agreement as appropriate on:
- (1) the *connection service charge* to be paid by the *Connection Applicant* in relation to *connection assets* to be provided by the *Distribution Network Service Provider*;
  - (2) in the case of a *Market Network Service Provider*, the service level standards to which the *Market Network Service Provider* requires the *Distribution Network Service Provider* to adhere in providing it services;
  - (3) the *use of system services charge* to be paid:
    - (i) by the *Connection Applicant* in relation to any *augmentations* or *extensions* required to be undertaken on all affected *transmission networks* and *distribution networks*; and
    - (ii) where the *Connection Applicant* is a *Market Network Service Provider*, to the *Market Network Service Provider* in respect of any reduction in the long run marginal cost of *augmenting* the *distribution network* as a result of it being *connected* to the *distribution network*,  
(*negotiated use of system charges*); and
  - (4) the following amounts:
    - (i) the amount to be paid by the *Connection Applicant* to the *Distribution Network Service Provider* in relation to the costs reasonably incurred by the *Distribution Network Service Provider* in providing *distribution network user access*;
    - (ii) where the *Connection Applicant* is an *Embedded Generator*:
      - (A) the compensation to be provided by the *Distribution Network Service Provider* to the *Embedded Generator* in the event that the *generating units* or group of *generating units* of the *Embedded Generator* are *constrained off* or *constrained on* during a *trading interval*; and
      - (B) the compensation to be provided by the *Embedded Generator* to the *Distribution Network Service Provider* in the event that dispatch of the *Embedded Generator's generating units* or group of *generating units* causes another *Generator's generating units* or group of

*generating units to be constrained off or constrained on during a trading interval; and*

- (iii) where the *Connection Applicant* is a *Market Network Service Provider*:
  - (A) the compensation to be provided by the *Distribution Network Service Provider* to the *Market Network Service Provider* in the event that the *distribution network user access* is not provided; and
  - (B) the compensation to be provided by the *Market Network Service Provider* to the *Distribution Network Service Provider* in the event that *dispatch* of the relevant *market network service* causes a *Generator's generating units* or group of *generating units* to be *constrained off* or *constrained on* during a *trading interval* or causes the *dispatch* of another *market network service* to be *constrained*.
- (g) The maximum negotiated *use of system* charges applied by a *Distribution Network Service Provider* must be in accordance with the applicable requirements of Chapter 6 and the *Negotiated Distribution Service Criteria* applicable to the *Distribution Network Service Provider*.
- (h) A *Distribution Network Service Provider* must pass through to a *Connection Applicant* the amount calculated in accordance with paragraph (i) for the locational component of *prescribed TUOS services* that would have been payable by the *Distribution Network Service Provider* to a *Transmission Network Service Provider* had the *Connection Applicant* not been *connected* to its *distribution network* ('**avoided charges for the locational component of prescribed TUOS services**').

**Note**

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

- (i) To calculate the amount to be passed through to a *Connection Applicant* in accordance with paragraph (h), a *Distribution Network Service Provider* must, if prices for the locational component of *prescribed TUOS services* were in force at the relevant *transmission network connection point* throughout the relevant *financial year*:
  - (1) determine the charges for the locational component of *prescribed TUOS services* that would have been payable by the *Distribution Network Service Provider* for the relevant *financial year*:
    - (i) where the *Connection Applicant* is an *Embedded Generator*, if that *Embedded Generator* had not injected any *energy* at its *connection point* during that *financial year*;
    - (ii) where the *Connection Applicant* is a *Market Network Service Provider*, if the *Market Network Service Provider* had not been *connected* to the *Distribution Network Service Provider's distribution network* during that *financial year*; and

- (2) determine the amount by which the charges calculated in subparagraph (1) exceed the amount for the locational component of *prescribed TUOS services* actually payable by the *Distribution Network Service Provider*, which amount will be the relevant amount for the purposes of paragraph (h).
- (j) Where prices for the locational component of *prescribed TUOS services* were not in force at the relevant *distribution network connection point* throughout the relevant *financial year*, as referred to in paragraph (i), the *Distribution Network Service Provider* must apply an equivalent procedure to that referred to in paragraph (i) in relation to that component of its *transmission use of system service* charges which is deemed by the relevant *Transmission Network Service Provider* to represent the marginal cost of *transmission*, less an allowance for locational signals present in the *spot market*, to determine the relevant amount for the purposes of paragraph (h).

## **Schedule 5.4A Preliminary Response**

For the purposes of clause 5.3A.7(a), the following information must be included in the preliminary response:

- (a) relevant technical information about the *Distribution Network Service Provider's distribution network*, including guidance on how the *Connection Applicant* may meet the following requirements if it were to proceed to prepare an *application to connect*:
  - (1) primary protection and backup protection;
  - (2) other protection and control requirements applicable to *embedded generating units* and associated *plant*;
  - (3) *remote monitoring equipment* and control communications *facilities*;
  - (4) insulation co-ordination and lightning protection;
  - (5) existing maximum and minimum fault levels and *fault clearance times* of relevant local zone substations;
  - (6) switching and *isolation* facilities;
  - (7) interlocking and *synchronising* arrangements; and
  - (8) *metering installations*.
- (b) if not otherwise provided in accordance with paragraph (a), to the extent the *Distribution Network Service Provider* holds technical information necessary to prepare an *application to connect*, that information.
- (c) information relevant to each technical requirement of the proposed *plant* as relevant to:
  - (1) the *automatic access standards*;
  - (2) any relevant *minimum access standards*;
  - (3) any applicable *plant standards*;
  - (4) the *normal voltage level*, if it is expected to change from the nominal voltage level;
- (d) the identity of other parties that the *Distribution Network Service Provider* considers:
  - (1) will need to be involved in planning to make the *connection* or must be involved under clause 5.3A.10(c); and
  - (2) must be paid for *transmission services* or *distribution services*;
- (e) whether it will be necessary for any of the parties identified in subparagraph (d) to enter into an agreement with the *Connection Applicant* in respect of the provision of *connection services* or other *transmission services* or *distribution services* or both, to the *Connection Applicant*;
- (f) whether any service the *Distribution Network Service Provider* proposes to provide is *contestable* in the relevant *participating jurisdiction*;
- (g) worked examples of *connection service* charges relevant to the enquiry and an explanation of the factors on which the charges depend;

- (h) information regarding the *Distribution Network Service Provider* and its *network*, system limitations for sub-transmission lines and zone substations and other information relevant to constraints of the *network* as such information is relevant to the *application to connect*;
- (i) an indication of whether *network augmentation* may be required and if required, what work the *network augmentation* may involve;
- (j) a hyperlink to the *Distribution Network Service Provider*'s information pack;
- (k) the contact details for the person within the *Distribution Network Service Provider* managing the *connection enquiry*;
- (l) the *Distribution Network Service Provider*'s response to the objectives of the *connection* sought as included by the *Connection Applicant* in its enquiry under clause 5.3A.5(b)(1);
- (m) a description of the process for the provision of the detailed response, including the further information to be provided by the *Connection Applicant* and analysis to be undertaken by the *Distribution Network Service Provider* as part of the preparation of the detailed response; and
- (n) an overview of any available options for *connection* to a *network*, as relevant to an enquiry lodged, at more than one *connection point* in a *network*, including:

  - (1) a single line diagram and relevant *protection systems* and *control systems* of existing *connection* arrangements
  - (2) different characteristics of supply; and
  - (3) an indication of the likely impact on terms and conditions of *connection*,  
at each differing *connection point*.
- (o) a statement of further information required from the *Connection Applicant* for the preparation of the detailed response, including:

  - (1) details of the *Connection Applicant*'s *connection* requirements, and the *Connection Applicant*'s specifications of the *facility* to be *connected*, consistent with the requirements advised in accordance with paragraphs (a) to (c);
  - (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;
- (p) an estimate of the enquiry fee payable by the *Connection Applicant* for the detailed response, including details of how components of the fee were calculated;
- (q) the component of the estimate of the enquiry fee payable by the *Connection Applicant* to request the detailed response;
- (r) an estimate of the application fee which is payable on submitting an *application to connect*; and
- (s) any additional information relevant to the enquiry.

## **Schedule 5.4B Detailed Response to Enquiry**

For the purposes of clause 5.3A.8(g), the following information must be included in the detailed response:

- (a) the contact details for the person within the *Distribution Network Service Provider* who will manage the *application to connect*;
- (b) written details of each technical requirement relevant to the proposed *plant* as relevant to the
  - (1) *automatic access standards*;
  - (2) *minimum access standards*;
  - (3) any applicable *plant standards*;
  - (4) *normal voltage level*, if that is to change from the nominal voltage level;
- (c) details of the *connection* requirements based on the *Connection Applicant's* specifications of the *facility* to be *connected*;
- (d) details of the level and standard of service of *power transfer capability* that the *Distribution Network Service Provider*, with reasonable endeavours, considers the *network* provides at the location of the *connection point* or *connection points*, if options have been made available under clause S5.4A(n);
- (e) whether negotiated *access standards* may be required and if so the aspects of the standards that will be the subject of negotiation;
- (f) a list of the technical data to be included with the *application to connect*, which may vary depending on the *connection* requirements and the type, rating and location of the *facility* to be *connected* and will generally be in the nature of the information set out in schedule 5.5 but may be varied by the *Distribution Network Service Provider* as appropriate to suit the size and complexity of the proposed *facility* to be *connected*;
- (g) commercial information to be supplied by the *Connection Applicant* to allow a *Network Service Provider* (as is relevant) to make an assessment of the ability of the *Connection Applicant* to satisfy the prudential requirements set out in rules 6.21 and 6A.28;
- (h) an itemised estimate of *connection* costs including, so far as is relevant:
  - (1) *connection services* charges;
  - (2) cost associated with the proposed *metering* requirements for the *connection*;
  - (3) costs of any *network extension*;
  - (4) details of *augmentation* required to provide the *connection* and associated cost;
  - (5) costs of interface equipment contained in the offer to *connect*;
  - (6) details of any ongoing operation and maintenance costs and charges to be undertaken by the *Distribution Network Service Provider*;

- (7) other incidental costs and their basis of calculation;
- (i) an explanation of the factors affecting each component of the itemised estimate of *connection* costs and the further information that will be taken into account by the *Distribution Network Service Provider* in preparing the final itemised statement of *connection* costs to be provided under clause 5.3.6(b2)(1);
- (j) using reasonable endeavours, all risks and obligations in respect of the proposed *connection* associated with planning and environmental laws not contained in the *Rules*;
- (k) a draft *connection agreement* that contains the proposed terms and conditions for *connection* to the *network* including those of the kind set out in schedule 5.6 and:
  - (1) an explanation of the terms and conditions in the *connection agreement* that need to be finalised;
  - (2) if relevant, further information necessary from the *Connection Applicant* to finalise the *connection agreement*;
- (l) a description of the process for lodging the *application to connect*, including:
  - (1) the options open to the *Connection Applicant* in submitting an *application to connect* in accordance with clause 5.3A.9;
  - (2) the further analysis to be undertaken by the *Distribution Network Service Provider* as part of the *Distribution Network Service Provider's* assessment of the *application to connect*;
  - (3) further information required from the *Connection Applicant* for the *Distribution Network Service Provider* to assess the *application to connect*;
  - (4) an outline of proposed milestones (and their timeframes) for *connection* and access activities which may be modified from time to time by agreement of the parties, where such agreement must not be unreasonably withheld;
- (m) the application fee payable when submitting an *application to connect*;
- (n) whether the *Distribution Network Service Provider* agrees to the detailed response remaining valid for a specified period of time to allow the *Connection Applicant* to lodge an *application to connect* within that time; and
- (o) any additional information relevant to the *application to connect*.

## **Schedule 5.8      Distribution Annual Planning Report**

### **Note**

The local definitions in clause 5.10.2 apply to this schedule.

For the purposes of clause 5.13.2(c), the following information must be included in a *Distribution Annual Planning Report*:

- (a) information regarding the *Distribution Network Service Provider* and its *network*, including:

- (1) a description of its *network*;
  - (2) a description of its operating environment;
  - (3) the number and types of its distribution assets;
  - (4) methodologies used in preparing the *Distribution Annual Planning Report*, including methodologies used to identify system limitations and any assumptions applied; and
  - (5) analysis and explanation of any aspects of forecasts and information provided in the *Distribution Annual Planning Report* that have changed significantly from previous forecasts and information provided in the preceding year;
- (b) forecasts for the forward planning period, including at least:
- (1) a description of the forecasting methodology used, sources of input information, and the assumptions applied;
  - (2) *load* forecasts:
    - (i) at the transmission-distribution connection points;
    - (ii) for sub-transmission lines; and
    - (iii) for zone substations,including, where applicable, for each item specified above:
    - (iv) total capacity;
    - (v) firm delivery capacity for summer periods and winter periods;
    - (vi) *peak load* (summer or winter and an estimate of the number of hours per year that 95% of *peak load* is expected to be reached);
    - (vii) *power factor* at time of *peak load*;
    - (viii) load transfer capacities; and
    - (ix) generation capacity of known *embedded generating units*;
  - (3) forecasts of future transmission-distribution connection points (and any associated *connection assets*), sub-transmission lines and zone substations, including for each future transmission-distribution connection point and zone substation:
    - (i) location;
    - (ii) future *loading level*; and
    - (iii) proposed commissioning time (estimate of month and year);
  - (4) forecasts of the *Distribution Network Service Provider's* performance against any reliability targets in a *service target performance incentive scheme*; and
  - (5) a description of any factors that may have a material impact on its *network*, including factors affecting:
    - (i) fault levels;
    - (ii) *voltage* levels;

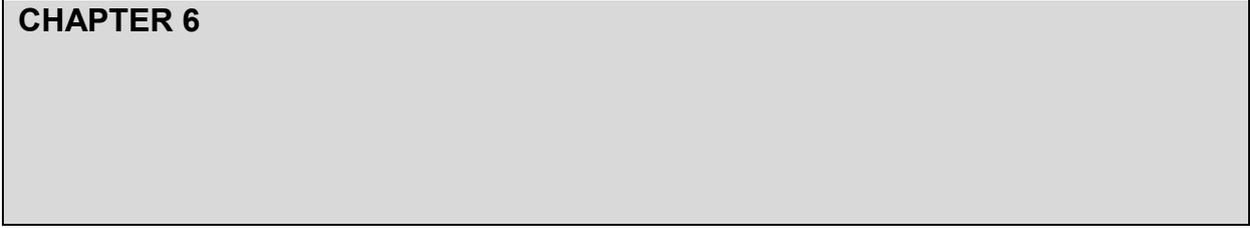
- (iii) other *power system security* requirements;
  - (iv) the quality of *supply* to other *Network Users* (where relevant);  
and
  - (v) ageing and potentially unreliable assets;
- (c) information on system limitations for sub-transmission lines and zone substations, including at least:
- (1) estimates of the location and timing (month(s) and year) of the system limitation;
  - (2) analysis of any potential for load transfer capacity between *supply* points that may decrease the impact of the system limitation or defer the requirement for investment;
  - (3) impact of the system limitation, if any, on the capacity at transmission-distribution connection points;
  - (4) a brief discussion of the types of potential solutions that may address the system limitation in the forward planning period, if a solution is required; and
  - (5) where an estimated reduction in forecast *load* would defer a forecast system limitation for a period of at least 12 months, include:
    - (i) an estimate of the month and year in which a system limitation is forecast to occur as required under subparagraph (1);
    - (ii) the relevant *connection points* at which the estimated reduction in forecast *load* may occur; and
    - (iii) the estimated reduction in forecast *load* in MW or improvements in *power factor* needed to defer the forecast system limitation;
- (d) for any primary distribution feeders for which a *Distribution Network Service Provider* has prepared forecasts of *maximum demands* under clause 5.13.1(d)(1)(iii) and which are currently experiencing an overload, or are forecast to experience an overload in the next two years the *Distribution Network Service Provider* must set out:
- (1) the location of the primary distribution feeder;
  - (2) the extent to which load exceeds, or is forecast to exceed, 100% (or lower utilisation factor, as appropriate) of the normal cyclic rating under normal conditions (in summer periods or winter periods);
  - (3) the types of potential solutions that may address the overload or forecast overload; and
  - (4) where an estimated reduction in forecast *load* would defer a forecast overload for a period of 12 months, include:
    - (i) estimate of the month and year in which the overload is forecast to occur;
    - (ii) a summary of the location of relevant *connection points* at which the estimated reduction in forecast *load* would defer the overload;

- (iii) the estimated reduction in forecast *load* in MW needed to defer the forecast system limitation;
- (e) a high-level summary of each RIT-D project for which the *regulatory investment test for distribution* has been completed in the preceding year or is in progress, including:
  - (1) if the *regulatory investment test for distribution* is in progress, the current stage in the process;
  - (2) a brief description of the identified need;
  - (3) a list of the credible options assessed or being assessed (to the extent reasonably practicable);
  - (4) if the *regulatory investment test for distribution* has been completed a brief description of the conclusion, including:
    - (i) the net economic benefit of each credible option;
    - (ii) the estimated capital cost of the preferred option; and
    - (iii) the estimated construction timetable and commissioning date (where relevant) of the preferred option; and
  - (5) any impacts on *Network Users*, including any potential material impacts on *connection* charges and *distribution use of system* charges that have been estimated;
- (f) for each identified system limitation which a *Distribution Network Service Provider* has determined will require a *regulatory investment test for distribution*, provide an estimate of the month and year when the test is expected to commence;
- (g) a summary of all committed investments to be carried out within the forward planning period with an estimated capital cost of \$2 million or more (as varied by a cost threshold determination) that are to address:
  - (1) a refurbishment or replacement need; or
  - (2) an urgent and unforeseen *network* issue as described in clause 5.17.3(a)(1),including:
  - (1) a brief description of the investment, including its purpose, its location, the estimated capital cost of the investment and an estimate of the date (month and year) the investment is expected to become operational;
  - (2) a brief description of the alternative options considered by the *Distribution Network Service Provider* in deciding on the preferred investment, including an explanation of the ranking of these options to the committed project. Alternative options could include, but are not limited to, *generation* options, demand side options, and options involving other *distribution* or *transmission networks*;
- (h) the results of any joint planning undertaken with a *Transmission Network Service Provider* in the preceding year, including:

- (1) a summary of the process and methodology used by the *Distribution Network Service Provider* and relevant *Transmission Network Service Providers* to undertake joint planning;
  - (2) a brief description of any investments that have been planned through this process, including the estimated capital costs of the investment and an estimate of the timing (month and year) of the investment; and
  - (3) where additional information on the investments may be obtained;
- (i) the results of any joint planning undertaken with other *Distribution Network Service Providers* in the preceding year, including:
- (1) a summary of the process and methodology used by the *Distribution Network Service Providers* to undertake joint planning;
  - (2) a brief description of any investments that have been planned through this process, including the estimated capital cost of the investment and an estimate of the timing (month and year) of the investment; and
  - (3) where additional information on the investments may be obtained;
- (j) information on the performance of the *Distribution Network Service Provider's network*, including:
- (1) a summary description of reliability measures and standards in *applicable regulatory instruments*;
  - (2) a summary description of the quality of *supply* standards that apply, including the relevant codes, standards and guidelines;
  - (3) a summary description of the performance of the *distribution network* against the measures and standards described under subparagraphs (1) and (2) for the preceding year;
  - (4) where the measures and standards described under subparagraphs (1) and (2) were not met in the preceding year, information on the corrective action taken or planned;
  - (5) a summary description of the *Distribution Network Service Provider's* processes to ensure compliance with the measures and standards described under subparagraphs (1) and (2); and
  - (6) an outline of the information contained in the *Distribution Network Service Provider's* most recent submission to the AER under the *service target performance incentive scheme*;
- (k) information on the *Distribution Network Service Provider's* asset management approach, including:
- (1) a summary of any asset management strategy employed by the *Distribution Network Service Provider*;
  - (1A) an explanation of how the *Distribution Network Service Provider* takes into account the cost of *distribution losses* when developing and implementing its asset management and investment strategy;
  - (2) a summary of any issues that may impact on the system limitations identified in the *Distribution Annual Planning Report* that has been identified through carrying out asset management; and

- (3) information about where further information on the asset management strategy and methodology adopted by the *Distribution Network Service Provider* may be obtained;
- (l) information on the *Distribution Network Service Provider's* demand management activities, including:
  - (1) a qualitative summary of:
    - (i) non-network options that have been considered in the past year, including *generation from embedded generating units*;
    - (ii) key issues arising from applications to connect embedded generating units received in the past year;
    - (iii) actions taken to promote non-network proposals in the preceding year, including *generation from embedded generating units*; and
    - (iv) the *Distribution Network Service Provider's* plans for demand management and *generation from embedded generating units* over the forward planning period;
  - (2) a quantitative summary of:
    - (i) connection enquiries received under clause 5.3A.5;
    - (ii) applications to connect received under clause 5.3A.9; and
    - (iii) average time taken to finalise applications to connect.
- (m) information on the *Distribution Network Service Provider's* investments in metering or information technology systems which occurred in the preceding year, and planned investments in metering or information technology systems in the forward planning period; and
- (n) a regional development plan consisting of a map of the *Distribution Network Service Provider's* network as a whole, or maps by regions, in accordance with the *Distribution Network Service Provider's* planning methodology or as required under any *regulatory obligation or requirement*, identifying:
  - (1) sub-transmission lines, zone substations and transmission-distribution connection points; and
  - (2) any system limitations that have been forecast to occur in the forward planning period, including, where they have been identified, overloaded primary distribution feeders.

**CHAPTER 6**





## 6 Economic Regulation of Distribution Services

### Part A Introduction

#### 6.7.2 Determination of terms and conditions of access for negotiated distribution services

- (a) A *Distribution Network Service Provider* must comply with:
- (1) the provider's *negotiating framework*; and
  - (2) the provider's *Negotiated Distribution Service Criteria*,
- when the provider is negotiating the *terms and conditions of access to negotiated distribution services*.
- (b) The *Distribution Network Service Provider* must also comply with any other applicable requirements of the *Rules*, including the requirements of:
- (1) rules 5.3, [5.3A](#) and 5.5, when negotiating for the provision of *connection services* and the associated *connection service charges* in respect of the provision of *negotiated distribution services* which would have been *negotiated distribution services* regardless of the operation of clause 6.24.2(c);
  - (2) rules 5.3, [5.3A](#) and 5.4A, when negotiating for the provision of *connection services* and the associated *connection service charges* in respect of the provision of *negotiated distribution services* which would have been treated as *negotiated transmission services* were it not for the operation of clause 6.24.2(c);
  - (3) rule 5.5, when negotiating the *use of system services charges and access charges* to be paid to or by a *Distribution Network User* in respect of the provision of *negotiated distribution services* which would have been *negotiated distribution services* regardless of the operation of clause 6.24.2(c); and
  - (4) rule 5.4A, when negotiating the *use of system services charges and access charges* to be paid to or by a *Distribution Network User* in respect of the provision of *negotiated distribution services* which would have been treated as *negotiated transmission services* were it not for the operation of clause 6.24.2(c).

#### 6.7.5 Preparation of and requirements for negotiating framework for negotiated distribution services

- (a) A *Distribution Network Service Provider* must prepare a document (the *negotiating framework*) setting out the procedure to be followed during negotiations between that provider and any person (the *Service Applicant* or applicant) who wishes to receive a *negotiated distribution service* from the provider, as to the *terms and conditions of access* for the provision of the service.
- (b) The *negotiating framework* for a *Distribution Network Service Provider* must comply with and be consistent with:

- (1) the applicable requirements of the relevant distribution determination; and

**Note:**

See clause 6.7.3.

- (2) paragraph (c), which sets out the minimum requirements for a *negotiating framework*.
- (c) The *negotiating framework* for a *Distribution Network Service Provider* must specify:
- (1) a requirement for the provider and a *Service Applicant* to negotiate in good faith the *terms and conditions of access* to a *negotiated distribution service*; and
  - (2) a requirement for the provider to provide all such commercial information a *Service Applicant* may reasonably require to enable that applicant to engage in effective negotiation with the provider for the provision of the *negotiated distribution service*, including the cost information described in subparagraph (3); and
  - (3) a requirement for the provider:
    - (i) to identify and inform a *Service Applicant* of the reasonable costs and/or the increase or decrease in costs (as appropriate) of providing the *negotiated distribution service*; and
    - (ii) to demonstrate to a *Service Applicant* that the charges for providing the *negotiated distribution service* reflect those costs and/or the cost increment or decrement (as appropriate); and
    - (iii) to have appropriate arrangements for assessment and review of the charges and the basis on which they are made; and

**Note:**

If (for example) a charge, or an element of a charge, is based on a customer's actual or assumed *maximum demand*, the assessment and review arrangements should allow for a change to the basis of the charge so that it more closely reflects the customer's *load* profile where a reduction or increase in *maximum demand* has been demonstrated.

- (4) a requirement for a *Service Applicant* to provide all commercial information the provider may reasonably require to enable the provider to engage in effective negotiation with that applicant for the provision of the *negotiated distribution service*; and
- (5) a requirement that negotiations with a *Service Applicant* for the provision of the *negotiated distribution service* be commenced and finalised within specified periods and a requirement that each party to the negotiations must make reasonable endeavours to adhere to the specified time limits; and
- (6) a process for dispute resolution which provides that all disputes as to the *terms and conditions of access* for the provision of *negotiated distribution services* are to be dealt with in accordance with the relevant provisions of the Law and the *Rules* for dispute resolution; and

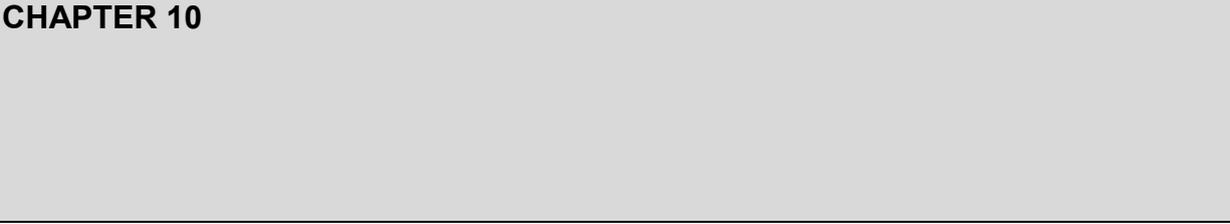
- (7) the arrangements for payment by a *Service Applicant* of the provider's reasonable direct expenses incurred in processing the application to provide the *negotiated distribution service*; and
  - (8) a requirement that the *Distribution Network Service Provider* determine the potential impact on other *Distribution Network Users* of the provision of the *negotiated distribution service*; and
  - (9) a requirement that the *Distribution Network Service Provider* must notify and consult with any affected *Distribution Network Users* and ensure that the provision of *negotiated distribution services* does not result in non-compliance with obligations in relation to other *Distribution Network Users* under the *Rules*; and
  - (10) a requirement that the *Distribution Network Service Provider* publish the results of negotiations on its website.
- (d) Notwithstanding the foregoing, the negotiating framework must not be inconsistent with any of the requirements of:
- (1) rules 5.3, [5.3A](#) and 5.5 insofar as the *negotiating framework* applies to *negotiated distribution services* which would have been *negotiated distribution services* regardless of the operation of clause 6.24.2(c); and
  - (2) rules 5.3, [5.3A](#) and 5.4A insofar as the *negotiating framework* applies to *negotiated distribution services* which would have been treated as *negotiated transmission services* were it not for the operation of clause 6.24.2(c),
- and any other relevant provisions of this Chapter 6 and, in the event of any inconsistency, those requirements prevail.
- (e) Each *Distribution Network Service Provider* and *Service Applicant* who is negotiating for the provision of a *negotiated distribution service* by the provider must comply with the requirements of the *negotiating framework* in accordance with its terms.







**CHAPTER 10**



## 10. Glossary

### *application to connect*

An application made by a *Connection Applicant* in accordance with [rule clause 5.3](#) or [rule 5.3A](#) for *connection* to a *network* and/or the provision of *network services* or modification of a *connection* to a *network* and/or the provision of *network services*

### *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](#).

#### **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.