

National Electricity Rules Version 26

Status Information

This is a draft consolidation based on the latest electronically available version of the National Electricity Rules as at 27 February 2009.

This draft consolidated version of the National Electricity Rules includes the following draft amendment:

National Electricity Amendment (Minor Change) Rule 2009 No. 7

This version of the National Electricity Rules only contains the Chapters of the National Electricity Rules that are amended by the Rule.

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CHAPTER 5

5. Network Connection

5.1 Statement of Purpose

5.1.1 [Deleted]

5.1.2 Purpose

- (a) This Chapter:
 - (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 Chapter 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 Chapter 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*.

5.1.3 Principles

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

- (a) all *Registered Participants* should have the opportunity to form a *connection* to a *network* and have access to the *network services* provided by the *networks* forming part of the *national grid*;

- (b) the terms and conditions on which *connection* to a *network* and provision of *network service* is to be granted are to be set out in commercial agreements on reasonable terms entered into between a *Network Service Provider* and other *Registered Participants*;
- (c) the technical terms and conditions of *connection agreements* regarding standards of performance must be established at levels at or above the *minimum access standards* set out in schedules 5.1, 5.2, 5.3 and 5.3a, with the objective of ensuring that the *power system* operates securely and reliably and in accordance with the *system standards* set out in schedule 5.1a;
- (d) a *Registered Participant* or person intending to become a *Registered Participant* may request *connection* of a facility, modification of a *connection*, or alteration of *connected plant* at a standard below an *automatic access standard* if the *connection*, modification to the *connection*, or alteration of *connected plant* does not adversely affect:
 - (1) *power system security*; and
 - (2) the quality of *supply* to other *Network Users*;
- (e) in some jurisdictions separate agreements may be required for *connection services* and *use of system services*; and
- (f) the operation of the *Rules* should result in the achievement of:
 - (1) long term benefits to *Registered Participants* in terms of cost and *reliability* of the *national grid*; and
 - (2) open communication and information flows relating to *connections* between *Registered Participants* themselves, and between *Registered Participants* and *NEMMCO*, while ensuring the security of *confidential information* belonging to competitors in the *market*.

5.2 Obligations

5.2.1 Obligations of Registered Participants

- (a) All *Registered Participants* must maintain and operate (or ensure their authorised *representatives* maintain and operate) all equipment that is part of their *facilities* in accordance with:
 - (1) relevant laws;
 - (2) the requirements of the *Rules*; and

- (3) *good electricity industry practice* and applicable *Australian Standards*.
- (b) All *Registered Participants* must ensure that the *connection agreements* to which they are a party require the provision and maintenance of all required *facilities* consistent with *good electricity industry practice* and must operate their equipment in a manner:
 - (1) to assist in preventing or controlling instability within the *power system*;
 - (2) comply with the minimum standards *published* pursuant to clause 3.11.4(c);
 - (3) to assist in the maintenance of, or restoration to, a *satisfactory operating state* of the *power system*; and
 - (4) to prevent uncontrolled separation of the *power system* into isolated *regions* or partly combined *regions*, *intra-regional transmission* break-up, or *cascading outages*, following any *power system* incident.

5.2.2 Connection agreements

- (a) If requested to do so by a *Transmission Network User*, *Distribution Network User*, *NEMMCO* or the *AER*, a *Network Service Provider* and a *Transmission Network User* or *Distribution Network User* (as the case may be) must document the terms of any *network connection* arrangements made prior to 13 December 1998 and the resulting document will then be deemed to be a *connection agreement* for the purposes of the *Rules*.
- (b) The *Rules* apply to:
 - (1) *connection agreements* made after 13 December 1998;
 - (2) deemed *connection agreements* under paragraph (a); and
 - (3) requests to establish *connection* after 13 December 1998.
- (c) This Chapter is neither intended to have, nor is it to be read or construed as having, the effect of:
 - (1) altering any of the terms of a *connection agreement*; or
 - (2) altering the contractual rights or obligations of any of the parties under the *connection agreement* as between those parties; or
 - (3) relieving the parties under any such *connection agreement* of their contractual obligations under such an *agreement*.

- (d) Notwithstanding the provisions of clause 5.2.2(c), if any obligation imposed or right conferred on a *Registered Participant* by this Chapter is inconsistent with the terms of a *connection agreement* to which the *Rules* apply and the application of the inconsistent terms of the *connection agreement* would adversely affect the quality or security of *network service* to other *Network Users*, the parties to the *connection agreement* must observe the provisions of this Chapter as if they prevail over the *connection agreement* to the extent of the inconsistency.

5.2.3 Obligations of network service providers

- (a) To be registered by *NEMMCO* as a *Network Service Provider*, a person must satisfy the relevant requirements specified in Chapter 2 and submit an application to *NEMMCO* in such form as *NEMMCO* 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.
- (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 *NEMMCO* on an annual basis. *NEMMCO* must allow access to such information to all other *Network Service Providers* and the *Network Service Providers* must keep such information confidential.
- (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 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;
- (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 rule 5.6;
- (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*;
- (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;
- (9) provide to *NEMMCO* 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 *NEMMCO* 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 is consistent with data used for such purposes by other *Network Service Providers*;

- (11) provide to *NEMMCO* 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
 - (12) where *network augmentations*, setting changes or other technical issues arise which could impact across *regional* boundaries, provide *NEMMCO* with a written report on the impact and its effects.
- (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 *NEMMCO*.
- (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*.
- (f) A *Network Service Provider* must comply with *applicable regulatory instruments*.
- (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 *NEMMCO* 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 rule 5.6;
 - (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.
- (h) **[Deleted]**
- (h1) On receipt of a written request from Basslink Pty Ltd or another party nominated in writing to *NEMMCO* by the Basslink Development Board (collectively ‘Basslink’) together with a copy of the *application to connect* lodged by Basslink with the relevant *Transmission Network Service Provider*, including all necessary supporting information and data required under clause 5.3.3(c), the *Inter-regional Planning Committee* must in accordance with clause 5.6.3 advise *NEMMCO* of the requirements that should be imposed on Basslink as the intending *Market Network Service Provider* for the purposes of clause 5.2.3(g)(2).
 - (h2) The *Inter-regional Planning Committee* must, in preparing its advice to *NEMMCO* under 5.2.3(h1), conduct a review of the technical impacts of the proposed interconnector to be constructed by Basslink covering those matters in clause 5.6.6(c)(1), (2) and (4) and *publish* a report of its review.
 - (h3) *NEMMCO* must, following receipt of advice from the *Inter-regional Planning Committee* in accordance with clause 5.2.3(h1), advise the relevant *Transmission Network Service Provider* and Basslink of its reasonable design requirements in respect of the equipment proposed to be *connected* to the *network* as set out in rule 5.4 and schedule 5.3a, in addition to those reasonable design requirements of the relevant *Transmission Network Service Provider*, for the purposes of clause 5.2.3(g)(2).
- (i) This Chapter is neither intended to require, nor is it to be read or construed as having the effect of requiring, a *Network Service Provider* to permit

connection to or to augment any part of its network which is solely used for the provision of market network services.

5.2.4 Obligations of customers

- (a) Each *Customer* must plan and design its *facilities* and ensure that its *facilities* are operated to comply with:
 - (1) its *connection agreement* with a *Network Service Provider*;
 - (2) subject to clause 5.2.4(a)(1), all applicable *performance standards*; and
 - (3) subject to clause 5.2.4(a)(2), the *system standards*.
- (b) A *Customer* must:
 - (1) submit an *application to connect* in respect of new or altered equipment owned, operated or controlled by the *Customer* and enter into a *connection agreement* with a *Network Service Provider* in accordance with rule 5.3 prior to that equipment being *connected* to the *network* of that *Network Service Provider* or altered (as the case may be);
 - (2) comply with the reasonable requirements of the relevant *Network Service Provider* in respect of design requirements of equipment proposed to be *connected* to the *network* of that *Network Service Provider* in accordance with rule 5.4 and schedule 5.3;
 - (3) provide *load* forecast information to the relevant *Network Service Provider* in accordance with rule 5.6;
 - (4) permit and participate in inspection and testing of *facilities* and equipment in accordance with rule 5.7;
 - (5) permit and participate in commissioning of *facilities* and equipment which are to be *connected* to a *network* for the first time in accordance with rule 5.8; and
 - (6) **[Deleted]**
 - (7) give notice of any intended voluntary permanent *disconnection* in accordance with rule 5.9.

5.2.5 Obligations of Generators

- (a) A *Generator* must plan and design its *facilities* and ensure that they are operated to comply with:

- (1) the *performance standards* applicable to those *facilities*;
 - (2) subject to subparagraph (1), its *connection agreement* applicable to those *facilities*; and
 - (3) subject to subparagraph (2), the *system standards*.
- (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 rule 5.6;
 - (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) Any person wishing to establish a *connection* to a *network* may elect to follow the procedures in this rule 5.3.
- (d) A *Generator* wishing to alter *connected generating plant* must comply with clause 5.3.9.

5.3.2 Connection enquiry

- (a) A person referred to in clause 5.3.1(b) or (c) who wishes to make an *application to connect* must first make a *connection* enquiry by advising the *Local Network Service Provider* of the type, magnitude and timing of the proposed *connection* to that provider's *network*.
- (b) If the information submitted with a *connection* enquiry is inadequate to enable the *Local Network Service Provider* to process the enquiry the provider must within 5 *business days*, advise the *Connection Applicant* what other relevant preliminary information of the kind listed in schedule 5.4 is required before the *connection* enquiry can be further processed.
- (c) The *Local Network Service Provider* must advise the *Connection Applicant* within 10 *business days* of receipt of the *connection* enquiry and the further information required in accordance with paragraph (b) if the enquiry would be more appropriately directed to another *Network Service Provider*.
- (d) The *Connection Applicant*, notwithstanding the advice received under paragraph (c), may if it is reasonable in all the circumstances, request the *Local Network Service Provider* to process the *connection* enquiry and the provider must meet this request.
- (e) Where the *Local Network Service Provider* considers that the *connection* enquiry should be jointly examined by more than one *Network Service Provider*, with the agreement of the *Connection Applicant*, one of those *Network Service Providers* may be allocated the task of liaising with the *Connection Applicant* and the other *Network Service Providers* to process and respond to the enquiry.
- (f) A *Network Service Provider* must to the extent that it holds technical information necessary to facilitate the processing of a *connection* enquiry made in accordance with paragraph (a) or an *application to connect* in accordance with clause 5.3.4(a), provide that information to the *Connection Applicant* in accordance with the relevant requirements of schedule 5.1, 5.2, 5.3 or 5.3a.

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.

(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 *NEMMCO*'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.
- (b2) A *Registered Participant*, *NEMMCO* 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 *NEMMCO* 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;
- (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 *NEMMCO* 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*.

5.3.4 Application for connection

- (a) A person who has made a *connection* enquiry under clause 5.3.2 may, following receipt of the responses under clause 5.3.3, make an *application to connect* in accordance with this clause 5.3.4 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 5.3.3(c) and the relevant application fee to the relevant *Network Service Provider*.
- (c) The *Connection Applicant* may submit *applications to connect* to more than one *Network Service Provider* in order to receive additional offers to *connect* in respect of *facilities* to be provided that are *contestable*.

- (d) To the extent that an application fee includes amounts to meet the reasonable costs anticipated to be incurred by any other *Network Service Providers* or *NEMMCO* in the assessment of the *application to connect*, a *Network Service Provider* who receives the *application to connect* and associated fee must pay such amounts to the other *Network Service Providers* or *NEMMCO*, as appropriate.
- (e) For each technical requirement where the proposed arrangement will not meet the *automatic access standards* nominated by the *Network Service Provider* pursuant to clause 5.3.3(b1), the *Connection Applicant* must submit with the *application to connect* a proposal for a *negotiated access standard* for each such requirement to be determined in accordance with clause 5.3.4A.
- (f) The *Connection Applicant* may:
 - (1) lodge separate *applications to connect* and separately liaise with the other *Network Service Providers* identified in clause 5.3.3(b) who may require a form of agreement; or
 - (2) lodge one *application to connect* with the *Network Service Provider* who processed the *connection* enquiry and require it to liaise with those other *Network Service Providers* and obtain and present all necessary draft agreements to the *Connection Applicant*.

5.3.4A Negotiated access standards

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

NEMMCO advisory matter means a matter that relates to *NEMMCO*'s functions under the *National Electricity Law* and a matter in which *NEMMCO* 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 clause 5.3.3(b1)(4);
 - (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) or paragraph (h), consult

with *NEMMCO* as soon as practicable in relation to *NEMMCO* advisory matters for that proposed standard.

- (d) *NEMMCO* must within 20 *business days* following the submission of a proposed *negotiated access standard* under clause 5.3.4(e) or paragraph (h)(3), respond to the *Network Service Provider* in writing in respect of any *NEMMCO* 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) or paragraph (h)(3), accept or reject a proposed *negotiated access standard*.
- (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 *NEMMCO*'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 *NEMMCO* or the *Network Service Provider*, in respect of a *NEMMCO* 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 *NEMMCO*'s reasonable opinion, not satisfy paragraph (b)(4).
- (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.
- (h) The *Connection Applicant* may in relation to a proposed *negotiated access standard* advised by a *Network Service Provider* in accordance with paragraph (g):
 - (1) accept the proposed *negotiated access standard*;
 - (2) reject the proposed *negotiated access standard*;
 - (3) propose an alternative *negotiated access standard* to be further evaluated in accordance with the criteria in paragraph (b); or

- (4) elect to adopt the relevant *automatic access standard* or a corresponding *plant standard*.
- (i) An *automatic access standard* or if the procedures in this clause 5.3.4A have been followed a *negotiated access standard*, that forms part of the terms and conditions of a *connection agreement*, is taken to be the *performance standard* applicable to the *connected plant* for the relevant technical requirement.

5.3.5 Preparation of offer to connect

- (a) The *Network Service Provider* to whom the *application to connect* is submitted:
 - (1) at the *automatic access standard* under clause 5.3.4; or
 - (2) at a *negotiated access standard* that the provider has accepted under clause 5.3.4A(e),must proceed to prepare an offer to *connect* in response.
- (b) The *Network Service Provider* must use its reasonable endeavours to advise the *Connection Applicant* of all risks and obligations in respect of the proposed *connection* associated with planning and environmental laws not contained in the *Rules*.
- (c) The *Connection Applicant* must provide such other additional information in relation to the *application to connect* as the *Network Service Provider* reasonably requires to assess the technical performance and costs of the required *connection* and to enable the *Network Service Provider* to prepare an offer to *connect*.
- (d) So as to maintain levels of service and quality of *supply* to existing *Registered Participants* in accordance with the *Rules*, the *Network Service Provider* in preparing the offer to *connect* must consult with *NEMMCO* and other *Registered Participants* with whom it has *connection agreements*, if the *Network Service Provider* believes in its reasonable opinion, that compliance with the terms and conditions of those *connection agreements* will be affected, in order to assess the *application to connect* and determine:
 - (1) the technical requirements for the equipment to be *connected*;
 - (2) the extent and cost of *augmentations* and changes to all affected *networks*;
 - (3) any consequent change in *network service* charges; and
 - (4) any possible material effect of this new *connection* on the *network power transfer capability* including that of other *networks*.

- (e) If the *application to connect* involves the *connection of generating units* having a *nameplate rating* of 10 MW or greater to a *distribution network*, 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.
- (f) The *Transmission Network Service Provider* consulted under paragraph (e) 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.
- (g) The *Network Service Provider* preparing the offer to *connect* must include provision for payment of the reasonable costs associated with *remote control equipment* and *remote monitoring equipment* as required by NEMMCO and it may be a condition of the offer to *connect* that the *Connection Applicant* pay such costs.

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*.
 - (a1) The *Network Service Provider* may amend the time period referred to in clause 5.3.6(a) 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.
 - (b) 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*.
 - (b1) The proposed terms and conditions detailed in the offer to *connect* must be no lower than the applicable *minimum access standards*.

- (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.
- (c1) An offer to *connect* and the resulting *connection agreement* must be consistent with any minimum standards set by *NEMMCO* under clause 3.11.4(b)(1).
- (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.
- (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.
- (i) An offer to *connect* in respect of a *transmission network* must conform with the access arrangements set out in rule 5.4A.
- (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.
- (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) 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) The *Network Service Provider* responsible for the *connection point* and the *Registered Participant* must jointly notify NEMMCO that a *connection agreement* has been entered into between them and forward to NEMMCO 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 updating the information required under clause S5.2.4(b);
 - (3) the proposed *metering installation*;

- (4) arrangements for the *Metering Provider* to obtain physical access to the *metering installation*; and
 - (5) the terms upon which a *Registered Participant* is to supply any *ancillary services* under the *connection agreement*.
- (h) *NEMMCO* 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 rule 5.3 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.
- (b) The data and information to be provided under this rule 5.3 may be shared between a *Network Service Provider* and *NEMMCO* for the purpose of enabling:
- (1) the *Network Service Provider* to advise *NEMMCO* of *ancillary services* or similar services described in clause 3.11.3(j); 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 rule 5.3 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.
- (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.
- (f) A *Registered Participant* must, within 5 *business days* of becoming aware that any information provided to NEMMCO in relation to a *performance standard* or other information of a kind required to be provided to NEMMCO under clause 5.3.7 is incorrect, advise NEMMCO of the correct information.

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

- (a) This clause 5.3.9 applies where a *Generator* proposes to alter:
 - (1) a *connected generating system*; or
 - (2) a *generating system* for which *performance standards* have been previously accepted by NEMMCO,in a manner that will affect the performance of the *generating system* relative to any of the technical requirements set out in clauses S5.2.5, S5.2.6, S5.2.7 and S5.2.8.
- (b) A *Generator* to which this clause applies, must submit to the *Network Service Provider* with a copy to NEMMCO:
 - (1) a description of the nature of the alteration and the timetable for implementation;
 - (2) in respect of the proposed alteration to the *generating system*, details of the *generating unit* design data and *generating unit* setting data in accordance with the *Generating System Model Guidelines*, *Generating System Design Data Sheet*, or *Generating System Setting Data Sheet*; and
 - (3) in relation to each relevant technical requirement for which the proposed alteration to the equipment will affect the performance of the *generating system*, the proposed amendments to:
 - (i) the applicable *automatic access standard*; or
 - (ii) a proposed *negotiated access standard*.

- (c) Clause 5.3.4A applies to a submission by a *Generator* under paragraph (b)(3)(ii).
- (d) Without limiting subparagraph (b)(3), for the purposes of that subparagraph (unless *NEMMCO* and the *Network Service Provider* otherwise agree), a proposed alteration to the equipment specified in column 1 of the table set out below is taken to affect the performance of the *generating system* relative to technical requirements specified in column 2, thereby necessitating a submission under subparagraph (b)(3).

Column 1 (altered equipment)	Column 2 (clause)
machine windings	S5.2.5.1, S5.2.5.2, S5.2.8
power converter	S5.2.5.1, S5.2.5.2, S5.2.5.5, S5.2.5.12, S5.2.5.13, S5.2.8
reactive compensation plant	S5.2.5.1, S5.2.5.2, S5.2.5.5, S5.2.5.12, S5.2.5.13
<i>excitation control system</i>	S5.2.5.5, S5.2.5.7, S5.2.5.12, S5.2.5.13
<i>voltage control system</i>	S5.2.5.5, S5.2.5.12, S5.2.5.13
<i>governor control system</i>	S5.2.5.7, S5.2.5.11, S5.2.5.14
<i>power control system</i>	S5.2.5.11, S5.2.5.14
<i>protection system</i>	S5.2.5.3, S5.2.5.4, S5.2.5.5, S5.2.5.7, S5.2.5.8, S5.2.5.9
auxiliary supplies	S5.2.5.1, S5.2.5.2, S5.2.8
remote control and monitoring system	S5.2.5.14, S5.2.6.1, S5.2.6.2

- (e) The *Network Service Provider* may as a condition of considering a submission made under paragraph (b), require payment of a fee to meet the reasonable costs anticipated to be incurred by the provider, other *Network Service Providers* and *NEMMCO*, in the assessment of the submission.
- (f) The *Network Service Provider* must require payment of a fee under paragraph (e) if so requested by *NEMMCO*.
- (g) On payment of the required fee referred to in paragraph (e), the *Network Service Provider* must pay such amounts as are on account of the costs anticipated to be incurred by the other *Network Service Providers* and *NEMMCO*, as appropriate.

- (h) If the application of this clause 5.3.9 leads to a variation to an existing *connection agreement* the *Network Service Provider* and the *Generator* must immediately jointly advise *NEMMCO*.

5.3.10 Acceptance of performance standards for generating plant that is altered

- (a) A *Generator* must not commission altered *generating plant* until the *Network Service Provider* has advised the *Generator* that the provider and *NEMMCO* are satisfied in accordance with paragraph (b).
- (b) In relation to altered *generating plant*, the *Network Service Provider* and *NEMMCO*, to the extent of *NEMMCO's* advisory role under clause 5.3.4A, must be satisfied that:
 - (1) the *Generator* has complied with clause 5.3.9; and
 - (2) each amended *performance standard* submitted by the *Generator* either meets:
 - (i) the *automatic access standard* applicable to the relevant technical requirement; or
 - (ii) the *negotiated access standard* under clause 5.3.4A as applied in accordance with clause 5.3.9(c).
- (c) For the purposes of paragraph (a), *NEMMCO* must advise the *Network Service Provider* as to whether it is satisfied with the matters referred to paragraph (b).

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*, *NEMMCO*, 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*.
- (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.
- (c) Nothing in this clause 5.4.2 affects the operation of clause 5.3.6(c1).

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*.

5.4A Access arrangements relating to Transmission Networks

- (a) The *Transmission Network Service Provider* referred to in this rule 5.4A is the *Transmission Network Service Provider* required under clause 5.3.3 to process and respond to a *connection* enquiry or required under clause 5.3.5 to prepare an offer to *connect* for the establishment or modification of a *connection* to the *transmission network* owned, controlled or operated by that *Transmission Network Service Provider* or for the provision of *network service*.
- (b) If requested by a *Connection Applicant*, whether as part of a *connection* enquiry, application to *connect* or the subsequent negotiation of a *connection* agreement, the *Transmission Network Service Provider* must negotiate in good faith with the *Connection Applicant* to reach agreement in respect of the *transmission network user access* arrangements sought by the *Connection Applicant*.
- (c) As a basis for negotiations under paragraph (b):
 - (1) the *Connection Applicant* must provide to the *Transmission Network Service Provider* such information as is reasonably requested relating to the expected operation of:
 - (i) its *generating units* (in the case of a *Generator*);
 - (ii) its *network elements* used in the provision of *network service* (in the case of a *Network Service Provider*); or
 - (iii) its *plant* (in the case of any other kind of *Connection Applicant*); and
 - (2) the *Transmission Network Service Provider* must provide to the *Connection Applicant* such information as is reasonably requested to allow the *Connection Applicant* to fully assess the commercial significance of the *transmission network user access* arrangements sought by the *Connection Applicant* and offered by the *Transmission Network Service Provider*.
- (d) A *Connection Applicant* may seek *transmission network user access* arrangements at any level of *power transfer capability* between zero and:
 - (1) in the case of a *Generator*, the *maximum power input* of the relevant *generating units* or group of *generating units*;
 - (2) in the case of a *Network Service Provider*, the *power transfer capability* of the relevant *network elements*; and
 - (3) in the case of any other kind of *Connection Applicant*, the *maximum demand* at the *connection point* for the relevant *plant*.

- (e) The *Transmission Network Service Provider* must use reasonable endeavours to provide the *transmission network user access* arrangements being sought by the *Connection Applicant* subject to those arrangements being consistent with *good electricity industry practice* considering:
 - (1) the *connection assets* to be provided by the *Transmission Network Service Provider* or otherwise at the *connection point*; and
 - (2) the potential *augmentations* or *extensions* required to be undertaken on all affected *transmission networks* or *distribution networks* to provide that level of *power transfer capability* over the period of the *connection agreement* taking into account the amount of *power transfer capability* provided to other *Registered Participants* under *transmission network user access* or *distribution network user access* arrangements in respect of all affected *transmission networks* and *distribution networks*.
- (f) The *Transmission Network Service Provider* and the *Connection Applicant* must negotiate in good faith to reach agreement as appropriate on:
 - (1) the *connection service charge* to be paid by the *Connection Applicant* in relation to *connection assets* to be provided by the *Transmission Network Service Provider*;
 - (2) in the case of a *Market Network Service Provider*, the service level standards to which the *Market Network Service Provider* requires the *Transmission Network Service Provider* to adhere in providing its services;
 - (3) the *use of system services charge* to be paid:
 - (i) by the *Connection Applicant* in relation to any *augmentations* or *extensions* required to be undertaken on all affected *transmission networks* and *distribution networks*; and
 - (ii) where the *Connection Applicant* is a *Market Network Service Provider*, to the *Market Network Service Provider* in respect of any reduction in the long run marginal cost of *augmenting* the *transmission network* as a result of it being *connected* to the *transmission network*;
 - (‘*negotiated use of system charges*’); and
 - (4) the amounts (‘*access charges*’) referred to in paragraphs (g)-(j).
- (g) The amount to be paid by the *Connection Applicant* to the *Transmission Network Service Provider* in relation to the costs reasonably incurred by the provider in providing *transmission network user access*.

- (h) Where the *Connection Applicant* is a *Generator*:
 - (1) the compensation to be provided by the *Transmission Network Service Provider* to the *Generator* in the event that the *generating units* or group of *generating units* of the *Generator* are *constrained off* or *constrained on* during a *trading interval*; and
 - (2) the compensation to be provided by the *Generator* to the *Transmission Network Service Provider* in the event that *dispatch* of the *Generator's generating units* or group of *generating units* causes another *Generator's generating units* or group of *generating units* to be *constrained off* or *constrained on* during a *trading interval*.
- (i) Where the *Connection Applicant* is a *Market Network Service Provider*:
 - (1) the compensation to be provided by the *Transmission Network Service Provider* to the *Market Network Service Provider* in the event that the *transmission network user access* is not provided; and
 - (2) the compensation to be provided by the *Market Network Service Provider* to the *Transmission Network Service Provider* in the event that *dispatch* of the relevant *market network service* causes a *Generator's generating units* or group of *generating units* to be *constrained off* or *constrained on* during a *trading interval* or causes the *dispatch* of another *market network service* to be *constrained*.
- (j) In the case of any other kind of *Connection Applicant*, the compensation to be provided by the *Transmission Network Service Provider* to the *Connection Applicant* in the event that the *transmission network user access* is not provided.
- (k) The maximum charge that can be applied by the *Transmission Network Service Provider* in respect of *negotiated use of system charges* for the *transmission network* is a charge that is determined in accordance with Part J of Chapter 6A.

5.5 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 clause 5.3.3 to process and respond to a *connection* enquiry or required under clause 5.3.5 to prepare an offer to *connect* for the establishment or modification of a *connection* to the *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 clause 5.3.2 or an application to *connect* under clause 5.3.4 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*').
- (i) To calculate the amount to be passed through to a *Connection Applicant* in accordance with paragraph (h), a *Distribution Network Service Provider* must, if prices for the locational component of *prescribed TUOS services* were in force at the relevant *transmission network connection point* throughout the relevant *financial year*:
 - (1) determine the charges for the locational component of *prescribed TUOS services* that would have been payable by the *Distribution Network Service Provider* for the relevant *financial year*:

- (i) where the *Connection Applicant* is an *Embedded Generator*, if that *Embedded Generator* had not injected any *energy* at its *connection point* during that *financial year*;
 - (ii) where the *Connection Applicant* is a *Market Network Service Provider*, if the *Market Network Service Provider* had not been connected to the *Distribution Network Service Provider's* *distribution network* during that *financial year*; and
- (2) determine the amount by which the charges calculated in subparagraph (1) exceed the amount for the locational component of *prescribed TUOS services* actually payable by the *Distribution Network Service Provider*, which amount will be the relevant amount for the purposes of paragraph (h).
- (j) Where prices for the locational component of *prescribed TUOS services* were not in force at the relevant *distribution network connection point* throughout the relevant *financial year*, as referred to in paragraph (i), the *Distribution Network Service Provider* must apply an equivalent procedure to that referred to in paragraph (i) in relation to that component of its *transmission use of system service* charges which is deemed by the relevant *Transmission Network Service Provider* to represent the marginal cost of *transmission*, less an allowance for locational signals present in the *spot market*, to determine the relevant amount for the purposes of paragraph (h).

5.6 Planning and Development of Network

5.6.1 Forecasts for connection points to transmission network

- (a) The relevant *Network Service Provider* must give at least 40 *business days* written notice to each relevant *Registered Participant* of the annual date by which the *Registered Participant* must provide the relevant *Network Service Provider* with the short and long term electricity *generation*, *market network service* and *load* forecast information listed in schedule 5.7 in relation to each *connection point* which connects the *Registered Participant* to a *transmission network* of that *Network Service Provider* and any other relevant information as reasonably required by the *Network Service Provider*.
- (b) Details of planned future *generating units*, *market network services* and *loads*, being details regarding the proposed commencing date, *active power capability* and *reactive power capability*, *power transfer capability*, operating times/seasons and special operating requirements, must be given by each relevant *Registered Participant* to the relevant *Network Service Provider* on reasonable request.
- (c) Each relevant *Registered Participant* must use reasonable endeavours to provide accurate information under clause 5.6.1(a) which must include

details of any factors which may impact on *load* forecasts or proposed *facilities* for *generation* or *market network services*.

- (d) If the *Network Service Provider* reasonably believes any forecast information to be inaccurate, the *Network Service Provider* may modify that forecast information and must advise the relevant *Registered Participant* and *NEMMCO* in writing of this action and the reason for the modification. The *Network Service Provider* is not responsible for any adverse consequences of this action or for failing to modify forecast information under this clause 5.6.1(d).

5.6.2 Network Development

- (a1) The terms *Network Service Provider*, *Transmission Network Service Provider* and *Distribution Network Service Provider* when used in this clause 5.6.2 are not intended to refer to, and are not to be read or construed as referring to, any *Network Service Provider* in its capacity as a *Market Network Service Provider*.
- (a) Each *Transmission Network Service Provider* and *Distribution Network Service Provider* must analyse the expected future operation of its *transmission networks* or *distribution networks* over an appropriate planning period, taking into account the relevant forecast *loads*, any future *generation*, *market network service*, demand side and *transmission* developments and any other relevant data.
- (b) Each *Transmission Network Service Provider* must conduct an annual planning review with each *Distribution Network Service Provider* connected to its *transmission network* within each *region*. The annual planning review must incorporate the forecast *loads* submitted by the *Distribution Network Service Provider* in accordance with clause 5.6.1 or as modified in accordance with clause 5.6.1(d) and must include a review of the adequacy of existing *connection points* and relevant parts of the *transmission system* and planning proposals for future *connection points*.
- (c) Where the necessity for *augmentation* or a non-network alternative is identified by the annual planning review conducted under clause 5.6.2(b), the relevant *Network Service Providers* must undertake joint planning in order to determine plans that can be considered by relevant *Registered Participants*, *NEMMCO* and *interested parties*.
- (d) The minimum planning period for the purposes of the annual planning review is 5 years for *distribution networks* and 10 years for *transmission networks*.
- (e) Each *Network Service Provider* must extrapolate the forecasts provided to it by *Registered Participants* for the purpose of planning and, where this analysis indicates that any relevant technical limits of the *transmission* or

distribution systems will be exceeded, either in normal conditions or following the contingencies specified in schedule 5.1, the *Network Service Provider* must notify any affected *Registered Participants* and *NEMMCO* of these limitations and advise those *Registered Participants* and *NEMMCO* of the expected time required to allow the appropriate corrective network *augmentation* or non-network alternatives, or modifications to *connection facilities* to be undertaken.

- (f) Within the time for corrective action notified in clause 5.6.2(e) the relevant *Distribution Network Service Provider* must consult with affected *Registered Participants*, *NEMMCO* and *interested parties* on the possible options, including but not limited to demand side options, *generation* options and *market network service* options to address the projected limitations of the relevant *distribution system* except that a *Distribution Network Service Provider* does not need to consult on a *network* option which would be a *new small distribution network asset*.
- (g) Each *Distribution Network Service Provider* must carry out an economic cost effectiveness analysis of possible options to identify options that satisfy the *regulatory test*, while meeting the technical requirements of schedule 5.1, and where the *Network Service Provider* is required by clause 5.6.2(f) to consult on the option this analysis and allocation must form part of the consultation on that option.
- (h) Following conclusion of the process outlined in clauses 5.6.2(f) and (g), the *Distribution Network Service Provider* must prepare a report that is to be made available to affected *Registered Participants*, *NEMMCO* and *interested parties* which:
 - (1) includes assessment of all identified options;
 - (2) includes details of the *Distribution Network Service Provider's* preferred proposal and details of:
 - (A) its economic cost effectiveness analysis in accordance with clause 5.6.2(g); and
 - (B) its consultations conducted for the purposes of clause 5.6.2(g);
 - (3) summarises the submissions from the consultations; and
 - (4) recommends the action to be taken.
- (i) *Registered Participants* may dispute the recommendation of the report prepared under clause 5.6.2(h) within 40 *business days* after the report is made available in respect of any proposal that is a *new large distribution network asset* or is reasonably likely to change the *distribution use of system service* charges applicable to that *Registered Participant* by more than 2% at

the date of the next price review, based on the assumption that the same approach to *distribution network* pricing is taken for the next review period as that taken for the current review period.

- (j) Where any *Registered Participant* disputes a recommendation under clause 5.6.2(i), the *Distribution Network Service Provider* and the affected *Registered Participants* must negotiate in good faith with a view to reaching agreement on the action to be taken.
- (k) Following:
 - (1) completion of the 40 *business day* period referred to in clause 5.6.2(i) or on resolution of any dispute in accordance with rule 8.2, in relation to proposals to which clause 5.6.2(j) applies; or
 - (2) completion of the report referred to in clause 5.6.2(h), in relation to any other *network* option recommended by the report,

the relevant *Distribution Network Service Provider* must arrange for the *network* options (if any) recommended by its report made in accordance with clause 5.6.2(h) to be available for service by the agreed time.

- (k1) The *Distribution Network Service Provider* must include the cost of the relevant assets of the *network options* referred to in clause 5.6.2(k) in the calculation of *distribution service* prices determined in accordance with Chapter 6.
- (l) If a *use of system service* or the provision of a service at a *connection point* is directly affected by a *transmission network* or *distribution network augmentation*, appropriate amendments to relevant *connection agreements* must be negotiated in good faith between the parties to them.
- (m) Where the relevant *Transmission Network Service Provider* or *Distribution Network Service Provider* decides to implement a *generation* option as an alternative to *network augmentation*, the *Network Service Provider* must:
 - (1) register the *generating unit* with NEMMCO and specify that the *generating unit* may be periodically used to provide a *network* support function and will not be eligible to set *spot prices* when *constrained on* in accordance with clause 3.9.7; and
 - (2) include the cost of this *network* support service in the calculation of *transmission service* and *distribution service* prices determined in accordance with Chapter 6 or Chapter 6A, as the case may be.
- (n) NEMMCO must provide to the *Inter-Regional Planning Committee*, and to other *Network Service Providers* on request, a copy of any report provided to NEMMCO by a *Network Service Provider* under clause 5.2.3(d)(12). If a *Registered Participant* reasonably considers that it is or may be adversely

affected by a development or change in another *region*, the *Registered Participant* may request the preparation of a report by the relevant *Network Service Provider* as to the technical impacts of the development or change. If so requested, the *Network Service Provider* must prepare such a report and provide a copy of it to NEMMCO, the *Registered Participant* requesting the report and, on request, any other *Registered Participant*.

5.6.2A Annual Planning Report

- (a) By 30 June each year all *Transmission Network Service Providers* must publish an *Annual Planning Report* setting out the results of the annual planning review conducted in accordance with clause 5.6.2(a) and (b).
- (b) The *Annual Planning Report* must set out:
 - (1) the forecast *loads* submitted by a *Distribution Network Service Provider* in accordance with clause 5.6.1 or as modified in accordance with clause 5.6.1(d);
 - (2) planning proposals for future *connection points*;
 - (3) a forecast of *constraints* and inability to meet the *network* performance requirements set out in schedule 5.1 or relevant legislation or regulations of a *participating jurisdiction* over 1, 3 and 5 years;
 - (4) for all proposed *augmentations* to the *network* the following information, in sufficient detail relative to the size or significance of the project and the proposed operational date of the project:
 - (i) project/asset name and the month and year in which it is proposed that the asset will become operational;
 - (ii) the reason for the actual or potential *constraint*, if any, or inability, if any, to meet the *network* performance requirements set out in schedule 5.1 or relevant legislation or regulations of a *participating jurisdiction*, including *load* forecasts and all assumptions used;
 - (iii) the proposed solution to the *constraint* or inability to meet the *network* performance requirements identified in clause 5.6.2A(b)(4)(ii), if any;
 - (iv) total cost of the proposed solution;
 - (v) whether the proposed solution will have a *material inter-network impact*. In assessing whether an *augmentation* to the *network* will have a *material inter-network impact* a

Transmission Network Service Provider must have regard to the objective set of criteria *published* by the *Inter-regional Planning Committee* in accordance with clause 5.6.3(i) (if any such criteria have been *published* by the *Inter-regional Planning Committee*); and

- (vi) other reasonable *network* and non-*network* options considered to address the actual or potential *constraint* or inability to meet the *network* performance requirements identified in clause 5.6.2A(b)(4)(ii), if any. Other reasonable *network* and non-*network* options include, but are not limited to, *interconnectors*, *generation* options, demand side options, *market network service* options and options involving other *transmission* and *distribution networks*;
- (5) for all proposed *new small transmission network assets*:
- (i) an explanation of the ranking of reasonable alternatives to the project including non-*network* alternatives. This ranking must be undertaken by the *Transmission Network Service Provider* in accordance with the principles contained in the *regulatory test*;
 - (ii) an *augmentation technical report* prepared by the *Inter-regional Planning Committee* in accordance with clause 5.6.3(j) if, and only if, the asset is reasonably likely to have a *material inter-network impact* and the *Transmission Network Service Provider* has not received the consent to proceed with the proposed solution from all *Transmission Network Service Providers* whose *transmission networks* are materially affected by the *new small transmission network asset*. In assessing whether a *new small transmission network asset* is reasonably likely to have a *material inter-network impact*, a *Transmission Network Service Provider* must have regard to the objective set of criteria *published* by the *Inter-regional Planning Committee* in accordance with clause 5.6.3(i) (if any such criteria have been *published* by the *Inter-regional Planning Committee*);
 - (iii) analysis of why the *Transmission Network Service Provider* considers that the *new small transmission network asset* satisfies the *regulatory test* and, where the *Transmission Network Service Provider* considers that the *new small transmission network asset* satisfies the *regulatory test* as the *new small transmission network asset* is a *reliability augmentation*, analysis of why the *Transmission Network Service Provider* considers that the *new small transmission network asset* is a *reliability augmentation*. In assessing whether a *new small transmission network asset* is a *reliability augmentation*, a *Transmission Network Service Provider* must consider whether the *new small transmission*

network asset satisfies the criteria for a *reliability augmentation* published by the *Inter-regional Planning Committee* in accordance with clause 5.6.3(l) (if any such criteria have been published by the *Inter-regional Planning Committee*); and

- (6) for all proposed *replacement transmission network assets*:
 - (i) a brief description of the new *replacement transmission network asset* project, including location;
 - (ii) the date from which the *Transmission Network Service Provider* proposes that the proposed new *replacement transmission network asset* will become operational;
 - (iii) the purpose of the proposed new *replacement transmission network asset*;
 - (iv) a list of any reasonable *network* or *non-network* alternatives to the proposed new *replacement transmission network asset* which are being, or have been, considered by the *Transmission Network Service Provider* (if any). Those alternatives include, but are not limited to, *interconnectors*, *generation* options, *demand side options*, *market network service options* and options involving other *transmission* or *distribution networks*; and
 - (v) the *Transmission Network Service Provider's* estimated total capitalised expenditure on the proposed new *replacement transmission network asset*.

5.6.3 Inter-regional planning committee

- (a) *NEMMCO* must establish an *Inter-regional Planning Committee*. The functions of the *Inter-regional Planning Committee* include to:
 - (1) provide such assistance as *NEMMCO* reasonably requests in connection with the preparation of the *statement of opportunities*;
 - (2) provide such assistance as *NEMMCO* reasonably requests in connection with the carrying out of the *ANTS review*;
 - (3) *publish* an objective set of criteria for assessing whether a proposed *transmission network augmentation* is reasonably likely to have a *material inter-network impact* in accordance with clause 5.6.3(i);
 - (4) *publish augmentation technical reports* in accordance with clause 5.6.3(j);

- (5) *publish* an objective set of criteria for assessing whether a proposed *new small transmission network asset* or *new large transmission network asset* is a *reliability augmentation*, in accordance with clause 5.6.3(l);
 - (6) *publish* guidelines to assist *Registered Participants* to determine when an *inter-network test* may be required, in accordance with clause 5.7.7(k);
 - (7) make recommendations to *NEMMCO* in relation to draft *test programs* in accordance with clause 5.7.7(o) and (q);
 - (8) provide advice to the *AEMC* as requested in relation to the exercise of the *last resort planning power*; and
 - (9) provide such assistance as *NEMMCO* reasonably requests in connection with the preparation of the report that is required to be provided by *NEMMCO* to the *Reliability Panel* in accordance with clause 3.13.3(u).
- (b) The *Inter-regional Planning Committee* is to consist of:
- (1) a *NEMMCO representative* as *Convener* of the *Inter-regional Planning Committee*;
 - (2) a *representative* from any entity that has been nominated by the relevant *Minister* of a *participating jurisdiction* as having *transmission system* planning responsibility in that *participating jurisdiction*; and
 - (3) such other persons appointed by *NEMMCO* that *NEMMCO* considers have the appropriate expertise to be members of the *Inter-regional Planning Committee*;
 - (4) for the purpose only of providing advice to the *AEMC* in relation to the exercise of the *last resort planning power*, persons appointed by *NEMMCO* at the request of the *AEMC* under clause 5.6.4(f),
- provided that:
- (5) a person appointed under clause 5.6.3(b)(2) must not take part in any decision or determination of the *Inter-regional Planning Committee* where the entity the person represents has a material financial interest in the matter to be decided or determined by the *Inter-regional Planning Committee*; and
 - (6) a member of the *Inter-regional Planning Committee* must not take part in providing advice to the *AEMC* for the purposes of the exercise of the *last resort planning power* under clause 5.6.4 where that

member has a material financial interest in the advice to be provided to the *AEMC*.

- (c) A person appointed under clause 5.6.3(b)(2) will serve on the *Inter-regional Planning Committee* until such time as the relevant entity nominates a different person or the *Minister* of the *participating jurisdiction* who nominated the relevant entity notifies *NEMMCO* that another entity is to replace the previous entity as having *transmission system* planning responsibility in that *participating jurisdiction*.
- (d) The term of office of members appointed under clause 5.6.3(b)(3) may be terminated at any time by *NEMMCO*.
- (e) The *Inter-regional Planning Committee* must meet during the year at a frequency to be determined by the *Inter-regional Planning Committee*.
- (f) The *Convener* of the *Inter-regional Planning Committee* must convene a meeting of the *Inter-regional Planning Committee* within a reasonable time after a reasonable request from a member of the *Inter-regional Planning Committee* is received setting out the business to be considered.
- (g) *NEMMCO* and each entity from which a member of the *Inter-regional Planning Committee* has been appointed under clause 5.6.3(b)(2) must procure the availability of reasonable resources to enable the *Inter-regional Planning Committee* to carry out its responsibilities.
- (h) *NEMMCO* and each entity from which a member of the *Inter-regional Planning Committee* has been appointed under clause 5.6.3(b)(2) must share the costs involved in conducting studies and analysis required to be undertaken by the *Inter-regional Planning Committee* under the *Rules* on a basis to be agreed between them.
- (i) The *Inter-regional Planning Committee* must develop and *publish*, and may vary from time to time, an objective set of criteria for assessing whether or not a proposed *transmission network augmentation* is reasonably likely to have a *material inter-network impact*, in accordance with the *Rules consultation procedures*. In developing the objective set of criteria referred to in this clause, the *Inter-regional Planning Committee* must have regard to the relevant guiding objectives and principles provided by the *AEMC* in accordance with clause 5.6.3(n).
- (j) Immediately upon receipt of a written request for an *augmentation technical report*, which must include sufficient information to enable the *Inter-regional Planning Committee* to carry out a review pursuant to this clause 5.6.3(j), together with payment of any reasonable fees to recover the *Inter-regional Planning Committee's* direct costs and expenses of the preparation of the *augmentation technical report*, the *Inter-regional Planning Committee* must:

- (1) undertake a review of all matters referred to it by the *Transmission Network Service Provider* in order to assess the *augmentation* proposal and determine:
 - (i) the performance requirements for the equipment to be *connected*;
 - (ii) the extent and cost of *augmentations* and changes to all affected *transmission networks*; and
 - (iii) the possible material effect of the *new connection* on the *network power transfer capability* including that of other *transmission networks*;
- (2) within 90 *business days*, or such other period as may be agreed by the *Transmission Network Service Provider* and the *Inter-Regional Planning Committee*, of receipt of such written request *publish* an *augmentation technical report*. The *Inter-Regional Planning Committee* must use reasonable endeavours to *publish* an *augmentation technical report* in as short a period as is reasonably practicable. The *augmentation technical report* must set out:
 - (i) the determinations of the *Inter-Regional Planning Committee* referred to in clause 5.6.3 (j)(1);
 - (ii) the information considered; and
 - (iii) the assumptions used.
- (k) For the purposes of clause 5.6.3(j), the period in which the *Inter-regional Planning Committee* must *publish* an *augmentation technical report* will be automatically extended by the period of time taken by the *Transmission Network Service Provider* to provide additional information requested by the *Inter-regional Planning Committee*.
- (l) The *Inter-regional Planning Committee* must develop and *publish*, and may vary from time to time, an objective set of criteria for assessing whether a proposed *new small transmission network asset* or *new large transmission network asset* is a *reliability augmentation*, in accordance with the *Rules consultation procedures*. In developing the objective set of criteria referred to in this clause, the *Inter-regional Planning Committee* must have regard to the relevant guiding objectives and principles provided by the AEMC in accordance with clause 5.6.3(n).
- (m) Should the objective set of criteria referred to in clauses 5.6.3(i) or (l) be changed after an application notice (referred to in clause 5.6.6(c)) has been made available to *Registered Participants* and *NEMMCO*, in the case of a *new large transmission network asset*, or after the *publication* of the *Annual*

Planning Report, in the case of a *new small transmission network asset*, then the relevant *Network Service Provider* is entitled to choose whether the new criteria, or the criteria that existed at the time the application notice was made available to *Registered Participants* and *NEMMCO* or the *Annual Planning Report* was published, is to be applied.

- (n) The *AEMC* must, in consultation with *NEMMCO*, provide the *Inter-regional Planning Committee* with guiding objectives and principles for the development by the *Inter-regional Planning Committee* of the criteria for assessing whether a proposed *transmission network augmentation* is reasonably likely to have a *material inter-network impact* and/or whether a proposed *new small transmission network asset* or *new large transmission network asset* is a *reliability augmentation* under clauses 5.6.3(i) and 5.6.3(l), respectively.

5.6.4 Last Resort Planning Power

- (a) In this clause 5.6.4:

directed party means one or more *Registered Participants* directed by the *AEMC* in accordance with this clause 5.6.4 and may include:

- (1) a single *Registered Participant*;
- (2) two or more *Registered Participants* who are directed by the *AEMC* to jointly and co-operatively comply with a direction under paragraph (c).

direction notice is a notice issued under paragraph (i).

Purpose

- (b) The purpose of a *last resort planning power* is to ensure timely and efficient *inter-regional transmission* investment for the long term interests of consumers of electricity.

AEMC last resort planning power

- (c) The *AEMC* may, in accordance with this clause 5.6.4, direct one or more *Registered Participants*:
 - (1) to identify a *potential transmission project* and apply the *regulatory test* to that project; or
 - (2) to apply the *regulatory test* to a *potential transmission project* identified by the *AEMC*.
- (d) The *AEMC* must exercise a *last resort planning power*:

- (1) consistently with the purpose referred to in paragraph (b); and
- (2) in accordance with the *last resort planning power guidelines*.

Advice from the Inter-regional Planning Committee

- (e) The *AEMC* may request advice from the *Inter-regional Planning Committee* in relation to the exercise of the *last resort planning power*, in accordance with the *last resort planning power guidelines*.
- (f) For the purpose only of providing advice to the *AEMC* in relation to the exercise of the *last resort planning power*, the *AEMC* may, in accordance with the *last resort planning power guidelines*, request *NEMMCO* to appoint up to 4 additional persons to the *Inter-regional Planning Committee* to:
 - (1) provide expertise and advice in relation to *generation* and *distribution* issues; and
 - (2) present the views of *Market Customers* and end user consumers of electricity.

Relevant considerations

- (g) In deciding whether or not to exercise a *last resort planning power* the *AEMC* must take into account:
 - (1) advice provided by the *Inter-regional Planning Committee*;
 - (2) the two most recent *Annual National Transmission Statements*;
 - (3) *Annual Planning Reports* published by *Transmission Network Service Providers* under clause 5.6.2A; and
 - (4) other matters that are relevant in all the circumstances.
- (h) In deciding whether or not to exercise the *last resort planning power* the *AEMC* must:
 - (1) identify a problem relating to *constraints* in respect of *national transmission flow paths* between *regional reference nodes* or a *potential transmission project* (**the problem or the project**);
 - (2) make reasonable inquiries to satisfy itself that there are no current processes underway for the application of the *regulatory test* in relation to the problem or the project;
 - (3) consider whether there are other options, strategies or solutions to address the problem or the project, and must be satisfied that all such

other options are unlikely to address the problem or the project in a timely manner;

- (4) be satisfied that the problem or the project may have a significant impact on the efficient operation of the *market*; and
- (5) be satisfied that but for the *AEMC* exercising the *last resort planning power*, the problem or the project is unlikely to be addressed.

Direction notice

- (i) The *AEMC* must exercise a *last resort planning power* by giving a direction notice in writing to a directed party that states:
 - (1) the relevant action under paragraph (c) that the directed party is required to undertake; and
 - (2) the *AEMC*'s reasons for exercising the *last resort planning power*.
- (j) A direction notice given by the *AEMC* under paragraph (i) may specify one or more of the following:
 - (1) one or more alternative projects which a directed party must consider when applying the *regulatory test* to *potential transmission projects*;
 - (2) the time period within which the application of the *regulatory test* must be carried out by a directed party; or
 - (3) consultation and publication requirements that are in addition to those required by the *regulatory test*.
- (k) The *AEMC* must *publish* the direction notice referred to in paragraph (i) on its website.
- (l) A directed party must comply with:
 - (1) a direction notice;
 - (2) the requirements of the *last resort planning power guidelines*; and
 - (3) the requirements for the application of the *regulatory test*.
- (m) If a directed party (an **earlier directed party**) fails to comply with a direction notice, the *AEMC* may:
 - (1) in accordance with this clause 5.6.4, give a direction notice to a *Registered Participant* other than the earlier directed party; and

- (2) inform the *AER* of the earlier directed party's failure to comply with the direction notice.

Annual reporting for last resort planning power

- (n) The *AEMC* must report annually on the matters which the *AEMC* has considered during that year in deciding whether or not to exercise the *last resort planning power*, and may include the information in its Annual Report published under s.27 of the Australian Energy Market Commission Establishment Act 2004 (South Australia).

Last resort planning power guidelines

- (o) The *AEMC* must develop and *publish* guidelines ('the *last resort planning power guidelines*') for or with respect to:
 - (1) the processes to be followed by the *AEMC* in exercising the *last resort planning power*;
 - (2) a request to *NEMMCO* to appoint a person as an additional member of the *Inter-regional Planning Committee* as referred to in paragraph (f);
 - (3) the advice to be provided to the *AEMC* by the *Inter-regional Planning Committee*, including the terms of reference for any such advice;
 - (4) the matters that the *Inter-regional Planning Committee* and the *AEMC* may consider in recommending or nominating a person as an appropriate directed party; and
 - (5) the provision of information to the *AEMC* in relation to the exercise of the *last resort planning power*.
- (p) The *AEMC* must develop and *publish* the *last resort planning power guidelines* in accordance with the *transmission consultation procedures*.
- (q) The *AEMC* must develop and *publish* the first *last resort planning power guidelines* by 1 January 2008 and there must be such guidelines available at all times after that date.
- (r) The *AEMC* may from time to time and in accordance with the *transmission consultation procedures*, amend or replace the *last resort planning power guidelines*.

5.6.5 Annual National Transmission Statement

- (a) *NEMMCO* must each year conduct a review of:
 - (1) *national transmission flow paths*;

- (2) forecast *constraints* in respect of *national transmission flow paths*;
- (3) those options which, in *NEMMCO's* reasonable opinion, have the technical capability of relieving forecast *constraints* in respect of *national transmission flow paths*,

and prepare and *publish* an *Annual National Transmission Statement* by 31 October each year setting out the results of that review.

- (b) *NEMMCO* must, in the course of conducting the *ANTS review*, consult with *Registered Participants* and *interested parties* in relation to:

- (1) the data and assumptions to be used as part of the *ANTS review*; and
- (2) the content of the *Annual National Transmission Statement*.

- (c) In carrying out the *ANTS review*, *NEMMCO* must consider the following:

- (1) the location of the current *national transmission flow paths* and the current capacities, *constraints* and congestion points on those flow paths;
- (2) the location of the potential *national transmission flow paths* over the next 10 years, and the likely capacities, *constraints* and congestion points on those flow paths;
- (3) the quantity of electricity which flowed, the periods in which the electricity flowed, and *constraints*, on the *national transmission flow paths* over the previous *financial year* or such other period as determined by *NEMMCO* having regard to data which is available to *NEMMCO*;
- (4) the forecast quantity of electricity which is expected to flow, and the periods in which the electricity is expected to flow, the magnitude and significance of future *network losses* and *constraints* on the current and potential *national transmission flow paths* over the current *financial year* or such other period as determined by *NEMMCO* having regard to data which is available to *NEMMCO*;
- (5) the projected capabilities of the existing *transmission network* and the *network control ancillary services* required to support existing and future *transmission network* capabilities;
- (6) demand forecasts for the next 10 *financial years*;
- (7) possible scenarios for additional *generation* and demand side options to meet demand forecasts;

- (8) relevant intra-jurisdictional developments and any incremental works which may be needed to co-ordinate *national transmission flow path* planning with intra-jurisdictional planning;
 - (9) those *transmission network* options for relieving forecast *constraints* on the *national transmission flow paths*, which in *NEMMCO's* opinion, deliver technically feasible solutions that meet the projected capabilities, demands, congestion and capacity for the *generation* expansion scenarios, taking into account committed projects; and
 - (10) such other matters as *NEMMCO*, in consultation with the *participating jurisdictions*, considers are appropriate.
- (d) In considering the matters described in clause 5.6.5(c), *NEMMCO* must have regard to:
- (1) the *Annual Planning Reports published* in the year in which the *ANTS review* is being conducted; and
 - (2) information obtained for the purposes of preparing the *statement of opportunities* to be *published* in the year in which the *ANTS review* is being conducted,
- and may include information from the *Annual Planning Reports* and the *statement of opportunities* in the *Annual National Transmission Statement*.
- (e) In carrying out the *ANTS review*, *NEMMCO* may seek the assistance of the *Inter-regional Planning Committee*.
- (f) *NEMMCO* may by written notice request an entity nominated under clause 5.6.3(b)(2) to provide *NEMMCO* with any additional information or documents reasonably available to it that *NEMMCO* reasonably requires for the purpose of the *ANTS review*.
- (g) An entity nominated under clause 5.6.3(b)(2) must comply with a written notice from *NEMMCO* issued pursuant to clause 5.6.5(f).
- (h) *NEMMCO* may only use information or documents provided in accordance with clauses 5.6.5(f) and 5.6.5(g) for the purpose of preparing the *Annual National Transmission Statement* or, where relevant, the *statement of opportunities*.

5.6.5A Regulatory Test

- (a) The *AER* must develop and *publish* the *regulatory test* in accordance with this clause 5.6.5A.
- (b) The purpose of the *regulatory test* is to identify *new network investments* or *non-network* alternative options that:

- (1) maximise the net economic benefit to all those who produce, consume and transport electricity in the *market*; or
 - (2) in the event the option is necessitated to meet the service standards linked to the technical requirements of schedule 5.1 or in *applicable regulatory instruments*, minimise the present value of the costs of meeting those requirements.
- (c) In so far as it relates to paragraph (b)(1), the *regulatory test* must:
- (1) be based on a cost-benefit analysis of the future (which includes assessment of reasonable scenarios of future supply and demand conditions):
 - (i) were the *new network investment* to take place,
compared to the likely alternative option or options,
 - (ii) were the *new network investment* not to take place;
 - (2) as a minimum, list or provide for:
 - (i) the classes of possible benefits that may be included as benefits, and classes of possible benefits that may not be included as benefits;
 - (ii) the method or methods permitted for estimating the magnitude of the different classes of benefits;
 - (iii) the classes of possible costs that may be counted as costs, and classes of possible costs that may not be included as costs;
 - (iv) the method or methods permitted for estimating the magnitude of the different classes of costs; and
 - (v) the appropriate method and value for specific inputs, where relevant, for determining the discount rate to be applied;
 - (3) ensure that the identification of the likely alternative option referred to in subparagraph (1) is informed by a consideration of all genuine and practicable alternative options to the proposed *new network investment* without bias regarding:
 - (i) energy source;
 - (ii) technology;
 - (iii) ownership;

- (iv) the extent to which the *new network investment* or the non-*network* alternative enables *intra-regional* or *inter-regional* trading of electricity;
 - (v) whether it is a *network* or non-*network* alternative;
 - (vi) whether the *new network investment* or non-*network* alternative is intended to be regulated; or
 - (vii) any other factor;
- (4) require, for a potential *new large transmission network asset*, that the *Network Service Provider* publish:
 - (i) a request for information as to the identity and detail of alternative options to the potential *new large transmission network asset*; and
 - (ii) details of the proposed *new large transmission network asset*;
- (5) contain a requirement that where there is more than one likely alternative option to the *new network investment*, and no single alternative option is significantly more likely to occur than the other, then the cost-benefit analysis referred to in subparagraph (1) must be undertaken in relation to each such likely alternative option;
- (6) not require the level of analysis to be disproportionate to the scale and size of the *new network investment*;
- (7) be capable of predictable, transparent and consistent application; and
- (8) provide that alternative options may include (without limitation) *generation*, demand side management, other *network* options, or the substitution of demand for electricity by the provision of alternative forms of energy.

Preparation, publication and amendment of regulatory test and regulatory test application guidelines

- (d) At the same time as the *AER publishes* a proposed *regulatory test* under the *transmission consultation procedure*, the *AER* must also *publish* guidelines for the operation and application of the *regulatory test* ('the **regulatory test application guidelines**') in accordance with the requirements of this clause 5.6.5A.
- (e) The *regulatory test* application guidelines must give effect to and be consistent with this clause 5.6.5A and provide guidance on the operation and application of the *regulatory test*.

- (f) The *AER* must develop and *publish* the first *regulatory test* and *regulatory test* application guidelines under this clause 5.6.5A by 31 December 2007 and there must be a *regulatory test* and *regulatory test* application guidelines in force at all times after that date.
- (g) The *AER* may, from time to time and in accordance with the *transmission consultation procedure*, amend or replace the *regulatory test* and *regulatory test* application guidelines developed and *published* under this clause, provided that such amendments must be *published* at the same time.
- (h) An amendment as referred to in paragraph (g) does not apply to a current application of the *regulatory test* and the *regulatory test* application guidelines under the *Rules* (however described) by a *Network Service Provider*.

5.6.6 Applications to establish new large transmission network assets

- (a) In addition to the procedures to establish a connection to a *network* in rule 5.3, applications to establish a *new large transmission network asset* must comply with the access arrangements and procedures set out in this clause 5.6.6.
- (b) A person who proposes to establish a *new large transmission network asset* (the **applicant**) must consult all *Registered Participants*, *NEMMCO* and *interested parties* about the proposed *new large transmission network asset* in accordance with this clause 5.6.6.
- (c) The applicant must make available to all *Registered Participants* and *NEMMCO* a notice (the **application notice**) which sets out, in relation to a proposed *new large transmission network asset*:
 - (1) a detailed description of:
 - (i) the proposed asset;
 - (ii) the reasons for proposing to establish the asset (including, where applicable, the actual or potential *constraint* or inability to meet the *network* performance requirements set out in schedule 5.1 or relevant legislation or regulations of a *participating jurisdiction*, including *load* forecasts and all assumptions used); and
 - (iii) all other reasonable *network* and non-*network* alternatives to address the identified *constraint* or inability to meet the *network* performance requirements identified in clause 5.6.6(c)(1)(ii). These alternatives include, but are not limited to, *interconnectors*, *generation* options, *demand side* options, *market network service* options and options involving other *transmission* and *distribution networks*;

- (2) all relevant technical details concerning the proposed asset;
 - (3) the construction timetable and commissioning date for the asset;
 - (4) an analysis of the ranking of the proposed asset and all reasonable alternatives as referred to in clause 5.6.6(c)(1)(iii). This ranking must be undertaken by the applicant in accordance with the principles contained in the *regulatory test*;
 - (5) an *augmentation technical report* prepared by the *Inter-regional Planning Committee* in accordance with clause 5.6.3(j) but only if:
 - (i) the asset is reasonably likely to have a *material inter-network impact*; and
 - (ii) the applicant has not received consent to proceed with such construction from all *Transmission Network Service Providers* whose *transmission networks* are materially affected by the asset; and
 - (6) a detailed analysis of why the applicant considers that the asset satisfies the *regulatory test* and, where the applicant considers that the asset satisfies the *regulatory test* as a *reliability augmentation*, analysis of why the applicant considers that the asset is a *reliability augmentation*.
- (d) In assessing whether a *new large transmission network asset*:
- (1) is reasonably likely to have a *material inter-network impact* for the purposes of clause 5.6.6(c)(5); or
 - (2) is a *reliability augmentation* for the purposes of clause 5.6.6(c)(6),
- an applicant must have regard to the objective set of criteria *published* by the *Inter-regional Planning Committee* in accordance with clause 5.6.3(i) or clause 5.6.3(l) (whichever is relevant), but only if any such criteria have been *published*.
- (e) The applicant must provide a summary of the application notice to *NEMMCO*. Within 3 *business days* of receipt of the summary, *NEMMCO* must *publish* the summary on its website. The applicant must, upon request by an *interested party*, provide a copy of the application notice to that person within 3 *business days* of the request.
 - (f) Within 30 *business days* of *publication* of the summary of the application notice on *NEMMCO's* website, *interested parties* may make written submissions to the applicant on any matter in the application notice, and may request a meeting.

- (g) The applicant must consider all submissions received in accordance with the requirements of clause 5.6.6(f) within a further 30 *business days*. The applicant must use its best endeavours to hold a meeting with *interested parties* who have requested such meeting, within a further 21 *business days* if:
 - (1) after having considered all submissions received in accordance with the requirements of clause 5.6.6(f), the applicant considers that it is necessary or desirable to hold a meetings; or
 - (2) a meeting is requested by 2 or more *interested parties*.
- (h) The applicant must prepare a final report (**final report**) to be made available to all *Registered Participants*, *NEMMCO* and *interested parties* who responded to the application notice. The final report must set out the matters detailed in clause 5.6.6(c) and summarise the submissions received from *interested parties* and the applicant's response to each such submission.
- (i) The applicant must provide to *NEMMCO* a summary of the final report, and *NEMMCO* must *publish* the summary on its website within 3 *business days* of its receipt.

Disputes in relation to certain matters

- (j) *Registered Participants*, the *AEMC*, *Connection Applicants*, *Intending Participants*, *NEMMCO* and *interested parties* may, by a referral to the *AER*, dispute the final report but only in relation to the contents, assumptions, findings or recommendations of the final report with respect to:
 - (1) possible alternatives considered and their ranking under clause 5.6.6(c)(4);
 - (2) whether the *new large transmission network asset*:
 - (i) will have a *material inter-network impact*; and
 - (ii) will satisfy any criteria for a *material inter-network impact published* by the *Inter-regional Planning Committee* in accordance with clause 5.6.3(i) that are in force at the time of preparation of the final report;
 - (3) the basis on which the applicant has assessed that the *new large transmission network asset* satisfies the *regulatory test* but only where that asset is not a *reliability augmentation*;
 - (4) whether the *new large transmission network asset* is a *reliability augmentation* and whether the asset satisfies the criteria for a *reliability augmentation published* by the *Inter-regional Planning*

Committee in accordance with clause 5.6.3(l) provided any such criteria had been *published* by the *Inter-regional Planning Committee* at the time of preparation of the final report; and

- (5) the finding in the final report that the *new large transmission network asset* satisfies the *regulatory test* provided the asset is not a *reliability augmentation*,

and a dispute under this clause 5.6.6(j) may not be in relation to any matters set out in the final report which are treated as externalities by the *regulatory test*, or relate to an individual's personal detriment or property rights.

- (k) A person disputing the final report under clause 5.6.6(j) (the **disputing party**) must:
 - (1) lodge notice of the dispute in writing (the **dispute notice**) with the *AER*;
 - (2) give a copy of the dispute notice to the applicant within 30 *business days* after publication of the summary of the final report on *NEMMCO's* website;
 - (3) specify in the dispute notice the grounds for the dispute in accordance with clause 5.6.6(j).
- (l) The *AER* must resolve disputes referred under clause 5.6.6(j) by making a determination.
- (m) In making a determination referred to in clause 5.6.6(l), the *AER*:
 - (1) must, subject to clauses 5.6.6(n) and (p), *publish* its determination in relation to disputes raised under clauses 5.6.6(j)(1)-(4) within 30 *business days* of receiving the dispute notice and in relation to a dispute raised in relation to clause 5.6.6(j)(5), within 120 *business days* of receiving notice of the dispute;
 - (2) must *publish* its reasons for making a determination;
 - (3) may disregard any matter raised by a party in the dispute that is misconceived or lacking in substance; and
 - (4) may request further information from a party bringing a dispute, or from the applicant, if the *AER* is not able to make a determination based on the information provided to it under clause 5.6.6(m).
- (n) The *AER* may, with the written consent of the disputing parties, extend the period of time in which the *AER* must make a determination under paragraph (m), if the *AER* considers there are issues of sufficient complexity or difficulty involved.

Determination that new large transmission asset satisfies regulatory test

- (o) Where a *new large transmission network asset* is not a *reliability augmentation* and the finding in the final report is not in dispute, the applicant may request in writing the *AER* to make a determination whether the *new large transmission network asset* satisfies the *regulatory test* and the *AER*:
 - (1) must, within 120 *business days* of receipt of the request from the applicant, subject to clause 5.6.6(p), make and *publish* a determination, including reasons;
 - (2) must use the findings and recommendations in the final report;
 - (3) may request further information from the applicant; and
 - (4) may have regard to any other matter the *AER* considers relevant.
- (p) The relevant period of time in which the *AER* must make a determination under paragraphs (l) and (o) is automatically extended by the period of time taken by an applicant or a disputing party to provide any additional information requested by the *AER* under this clause 5.6.6, provided:
 - (1) the *AER* makes the request for the additional information at least 7 *business days* prior to the expiry of the relevant period; and
 - (2) the applicant or the disputing party provides the additional information within 14 *business days* of receipt of the request.

Costs determinations

- (q) Where the *AER* engages a consultant to assist in making a determination under this clause 5.6.6, the *AER* may include a costs determination.
- (r) Where a costs determination is made, the *AER* may:
 - (1) render the applicant an invoice for the costs; or
 - (2) determine that the costs should:
 - (i) be shared by all the parties to the dispute, whether in the same proportion or differing proportions; or
 - (ii) borne by a party or parties to the dispute other than the applicant whether in the same proportion or differing proportions; andthe *AER* may render invoices accordingly.

- (s) If an invoice is rendered, the *AER* must specify a time period for the payment of the invoice that is no later than 30 *business days* from the date the *AER* makes a determination under clause 5.6.6.

5.6.6A Construction of new small transmission network assets

- (a) Each *Transmission Network Service Provider* must consult with any *interested parties* on any matter relating to a proposed *new small transmission network asset* set out in the *Annual Planning Report*. *Interested parties* may make written submissions to the *Transmission Network Service Provider*. To be valid, a submission must be received within 20 *business days* of *publication* of the *Annual Planning Report*.
- (b) At the conclusion of the consultation process in clause 5.6.6A(a):
 - (1) if there is any material change in the matters referred to in clauses 5.6.2A(b)(4) and (5) with respect to the *new small transmission network asset* as a result of the consultation process, the *Transmission Network Service Provider* must *publish* again the matters set out in clauses 5.6.2A(b)(4) and (5) in relation to such *new small transmission network asset*, incorporating the agreed or amended matters; and
 - (2) the *AER* must take into account the report *published* by the *Transmission Network Service Provider* in accordance with clause 5.6.6A(b)(1) and all material submitted to the *Transmission Network Service Provider* in the consultation process in the process of its determination of the *total revenue cap* for the *Transmission Network Service Provider* and whether the *new small transmission network asset* the subject of the consultation satisfies the *regulatory test*.
- (c) In relation to a *new small transmission network asset* which was not identified in an *Annual Planning Report* or if a matter set out in the *Annual Planning Report* pursuant to clause 5.6.2A(b) has materially changed since the *publication* of the *Annual Planning Report* the *Transmission Network Service Provider* must prepare a report that is to be *published* to all *Registered Participants*, *NEMMCO* and *interested parties* which sets out the matters referred to in clauses 5.6.2A(b)(4) and (5) in relation to that *new small transmission network asset*.
- (d) Each *Transmission Network Service Provider* must consult with any *interested parties* on any matter relating to a proposed *new small transmission network asset* set out in a report prepared pursuant to clause 5.6.6A(c). *Interested parties* may make written submissions to the *Transmission Network Service Provider*. To be valid, a submission must be received within 20 *business days* of publication of the report prepared pursuant to clause 5.6.6A(c).

- (e) At the conclusion of the consultation process in clause 5.6.6A(d):
 - (1) if there is any material change in the matters referred to in clauses 5.6.2A(b)(4) and (5) with respect to the *new small transmission network asset* as a result of the consultation process the *Transmission Network Service Provider* must *publish* again the matters set out in clauses 5.6.2A(b)(4) and (5) in relation to such *new small transmission network asset*, incorporating the agreed or amended matters; and
 - (2) the *AER* must take into account the matters raised in the consultation process in its determination of the *total revenue cap* for the *Transmission Network Service Provider* and its determination of whether the *new small transmission network asset* the subject of the consultation satisfies the *regulatory test*.

5.6.6B Construction of Funded Augmentations

- (a) The term *Transmission Network Service Provider* when used in this clause 5.6.6B is not intended to refer to, and is not to be read or construed as referring to, any *Transmission Network Service Provider* in its capacity as a *Market Network Service Provider*.
- (b) A *Transmission Network Service Provider* who proposes to construct a *funded augmentation* must make available to all *Registered Participants* and *NEMMCO* a notice which must set out:
 - (1) a detailed description of the proposed *funded augmentation*;
 - (2) all relevant technical details concerning the proposed *funded augmentation*, the impact of the *funded augmentation* on the relevant *transmission network's Transmission Network Users* and the construction timetable and commissioning date for the *funded augmentation*;
 - (3) an *augmentation technical report* prepared by the *Inter-regional Planning Committee* in accordance with clause 5.6.3(j) if, and only if, the *funded augmentation* is reasonably likely to have a *material inter-network impact* and the *Transmission Network Service Provider* has not received consent to proceed with construction from all *Transmission Network Service Providers* whose *transmission networks* are materially affected by the *funded augmentation*. In assessing whether a *funded augmentation* is reasonably likely to have a *material inter-network impact*, the *Transmission Network Service Provider* must have regard to the objective set of criteria *published* by the *Inter-regional Planning Committee* in accordance with clause 5.6.3(i) (if any such criteria have been *published* by the *Inter-regional Planning Committee*).

- (c) The *Transmission Network Service Provider* must provide a summary of the notice prepared in accordance with clause 5.6.6B(b) to *NEMMCO*. Within 3 *business days* of receipt of the summary, *NEMMCO* must *publish* the summary on its website.
- (d) The *Transmission Network Service Provider* must consult with any *interested parties*, in accordance with the *Rules consultation procedures*, on any matter set out in the notice prepared in accordance with clause 5.6.6B(b).

5.6.6C Review of total capitalised expenditure thresholds

- (a) Every 3 years the *AER* must undertake a review (*the 'total capitalised expenditure threshold review'*) of the changes in the input costs used to calculate the *total capitalised expenditure thresholds*. The purpose of the review is to determine whether those amounts need to be changed to maintain the value of the *total capitalised expenditure thresholds* over time by adjustment to reflect any increase or decrease in the input costs for *new transmission network investment* since:
 - (1) 1 July 2008 in respect of the first *total capitalised expenditure threshold review*; and
 - (2) the date of the previous review in respect of every subsequent *total capitalised expenditure threshold review*.
- (b) Each *total capitalised expenditure threshold review* is to be commenced by the *AER* on 31 July of the relevant year, with the first such review to be initiated in 2011.
- (c) Within 6 weeks following the commencement of a *total capitalised expenditure threshold review* the *AER* must *publish* a draft determination outlining:
 - (1) whether or not the *AER* has formed the view that any of the *total capitalised expenditure thresholds* need to be amended to reflect increases or decreases in the input costs to ensure that the value of the *total capitalised expenditure thresholds* is maintained over time; and
 - (2) its reasons for determining whether or not the *total capitalised expenditure thresholds* need to be varied to reflect increases or decreases in the input costs; and
 - (3) if there is to be a variation in a *total capitalised expenditure threshold*, the amount of the new *total capitalised expenditure threshold* and the date the new *total capitalised expenditure threshold* will take effect; and

- (4) the *AER's* reasons for determining the amount of the new *total capitalised expenditure threshold*.
- (d) At the same time as the *AER publishes* the draft determination under clause 5.6.6C(c), the *AER* must *publish* a notice seeking submissions on the draft determination. The notice is to specify the period within which written submissions can be made (*the 'total capitalised expenditure threshold consultation period'*). The *total capitalised expenditure threshold consultation period* must be no longer than 5 weeks.
- (e) The *AER* is to consider any written submissions received during the *total capitalised expenditure threshold consultation period* in making its final determination in respect of the matters outlined in clause 5.6.6C(c). The final determination must be made and *published* by the *AER* within 5 weeks following the end of the *total capitalised expenditure threshold consultation period*.
- (f) The new *total capitalised expenditure thresholds* (if any) will take effect to vary the then current *total capitalised expenditure thresholds* with effect from the relevant date specified in the *total capitalised expenditure threshold determination*.

5.7 Inspection and Testing

5.7.1 Right of entry and inspection

- (a) If a *Registered Participant* who is party to a *connection agreement* reasonably believes that the other party to the *connection agreement* (being a party who is also a *Registered Participant*) is not complying with a technical provision of the *Rules* and that, as a consequence, the first *Registered Participant* is suffering, or is likely to suffer, a material adverse effect, then the first *Registered Participant* may enter the relevant *facility* at the *connection point* of the other *Registered Participant* in order to assess compliance by the other *Registered Participant* with its technical obligations under the *Rules*.
- (b) A *Registered Participant* who wishes to inspect the *facilities* of another *Registered Participant* under clause 5.7.1(a) must give that other *Registered Participant* at least 2 *business days* notice of its intention to carry out an inspection.
- (c) A notice given under clause 5.7.1(b) must include the following information:
 - (1) the name of the *representative* who will be conducting the inspection on behalf of the *Registered Participant*;

- (2) the time when the inspection will commence and the expected time when the inspection will conclude; and
 - (3) the nature of the suspected non-compliance with the *Rules*.
- (d) Neither a *Registered Participant* nor *NEMMCO* may carry out an inspection under this rule 5.7 within 6 months of any previous inspection except for the purpose of verifying the performance of corrective action claimed to have been carried out in respect of a non-conformance observed and documented on the previous inspection or (in the case of *NEMMCO*) for the purpose of reviewing an operating incident in accordance with clause 4.8.15.
- (e) At any time when the *representative* of a *Registered Participant* is in another *Registered Participant's facility*, that *representative* must:
 - (1) cause no damage to the *facility*;
 - (2) only interfere with the operation of the *facility* to the extent reasonably necessary and approved by the relevant *Registered Participant* (such approval not to be unreasonably withheld or delayed); and
 - (3) observe “permit to test” access to sites and clearance protocols of the operator of the *facility*, provided that these are not used by the operator of the *facility* solely to delay the granting of access to site and inspection.
- (f) Any *representative* of a *Registered Participant* conducting an inspection under this clause 5.7.1 must be appropriately qualified to perform the relevant inspection.
- (g) The costs of inspections under this clause 5.7.1 must be borne by the *Registered Participant* requesting the inspection.
- (h) *NEMMCO* or any of its *representatives* may, in accordance with this rule 5.7, inspect a *facility* of a *Registered Participant* and the operation and maintenance of that *facility* in order to:
 - (1) assess compliance by the relevant *Registered Participant* with its operational obligations under Chapter 3 or 4, or an *ancillary services agreement*;
 - (2) investigate any possible past or potential threat to *power system security*; or
 - (3) conduct any periodic familiarisation or training associated with the operational requirements of the *facility*.
- (i) Any inspection under clause 5.7.1(a) or (h) must only be for so long as is reasonably necessary.

- (j) Any equipment or goods installed or left on land or in premises of a *Registered Participant* after an inspection conducted under clause 5.7.1 do not become the property of the relevant *Registered Participant* (notwithstanding that they may be annexed or affixed to the relevant land or premises).
- (k) In respect of any equipment or goods left on land or premises of a *Registered Participant* during or after an inspection, a *Registered Participant*:
 - (1) must not use any such equipment or goods for a purpose other than as contemplated in the *Rules* without the prior written approval of the owner of the equipment or goods;
 - (2) must allow the owner of any such equipment or goods to remove any such equipment or goods in whole or in part at a time agreed with the relevant *Registered Participant*, such agreement not to be unreasonably withheld or delayed; and
 - (3) must not create or cause to be created any mortgage, charge or lien over any such equipment or goods.
- (l) A *Registered Participant* (in the case of an inspection carried out under clause 5.7.1(a)) or *NEMMCO* (in the case of an inspection carried out under clause 5.7.1(h)) must provide the results of that inspection to the *Registered Participant* whose *facilities* have been inspected, any other *Registered Participant* which is likely to be materially affected by the results of the test or inspection and *NEMMCO* (in the case of an inspection carried out under clause 5.7.1(a)).

5.7.2 Right of testing

- (a) A *Registered Participant*, who has reasonable grounds to believe that equipment owned or operated by a *Registered Participant* with whom it has a *connection agreement* (which equipment is associated with the *connection agreement*) may not comply with the *Rules* or the *connection agreement*, may request testing of the relevant equipment by giving notice in writing to the other *Registered Participant*.
- (b) If a notice is given under clause 5.7.2(a) the relevant test is to be conducted at a time agreed by *NEMMCO*.
- (c) The *Registered Participant* who receives a notice under clause 5.7.2(a) must co-operate in relation to conducting tests requested under clause 5.7.2(a).
- (d) The cost of tests requested under clause 5.7.2(a) must be borne by the *Registered Participant* requesting the test, unless the equipment is determined by the tests not to comply with the relevant *connection*

agreement and the *Rules*, in which case all reasonable costs of such tests must be borne by the owner of that equipment.

- (e) Tests conducted in respect of a *connection point* under clause 5.7.2 must be conducted using test procedures agreed between the relevant *Registered Participants*, which agreement is not to be unreasonably withheld or delayed.
- (f) Tests under clause 5.7.2 must be conducted only by persons with the relevant skills and experience.
- (g) A *Transmission Network Service Provider* must give *NEMMCO* adequate prior notice of intention to conduct a test in respect of a *connection point* to that *Network Service Provider's network*.
- (h) The *Registered Participant* who requests a test under this clause 5.7.2 may appoint a *representative* to witness a test and the relevant *Registered Participant* must permit a *representative* appointed under this clause 5.7.2(h) to be present while the test is being conducted.
- (i) A *Registered Participant* who conducts a test must submit a report to the *Registered Participant* who requested the relevant test, *NEMMCO* and to any other *Registered Participant* which is likely to be materially affected by the results of the test, within a reasonable period after the completion of the test and the report is to outline relevant details of the tests conducted, including but not limited to the results of those tests.
- (j) A *Network Service Provider* may attach test equipment or *monitoring equipment* to *plant* owned by a *Registered Participant* or require a *Registered Participant* to attach such test equipment or *monitoring equipment*, subject to the provisions of clause 5.7.1 regarding entry and inspection.
- (k) In carrying out monitoring under clause 5.7.2(j) the *Network Service Provider* must not cause the performance of the monitored *plant* to be *constrained* in any way.

5.7.3 Tests to demonstrate compliance with connection requirements for generators

- (a) Each *Generator* must, in accordance with the time frames specified in rule 4.15, provide evidence to any relevant *Network Service Provider* with which that *Generator* has a *connection agreement* and to *NEMMCO*, that its *generating system* complies with:
 - (1) the applicable technical requirements of clause S5.2.5; and

- (2) the relevant *connection agreement* including the *performance standards*.
- (b) **[Deleted]**
- (c) If a test required by clause 5.7.3(a) demonstrates that a *generating system* is not complying with one or more technical requirements of clause S5.2.5 or the relevant *connection agreement* or one or more of the *performance standards* then the *Generator* must:
 - (1) promptly notify the relevant *Network Service Provider* and *NEMMCO* of that fact; and
 - (2) promptly notify the *Network Service Provider* and *NEMMCO* of the remedial steps it proposes to take and the timetable for such remedial work; and
 - (3) diligently undertake such remedial work and report at monthly intervals to the *Network Service Provider* on progress in implementing the remedial action; and
 - (4) conduct further tests or monitoring on completion of the remedial work to confirm compliance with the relevant technical requirements or *performance standards* (as the case may be).
- (d) If *NEMMCO* reasonably believes that a *generating system* is not complying with one or more applicable *performance standards* or one or more applicable technical requirements of clause S5.2.5 or the relevant *connection agreement*, *NEMMCO* may instruct the *Generator* to conduct tests within 25 *business days* to demonstrate that the relevant *generating system* complies with those *performance standards* or technical requirements.
- (e) If the tests undertaken in accordance with paragraph (d) provide evidence that the *generating system* continues to comply with those requirements *NEMMCO* must reimburse the *Generator* for the reasonable expenses incurred as a direct result of conducting the tests.
- (f) If *NEMMCO*:
 - (1) is satisfied that:
 - (i) a *generating system* is not complying with the relevant *performance standards* for that system in respect of one or more of the technical requirements contained in S5.2.5, S5.2.6, S5.2.7 or S5.2.8 and the relevant *connection agreement*; or

- (ii) a *generating system's* performance is not adequately represented by the applicable analytical model provided under clause 5.7.6(h) or clause S5.2.4; and
- (2) holds the reasonable opinion that the performance of the *generating system*, or inadequacy of the applicable analytical model of the *generating system* is or will impede NEMMCO's ability to carry out its role in relation to *power system security*,

NEMMCO may direct the relevant *Generator* to operate the *generating system* at a particular *generated* output or in a particular mode until the relevant *Generator* submits evidence reasonably satisfactory to NEMMCO that the *generating system* is complying with the relevant *performance standard* and performing substantially in accordance with the applicable analytical model.

- (g) Each *Generator* must maintain records for 7 years for each of its *generating systems* and *power stations* setting out details of the results of all technical performance and monitoring conducted under this clause 5.7.3 and make these records available to NEMMCO on request.

5.7.4 Routine testing of protection equipment

- (a) A *Registered Participant* must co-operate with any relevant *Network Service Provider* to test the operation of equipment forming part of a *protection system* relating to a *connection point* at which that *Registered Participant* is *connected* to a *network* and the *Registered Participant* must conduct these tests:
 - (1) prior to the *plant* at the relevant *connection point* being placed in service; and
 - (2) at intervals specified in the *connection agreement* or in accordance with an asset management plan agreed between the *Network Service Provider* and the *Registered Participant*.
- (a1) A *Network Service Provider* must institute and maintain a compliance program to ensure that its *facilities* of the following types, to the extent that the proper operation of a *facility* listed in this clause may affect *power system security*, operate reliably and in accordance with their performance requirements under schedule 5.1:
 - (1) *protection systems*;
 - (2) *control systems* for maintaining or enhancing *power system* stability;
 - (3) *control systems* for controlling *voltage* or *reactive power*; and

- (4) *control systems for load shedding.*
- (a2) A compliance program under clause 5.7.4(a1) must:
 - (1) include monitoring of the performance of the *facilities*;
 - (2) to the extent reasonably necessary, include provision for periodic testing of the performance of those *facilities* upon which *power system security* depends;
 - (3) provide reasonable assurance of ongoing compliance of the *facilities* with the relevant performance requirements of schedule 5.1; and
 - (4) be in accordance with *good electricity industry practice.*
- (a3) A *Network Service Provider* must immediately notify *NEMMCO* if it reasonably believes that a *facility* of a type listed in clause 5.7.4(a1) does not comply with, or is likely not to comply with, its performance requirements.
- (a4) A notice issued under clause 5.7.4(a3) must:
 - (1) identify the *facility* and the requirement with which the *facility* does not comply;
 - (2) give an explanation of the reason why the *facility* failed to comply with its performance requirement;
 - (3) give the date and time when the *facility* failed to comply with its performance requirement;
 - (4) give the date and time when the *facility* is expected to again comply with its performance requirement; and
 - (5) describe the expected impact of the failure on the performance of the *Network Service Provider's transmission system or distribution system.*
- (b) Each *Registered Participant* must bear its own costs of conducting tests under this clause 5.7.4.

5.7.5 Testing by Registered Participants of their own plant requiring changes to normal operation

- (a) A *Registered Participant* proposing to conduct a test on equipment related to a *connection point*, which requires a change to the normal operation of that equipment, must give notice in writing to the relevant *Network Service Provider* of at least 15 *business days* except in an emergency.

- (b) The notice to be provided under clause 5.7.5(a) must include:
 - (1) the nature of the proposed test;
 - (2) the estimated start and finish time for the proposed test;
 - (3) the identity of the equipment to be tested;
 - (4) the *power system* conditions required for the conduct of the proposed test;
 - (5) details of any potential adverse consequences of the proposed test on the equipment to be tested;
 - (6) details of any potential adverse consequences of the proposed test on the *power system*; and
 - (7) the name of the person responsible for the co-ordination of the proposed test on behalf of the *Registered Participant*.
- (c) The *Network Service Provider* must review the proposed test described in a notice provided under clause 5.7.5(a) to determine whether the test:
 - (1) could adversely affect the normal operation of the *power system*;
 - (2) could cause a threat to *power system security*;
 - (3) requires the *power system* to be operated in a particular way which differs from the way in which the *power system* is normally operated;
or
 - (4) could affect the normal *metering* of *energy* at a *connection point*.
- (d) If the *Network Service Provider* determines that the proposed test does fulfil one of the conditions specified in clause 5.7.5(c), then the *Registered Participant* and *Network Service Provider* must seek *NEMMCO's* approval prior to undertaking the test, which approval must not be unreasonably withheld or delayed.
- (e) If, in *NEMMCO's* reasonable opinion, a test could threaten public safety, damage or threaten to damage equipment or adversely affect the operation of the *power system*, *NEMMCO* may direct that the proposed test procedure be modified or that the test not be conducted at the time proposed.
- (f) *NEMMCO* must advise *Network Service Providers* of any test which may have a possible effect on normal *metering* of *energy* at a *connection point*.
- (g) *NEMMCO* must advise any other *Registered Participants* who might be adversely affected by a proposed test and consider any reasonable

requirements of those *Registered Participants* when approving the proposed test.

- (h) The *Registered Participant* who conducts a test under this clause 5.7.5 must ensure that the person responsible for the co-ordination of a test promptly advises *NEMMCO* when the test is complete.
- (i) If *NEMMCO* approves a proposed test, *NEMMCO* must use its reasonable endeavours to ensure that *power system* conditions reasonably required for that test are provided as close as is reasonably practicable to the proposed start time of the test and continue for the proposed duration of the test.
- (j) Within a reasonable period after any such test has been conducted, the *Registered Participant* who has conducted a test under this clause 5.7.5 must provide the *Network Service Provider* with a report in relation to that test including test results where appropriate.

5.7.6 Tests of generating units requiring changes to normal operation

- (a) A *Network Service Provider* may, at intervals of not less than 12 months per *generating system*, require the testing by a *Generator* of any *generating unit connected* to the *network* of that provider in order to determine analytic parameters for modelling purposes or to assess the performance of the relevant *generating unit* or *generating system* for the purposes of a *connection agreement*, and that provider is entitled to witness such tests.
- (b) If *NEMMCO* reasonably considers that:
 - (1) the analytic parameters for modelling of a *generating unit* or *generating system* are inadequate; or
 - (2) available information, including results from a previous test of a *generating unit* or *generating system*, are inadequate to determine parameters for an applicable model developed in accordance with the *Generating System Model Guidelines*, or otherwise agreed with *NEMMCO* under clause S5.2.4(c)(2),

NEMMCO may direct a *Network Service Provider* to require a *Generator* to conduct a test under paragraph (a), and *NEMMCO* may witness such a test.

- (c) Adequate notice of not less than 15 *business days* must be given by the *Network Service Provider* to the *Generator* before the proposed date of a test under paragraph (a).
- (d) The *Network Service Provider* must use its best endeavours to ensure that tests permitted under this clause 5.7.6 are conducted at a time which will minimise the departure from the *commitment* and *dispatch* that are due to take place at that time.

- (e) If not possible beforehand, a *Generator* must conduct a test under this clause 5.7.6 at the next scheduled *outage* of the relevant *generating unit* and in any event within 9 months of the request.
- (f) A *Generator* must provide any reasonable assistance requested by the *Network Service Provider* in relation to the conduct of tests.
- (f1) If requested by a *Network Service Provider* who required the test under clause 5.7.6(a), a *Generator* must provide to the *Network Service Provider* any relevant information relating to the *plant* which is the subject of a test carried out under this clause 5.7.6, including model source code provided to NEMMCO under clause S5.2.4(b)(6).
- (g) Tests conducted under this clause 5.7.6 must be conducted in accordance with test procedures agreed between the *Network Service Provider* and the relevant *Generator* and a *Generator* must not unreasonably withhold its agreement to test procedures proposed for this purpose by the *Network Service Provider*.
- (h) A *Generator* must provide the test records obtained from a test under paragraph (a) to the *Network Service Provider*, who must derive the analytical parameters for the applicable model developed in accordance with the *Generating System Model Guidelines*, or otherwise agreed with NEMMCO under clause S5.2.4(c)(2) and provide them and any new or revised model source code to the relevant *Generator*.
- (i) The *Generator*, the *Network Service Provider* and NEMMCO must each bear its own costs associated with tests conducted under this clause 5.7.6 and no compensation is to be payable for financial losses incurred as a result of these tests or associated activities.

5.7.7 Inter-network power system tests

- (a) For each kind of development or activity described in the first column of chart 1 below, the *Proponent* is as set out in the second column and the *Relevant Transmission Network Service Provider* (“*Relevant TNSP*”) is as set out in the third column, respectively, opposite the description of the development or activity.

Chart 1

No.	Kind of development or activity	<i>Proponent</i>	<i>Relevant TNSP</i>
	column 1	column 2	column 3
1.	A new <i>transmission line</i>	<i>Network Service Provider</i>	<i>Proponent</i> and the

No.	Kind of development or activity	Proponent	Relevant TNSP
	column 1	column 2	column 3
	between two <i>networks</i> , or within a <i>transmission network</i> , that is anticipated to have a <i>material inter-network impact</i> is commissioned.	in respect of the new <i>transmission line</i> .	<i>Transmission Network Service Provider</i> in respect of any <i>network</i> to which the <i>transmission line</i> is connected.
2.	An existing <i>transmission line</i> between two <i>networks</i> , or within a <i>transmission network</i> , that is anticipated to have a <i>material inter-network impact</i> is <i>augmented</i> or substantially modified.	<i>Network Service Provider</i> in respect of the <i>augmentation</i> or modification of the <i>transmission line</i> .	<i>Proponent</i> and the <i>Transmission Network Service Provider</i> in respect of any <i>network</i> to which the <i>transmission line</i> is connected.
3.	A new <i>generating unit</i> or <i>facility</i> of a <i>Customer</i> or a <i>network</i> development is commissioned that is anticipated to have a <i>material inter-network impact</i> .	<i>Generator</i> in respect of the <i>generating unit</i> and associated <i>connection assets</i> . <i>Customer</i> in respect of the <i>facility</i> and associated <i>connection assets</i> . <i>Network Service Provider</i> in respect of the relevant <i>network</i> .	<i>Transmission Network Service Provider</i> in respect of any <i>network</i> to which the <i>generating unit, facility</i> or <i>network</i> development is connected and, if a <i>network</i> development, then also the <i>Proponent</i> .
4.	Setting changes are made to any <i>power system</i> stabilisers as a result of a <i>generating unit, facility</i> of a <i>Customer</i> or <i>network</i> development being commissioned, modified or replaced.	<i>Generator</i> in respect of the <i>generating unit</i> . <i>Customer</i> in respect of the <i>facility</i> . <i>Network Service Provider</i> in respect of the relevant <i>network</i> .	<i>Transmission Network Service Provider</i> in respect of any <i>transmission network</i> to which the <i>generating unit, facility</i> or <i>network</i> development is connected.

No.	Kind of development or activity	<i>Proponent</i>	<i>Relevant TNSP</i>
	column 1	column 2	column 3
5.	Setting changes are made to any <i>power system</i> stabilisers as a result of a decision by the <i>Inter-regional Planning Committee</i> or <i>NEMMCO</i> , which are not covered by item 4 in this chart.	<i>NEMMCO</i> .	None.
6.	<i>NEMMCO</i> determines that a test is required to verify the performance of the <i>power system</i> in light of the results of planning studies or simulations or one or more system incidents.	<i>NEMMCO</i> .	None.

- (b) A *Registered Participant*, not being a *Transmission Network Service Provider*, determined in accordance with clause 5.7.7(a) to be a *Proponent* for a development or activity detailed in chart 1, may require the *Relevant TNSP* corresponding to that development or activity to undertake on their behalf their obligations as the *Proponent* and, where the *Relevant TNSP* receives a written request to undertake those obligations, the *Relevant TNSP* must do so.
- (c) Where, in this clause 5.7.7, there is a reference to a *Proponent* that reference includes a *Relevant TNSP* required in accordance with clause 5.7.7(b) to undertake the obligations of another *Registered Participant*.
- (d) If a *Relevant TNSP* is required by a *Registered Participant* in respect of a *scheduled generating unit*, a *semi-scheduled generating unit*, a *scheduled load* or a *market network service*, any of which have a *nameplate rating* in excess of 30 MW, to act as a *Proponent* in accordance with clause 5.7.7(b), that *Relevant TNSP* is entitled to recover all reasonable costs incurred from the *Registered Participant* that required the *Relevant TNSP* to act as the *Proponent*.
- (e) A *Registered Participant* wishing to undertake a development or conduct an activity listed in item 1, 2, 3 or 4 of chart 1 must notify *NEMMCO* not less than 80 *business days* before the *transmission line*, *generating unit*, *facility*

or *network* development is planned to be commissioned, modified or replaced, giving details of the development or activity.

- (f) If *NEMMCO* receives a notice under clause 5.7.7(e), then it must provide a copy of the notice to each member of the *Inter-regional Planning Committee* and consult with the *Inter-regional Planning Committee* about the potential impact of the development or activity.
- (g) *NEMMCO* or the *Relevant TNSP* in respect of a development or activity may notify the *Proponent* of the development or activity that *NEMMCO* or the *Relevant-TNSP* believes that an *inter-network test* is required in relation to that development or activity.
- (h) *NEMMCO* or the *Relevant TNSP* may only give a notice under clause 5.7.7(g) if *NEMMCO* or the *Relevant TNSP* considers that:
 - (1) the development or activity may have a material impact on the magnitude of the *power transfer capability* of more than one *transmission network* and, in the circumstances, an *inter-network test* is required; or
 - (2) if the *Inter-regional Planning Committee* has *published* guidelines under clause 5.7.7(k), an *inter-network test* is required having regard to those guidelines and the surrounding circumstances.
- (i) If *NEMMCO* or the *Relevant TNSP* gives a notice under clause 5.7.7(g), then they must also promptly give a copy of the notice to each member of the *Inter-regional Planning Committee*.
- (j) A *Registered Participant* undertaking a development or activity listed in chart 1 must provide such information to *NEMMCO* or the *Relevant TNSP* in respect of the development or activity as *NEMMCO* or the *Relevant TNSP* reasonably requests in order to make an assessment under this clause 5.7.7.
- (k) The *Inter-regional Planning Committee* may develop, *publish* and amend from time to time, in accordance with the *Rules consultation procedures*, a set of guidelines to assist *Registered Participants* to determine when an *inter-network test* may be required.
- (l) If the *Inter-regional Planning Committee* has *published* guidelines in accordance with clause 5.7.7(k), then *NEMMCO* and the *Relevant TNSP* must consider those guidelines in determining whether an *inter-network test* is required under clause 5.7.7(g) or 5.7.7(n).
- (m) If *NEMMCO* or the *Relevant TNSP* gives notice under clause 5.7.7(g), then the *Proponent* must, in consultation with *NEMMCO*, prepare a draft *test program* for the *inter-network test* and submit it to each member of the

Inter-regional Planning Committee and the *Relevant TNSP* (if the *Relevant TNSP* gave the notice given under clause 5.7.7(g)).

- (n) If *NEMMCO* determines that an *inter-network test* is required for a reason contemplated in item 5 or 6 of chart 1, then it must prepare a draft *test program* for the *inter-network test* and submit it to each member of the *Inter-regional Planning Committee* at least 40 *business days* prior to the proposed test.
- (o) The *Inter-regional Planning Committee* must:
 - (1) meet within 15 *business days* of the members receiving a draft *test program* under clauses 5.7.7(m) or (n); and
 - (2) within a period of not more than 10 *business days* make a recommendation to *NEMMCO* on the draft *test program* that identifies changes the *Inter-regional Planning Committee* proposes to the *test program*.
- (p) *NEMMCO* must:
 - (1) *publish* a copy of the draft *test program* and any relevant changes recommended by the *Inter-regional Planning Committee* and invite interested *Registered Participants* to make written submissions;
 - (2) only accept as valid submissions received not later than the date specified in the notice *publishing* the copy of the draft *test program* (not to be less than 14 *days* after the date of *publication*); and
 - (3) provide the *Inter-regional Planning Committee* with copies of all valid submissions and seek its final recommendation.
- (q) The *Inter-regional Planning Committee* must consider and take into account all valid submissions received and may amend its recommendation.
- (r) *NEMMCO* must determine and *publish* in accordance with clause 3.13.13 the *test program* for an *inter-network test* after taking into account the draft *test program* submitted to the *Inter-regional Planning Committee*, the *Inter-regional Planning Committee's* recommendation and any valid submissions received from *Registered Participants*.
- (s) In making a recommendation under clause 5.7.7(o) and in determining the *test program*, the *Inter-regional Planning Committee* and *NEMMCO* must so far as practicable have regard to the following principles:
 - (1) *power system security* must be maintained in accordance with Chapter 4;

- (2) the variation from the *central dispatch* outcomes that would otherwise occur if there was no *inter-network test* should be minimised;
 - (3) the duration of the tests should be as short as possible consistent with test requirements and *power system security*; and
 - (4) subject to clauses 5.7.7(s)(1), (2) and (3), the test facilitation costs borne or payable under clause 5.7.7 (aa) by the *Proponent* should be minimised.
- (t) An *inter-regional test* must not be conducted within 20 *business days* after *NEMMCO* publishes the *test program* for the *inter-network test* determined by *NEMMCO* under clause 5.7.7(r).
- (u) The *Proponent* in respect of an *inter-network test* must seek to enter into agreements with other *Registered Participants* to provide the test facilitation services identified in the *test program* in order to ensure that the *power system* conditions required by the *test program* are achieved.
- (v) If the *Proponent* approaches another *Registered Participant* seeking to enter into an agreement under clause 5.7.7(u) then the *Proponent* and the *Registered Participant* must negotiate in good faith concerning the provision of the relevant test facilitation service.
- (w) If:
 - (1) a *Proponent* approaches another *Registered Participant* as described in clause 5.7.7(v); and
 - (2) the *Proponent* and the other *Registered Participant* have not agreed the terms and conditions to be included in the agreement under which the *Registered Participant* will provide the test facilitation service requested within 15 *business days* of the approach,then those terms and conditions must be determined in accordance with rule 8.2 and a dispute of this type is deemed to fall within clause 8.2.5(c)(2).
- (x) If the dispute concerns the price which the *Proponent* is to pay for a test facilitation service, then it must be resolved applying the following principles:
 - (1) the other *Registered Participant* is entitled to recover the costs it incurs, and a reasonable rate of return on the capital it employs, in providing the test facilitation service, determined taking into account the additional costs associated with:
 - (i) maintaining the equipment necessary to provide the test facilitation service;

- (ii) any labour required to operate and maintain the equipment used to provide the test facilitation service; and
 - (iii) any materials consumed when the test facilitation service is utilised; and
- (2) the other *Registered Participant* is entitled to be compensated for any commercial opportunities foregone by providing the test facilitation service.
- (y) When the terms and conditions are determined in accordance with rule 8.2 under this clause 5.7.7, then the *Proponent* and the other *Registered Participant* must enter into an agreement setting out those terms and conditions.
- (z) If *NEMMCO* is not the *Proponent* in respect of an *inter-network test*, the *Proponent* must:
 - (1) prior to the scheduled date of the *inter-network test*, confirm to *NEMMCO* that the test facilitation services identified in the *test program* will be available to be utilised, who will be providing them and the operational arrangements for utilising them;
 - (2) provide sufficient information to enable *NEMMCO* to utilise the test facilitation services in conducting the *inter-network test*; and
 - (3) respond promptly to any queries *NEMMCO* raises with the *Proponent* concerning the availability of the test facilitation services and *NEMMCO's* ability to utilise those services in conducting the *inter-network tests*.
- (aa) The *Proponent* in respect of an *inter-network test* must bear all of the following costs associated with that *inter-network test*:
 - (1) any amounts payable under an agreement under which test facilitation services are provided;
 - (2) the *Proponent's* own costs associated with the *inter-network test* and in negotiating and administering the agreements referred to in clause 5.7.7(u); and
 - (3) if the *Proponent* is not *NEMMCO* and the amount of *settlements residue* on any *directional interconnector* for a *trading interval* during which there is an impact on *central dispatch* outcomes as a result of the *inter-network test* is negative, then the *Proponent* must enter into an agreement with *NEMMCO* to pay that amount to *NEMMCO*.
- (ab) If the *Proponent* is *NEMMCO* and the amount of *settlements residue* on any *directional interconnector* for a *trading interval* during which there is an

impact on *central dispatch* outcomes as a result of the *inter-network test* is negative, then *NEMMCO* must adjust that residue to be zero and must recover the amount as provided for in clause 2.11.3(b)(2A).

- (ac) *NEMMCO* must establish operational conditions to achieve the particular *power transfer* levels for each stage of the *inter-network test* as contemplated by the *test program*:
 - (1) utilizing where practicable and economic to do so the test facilitation services identified in the *test program*; and
 - (2) otherwise, by applying to the minimum extent necessary to fulfil the test requirements, *inter-network testing constraints*.
- (ad) An *inter-network test* must be coordinated by an officer nominated by the *Inter-regional Planning Committee* who has authority to stop the test or any part of it or vary the procedure within pre-approved guidelines determined by the *Inter-regional Planning Committee* if that officer considers any of these actions to be reasonably necessary.
- (ae) Each *Registered Participant* must:
 - (1) cooperate with *NEMMCO* in planning, preparing for and conducting *inter-regional tests*;
 - (2) act in good faith in respect of, and not unreasonably delay, an *inter-network test*; and
 - (3) comply with any instructions given to it by *NEMMCO* under clause 5.7.7(af).
- (af) *NEMMCO* may utilise test facilitation services under agreements entered into by the *Proponent* under this clause 5.7.7 during an *inter-network test* in order to achieve operational conditions on the *power system* which are reasonably required to achieve valid test results.

5.8 Commissioning

5.8.1 Requirement to inspect and test equipment

- (a) A *Registered Participant* must ensure that any of its new or replacement equipment is inspected and tested to demonstrate that it complies with relevant *Australian Standards*, the *Rules* and any relevant *connection agreement* prior to or within an agreed time after being *connected* to a *transmission network* or *distribution network*, and the relevant *Network Service Provider* is entitled to witness such inspections and tests.

- (b) The *Registered Participant* must produce test certificates on demand by the relevant *Network Service Provider* showing that the equipment has passed the tests and complies with the standards set out in clause 5.8.1(a) before *connection* to a *network*, or within an agreed time thereafter.

5.8.2 Co-ordination during commissioning

A *Registered Participant* seeking to *connect* to a *network* must co-operate with the relevant *Network Service Provider(s)* and *NEMMCO* to develop procedures to ensure that the commissioning of the *connection* and *connected facility* is carried out in a manner that:

- (a) does not adversely affect other *Registered Participants* or affect *power system security* or quality of *supply* of the *power system*; and
- (b) minimises the threat of damage to any other *Registered Participant's* equipment.

5.8.3 Control and protection settings for equipment

- (a) Not less than 3 months prior to the proposed commencement of commissioning by a *Registered Participant* of any new or replacement equipment that could reasonably be expected to alter performance of the *power system* (other than replacement by identical equipment), the *Registered Participant* must submit to the relevant *Network Service Provider* sufficient design information including proposed parameter settings to allow critical assessment including analytical modelling of the effect of the new or replacement equipment on the performance of the *power system*.
- (b) The *Network Service Provider* must:
 - (1) consult with other *Registered Participants* and *NEMMCO* as appropriate; and
 - (2) within 20 *business days* of receipt of the design information under clause 5.8.3(a), notify the *Registered Participant* and *NEMMCO* of any comments on the proposed parameter settings for the new or replacement equipment.
- (c) If the *Network Service Provider's* comments include alternative parameter settings for the new or replacement equipment, then the *Registered Participant* must notify the *Network Service Provider* that it either accepts or disagrees with the alternative parameter settings suggested by the *Network Service Provider*.
- (d) The *Network Service Provider* and the *Registered Participant* must negotiate parameter settings that are acceptable to them both and if there is

any unresolved disagreement between them, the matter must be referred to the *Inter-regional Planning Committee* whose majority decision must be given within 20 *business days* of referral of the dispute and, once a decision is given, it is to be final.

- (e) The *Registered Participant* and the *Network Service Provider* must co-operate with each other to ensure that adequate grading of protection is achieved so that faults within the *Registered Participant's facility* are cleared without adverse effects on the *power system*.

5.8.4 Commissioning program

- (a) Prior to the proposed commencement of commissioning by a *Registered Participant* of any new or replacement equipment that could reasonably be expected to alter performance of the *power system*, the *Registered Participant* must advise the relevant *Network Service Provider* and *NEMMCO* in writing of the commissioning program including test procedures and proposed test equipment to be used in the commissioning.
- (b) Notice under clause 5.8.4(a) must be given not less than 3 months prior to commencement of commissioning for a *connection* to a *transmission network* and not less than 1 month prior to commencement of commissioning for a *connection* to a *distribution network*.
- (c) The relevant *Network Service Provider* and *NEMMCO* must, within 15 *business days* of receipt of such advice under clause 5.8.4(a), notify the *Registered Participant* either that they:
 - (1) agree with the proposed commissioning program; or
 - (2) require changes to it in the interest of maintaining *power system security*, safety or quality of *supply*.
- (d) If the relevant *Network Service Provider* or *NEMMCO* require changes to the proposed commissioning program, then the parties must co-operate to reach agreement and finalise the commissioning program within a reasonable period.
- (e) A *Registered Participant* must not commence the commissioning until the commissioning program has been finalised and the relevant *Network Service Provider* and *NEMMCO* must not unreasonably delay finalising a commissioning program.

5.8.5 Commissioning tests

- (a) The relevant *Network Service Provider* and/or *NEMMCO* has the right to witness commissioning tests relating to new or replacement equipment that

could reasonably be expected to alter performance of the *power system* or the accurate *metering* of *energy*.

- (b) The relevant *Network Service Provider* must, within a reasonable period of receiving advice of commissioning tests, notify the *Registered Participant* whose new or replacement equipment is to be tested under this clause 5.8.5 whether or not it:
 - (1) wishes to witness the commissioning tests; and
 - (2) agrees with the proposed commissioning times.
- (c) A *Registered Participant* whose new or replacement equipment is tested under this clause 5.8.5 must submit to the relevant *Network Service Provider* the commissioning test results demonstrating that a new or replacement item of equipment complies with the *Rules* or the relevant *connection agreement* or both to the satisfaction of the relevant *Network Service Provider*.
- (d) If the commissioning tests conducted in relation to a new or replacement item of equipment demonstrates non-compliance with one or more requirements of the *Rules* or the relevant *connection agreement* then the *Registered Participant* whose new or replacement equipment was tested under this clause 5.8.5 must promptly meet with the *Network Service Provider* to agree on a process aimed at achievement of compliance of the relevant item with the *Rules*.
- (e) On request by a *Network Service Provider*, NEMMCO may direct that the commissioning and subsequent *connection* of the *Registered Participant's* equipment must not proceed if the relevant equipment does not comply with the requirements described in clause 5.8.1(a).

5.9 Disconnection and Reconnection

5.9.1 Voluntary disconnection

- (a) Unless agreed otherwise and specified in a *connection agreement*, a *Registered Participant* must give to the relevant *Network Service Provider* notice in writing of its intention to permanently *disconnect* a *facility* from a *connection point*.
- (b) A *Registered Participant* is entitled, subject to the terms of the relevant *connection agreement*, to require voluntary permanent *disconnection* of its equipment from a *network* in which case appropriate operating procedures necessary to ensure that the *disconnection* will not threaten *power system security* must be implemented in accordance with clause 5.9.2.

- (c) The *Registered Participant* must pay all costs directly attributable to the voluntary *disconnection* and *decommissioning*.

5.9.2 Decommissioning procedures

- (a) In the event that a *Registered Participant's facility* is to be permanently *disconnected* from a *network*, whether in accordance with clause 5.9.1 or otherwise, the *Network Service Provider* and the *Registered Participant* must, prior to such *disconnection* occurring, follow agreed procedures for *disconnection*.
- (b) The *Network Service Provider* must notify *NEMMCO* and any *Registered Participants* with whom it has a *connection agreement* if it believes, in its reasonable opinion, the terms and conditions of such a *connection agreement* will be affected by procedures for *disconnection* or proposed procedures agreed with any other *Registered Participant*. The parties must negotiate any amendments to the procedures for *disconnection* or the *connection agreement* that may be required.
- (c) Any *disconnection* procedures agreed to or determined under clause 5.9.2(a) must be followed by all relevant *Network Service Providers* and *Registered Participants*.

5.9.3 Involuntary disconnection

- (a) *NEMMCO* may direct a *Network Service Provider* to, or a *Network Service Provider* may (either on its own initiative or in accordance with a direction from *NEMMCO*), *disconnect* a *Registered Participant's facilities* from a *network*, or a *Registered Participant's market loads*, in the following circumstances:
 - (1) pursuant to a direction for a *disconnection* made by a court under section 62 or 63 of the *National Electricity Law* or pursuant to regulations made under section 44AAG of the Trade Practices Act 1974 (Cth);
 - (2) during an emergency in accordance with clause 5.9.5;
 - (3) in accordance with the *National Electricity Law*; or
 - (4) in accordance with the provisions of the *Registered Participant's connection agreement*.
- (b) In all cases of *disconnection* by a *Network Service Provider* at *NEMMCO's* direction during an emergency in accordance with clause 5.9.5, *NEMMCO* must undertake a review under clause 4.8.15 and *NEMMCO* must then provide a report to the *Registered Participant*, the *AEMC* and the *AER* advising of the circumstances requiring such action.

- (c) A *Network Service Provider* that has received a direction from *NEMMCO* under this clause 5.9.3 must comply with that direction promptly.

5.9.4 Direction to disconnect

- (a) Where a *disconnection* is made pursuant to clause 5.9.3(a)(1), neither *NEMMCO* nor the relevant *Network Service Provider* is liable in any way for any loss or damage suffered or incurred by the *Registered Participant* by reason of the *disconnection* and neither *NEMMCO* nor the relevant *Network Service Provider* is obliged for the duration of the *disconnection* to fulfil any agreement to convey electricity to or from the *Registered Participant's* facility.
- (b) A *Registered Participant* must not bring proceedings against *NEMMCO* or a *Network Service Provider* to seek to recover any amount for any loss or damage described in clause 5.9.4(a).
- (c) *Transmission service* charges and *distribution service* charges must be paid by a *Registered Participant* whose facilities have been *disconnected* under this clause 5.9.4 as if any *disconnection* had not occurred.
- (d) A *Network Service Provider* that has received a direction from *NEMMCO* to *disconnect* a *Registered Participant's* facilities in the circumstances described in clause 5.9.3(a)(1) must comply with that direction promptly.

5.9.4A Notification of disconnection

If the *AER* applies to a court for a direction, under section 62 or 63 of the *National Electricity Law* or pursuant to regulations made under section 44AAG of the *Trade Practices Act 1974 (Cth)*, that a *Registered Participant's* market loads be *disconnected*, the *AER* must promptly notify *NEMMCO* and the *participating jurisdictions* which the *AER* considers may be affected.

5.9.5 Disconnection during an emergency

- (a) Where *NEMMCO* may direct a *Network Service Provider* to *disconnect* a *Registered Participant's* facilities during an emergency under the *Rules* or otherwise, then *NEMMCO* may:
 - (1) require the relevant *Registered Participant* to reduce the *power transfer* at the proposed point of *disconnection* to zero in an orderly manner and then direct a *Network Service Provider* to *disconnect* the *Registered Participant's* facility by automatic or manual means; or
 - (2) direct a *Network Service Provider* to immediately *disconnect* the *Registered Participant's* facilities by automatic or manual means where, in *NEMMCO's* reasonable opinion, it is not appropriate to follow the procedure set out in clause 5.9.5(a)(1) because action is

urgently required as a result of a threat to safety of persons, hazard to equipment or a threat to *power system security*.

- (b) A *Network Service Provider* that has received a direction from *NEMMCO* under this clause 5.9.5 must comply with that direction promptly.

5.9.6 Obligation to reconnect

- (a) Either *NEMMCO* (by directing the *Network Service Provider*) or the relevant *Network Service Provider* (either on its own initiative or in accordance with a direction from *NEMMCO*) must reconnect a *Registered Participant's facilities* to a *transmission network* or *distribution network* at a reasonable cost to the *Registered Participant* as soon as practicable if:
 - (1) *NEMMCO* is reasonably satisfied that there no longer exists an emergency due to which the *Registered Participant's facilities* were *disconnected* under clause 5.9.5;
 - (2) *NEMMCO* is reasonably satisfied that there no longer exists a reason for the *disconnection* under the *National Electricity Law* or the *Registered Participant's connection agreement*;
 - (3) one of the following occurs:
 - (i) a breach of the *Rules* giving rise to the *disconnection* has been remedied;
 - (ii) where the breach is not capable of remedy, compensation has been agreed and paid by the *Registered Participant* to the affected parties or, failing agreement, the amount of compensation payable has been determined in accordance with the dispute resolution procedure in rule 8.2 and that amount has been paid;
 - (iii) where the breach is not capable of remedy and the amount of compensation has not been agreed or determined, assurances for the payment of reasonable compensation have been given to the satisfaction of *NEMMCO*, the *Network Service Provider* and the parties affected; or
 - (iv) the *Registered Participant* has taken all necessary steps to prevent the re-occurrence of the breach and has delivered binding undertakings to *NEMMCO* or the *Network Service Provider* that the breach will not re-occur.
- (b) In carrying out its obligations under clause 5.9.6(a), *NEMMCO* must, to the extent practicable, arrange for the implementation of an equitable sharing of the reconnection of *facilities* across *interconnected regions* up to the *power*

transfer capability of the *network* and, in performing these obligations within a *region*, both *NEMMCO* and the relevant *Network Service Provider* must, to the extent practicable, give priority to reconnection of a *region's sensitive loads*.

- (c) A *Network Service Provider* that has received a direction from *NEMMCO* under this clause 5.9.6 must comply with that direction promptly.

Schedule 5.1a - System standards

S5.1a.1 Purpose

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

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

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

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

The *system standards* are set out below.

S5.1a.2 Frequency

The *frequency operating standards* are *system standards* and are as determined by the *Reliability Panel* and *published* by the AEMC.

S5.1a.3 System stability

The *power system* should remain in synchronism and be stable:

- (a) **Transient stability:** following any *credible contingency event*; and
- (b) **Oscillatory stability:** in the absence of any *contingency event*, for any level of *inter-regional* or *intra-regional* power transfer up to the applicable operational limit; and
- (c) **Voltage stability:** stable *voltage* control must be maintained following the most severe *credible contingency event*.

For the purposes of clause S5.1a.3 a *credible contingency event* includes the application of a fault (other than a three-phase fault) to any part of the *power system* and de-energisation of the faulted element within the allowable clearance time applicable to that element according to clause S5.1a.8.

The halving time of any *inter-regional* or *intra-regional* oscillation, being the time for the amplitude of an oscillation to reduce by half, should be less than 10 seconds. To allow for planning and operational uncertainties, the *power system* should be planned and operated to achieve a halving time of 5 seconds.

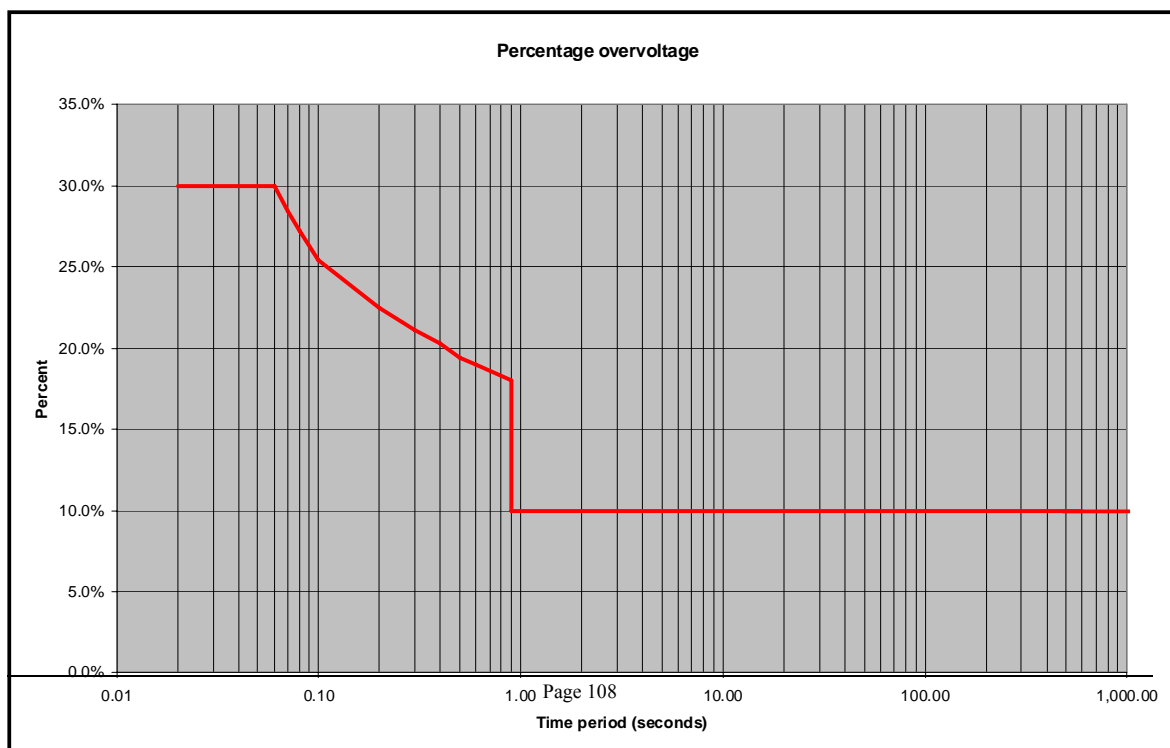
S5.1a.4 Power frequency voltage

Except as a consequence of a *contingency event*, the *voltage of supply* at a *connection point* should not vary by more than 10 percent above or below its *normal voltage*, provided that the *reactive power flow* and the *power factor* at the *connection point* is within the corresponding limits set out in the *connection agreement*.

As a consequence of a *credible contingency event*, the *voltage of supply* at a *connection point* should not rise above its *normal voltage* by more than a given percentage of *normal voltage* for longer than the corresponding period shown in Figure S5.1a.1 for that percentage.

As a consequence of a *contingency event*, the *voltage of supply* at a *connection point* could fall to zero for any period.

Figure S5.1a.1



S5.1a.5 Voltage fluctuations

The *voltage* fluctuation level of *supply* should be less than the "compatibility levels" set out in 1 of *Australian Standard AS/NZS 61000.3.7:2001*. To facilitate the application of this standard *Network Service Providers* must establish "planning levels" for their *networks* as provided for in the *Australian Standard*.

The following principles apply to the use of the shared network:

- (a) the sharing between *Network Users* of the capability of *connection assets* to withstand *voltage* fluctuations is to be managed by *Network Service Providers* in accordance with the provisions of clause S5.1.5 of schedule 5.1; and
- (b) to the extent practicable, the costs of managing or abating the impact of *voltage* fluctuations in excess of the costs which would result from the application of an *automatic access standard* are to be borne by those *Network Users* whose *facilities* cause the *voltage* fluctuations.

S5.1a.6 Voltage waveform distortion

Harmonic *voltage* distortion level of *supply* should be less than the "compatibility levels" defined in Table 1 of *Australian Standard AS/NZS 61000.3.6:2001*. To facilitate the application of this standard *Network Service Providers* must establish "planning levels" for their *networks* as provided for in the *Australian Standard*.

The following principles apply to the use of the shared network:

- (a) the sharing between *Network Users* of the capability of *connection assets* to absorb or mitigate harmonic *voltage* distortion is to be managed by *Network Service Providers* in accordance with the provisions of clause S5.1.6 of schedule 5.1; and
- (b) to the extent practicable, the costs of managing or abating the impact of harmonic distortion in excess of the costs which would result from the application of an *automatic access standard* are to be borne by those *Network Users* whose *facilities* cause the harmonic *voltage* distortion.

S5.1a.7 Voltage unbalance

Except as a consequence of a *contingency event*, the average *voltage* unbalance, measured at a *connection point*, should not vary by more than the amount set out

in column 2 of Table S5.1a.1, when determined over a 30-minute averaging period.

As a consequence of a *credible contingency event*, the average *voltage* unbalance, measured at a *connection point*, should not vary by more than the amount set out in column 3 of Table S5.1a.1, when determined over a 30-minute averaging period.

The average *voltage* unbalance, measured at a *connection point*, should not vary by more than the amount set out in column 4 of Table S5.1a.1 for the relevant nominal *supply voltage*, when determined over a 10-minute averaging period.

The average *voltage* unbalance, measured at a *connection point*, should not vary more often than once per hour by more than the amount set out in column 5 of Table S5.1a.1 for the relevant nominal *supply voltage*, when determined over a 1-minute averaging period.

For the purpose of this clause, *voltage* unbalance is measured as negative sequence voltage.

Table S5.1a.1

Nominal supply voltage (kV)	Maximum negative sequence voltage (% of nominal voltage)			
Column 1	Column 2	Column 3	Column 4	Column 5
	no contingency event	credible contingency event	general	once per hour
	30 minute average	30 minute average	10 minute average	1 minute average
more than 100	0.5	0.7	1.0	2.0
more than 10 but not more than 100	1.3	1.3	2.0	2.5
10 or less	2.0	2.0	2.5	3.0

S5.1a.8 Fault clearance times

- (a) Faults anywhere within the *power system* should be cleared sufficiently rapidly that:

- (1) the *power system* does not become unstable as a result of faults that are *credible contingency events*;
 - (2) *inter-regional* or *intra-regional power transfers* are not unduly *constrained*; and
 - (3) consequential equipment damage is minimised.
- (b) The *fault clearance time* of a primary *protection system* for a *short circuit fault* of any *fault type* anywhere:
- (1) within a *substation*;
 - (2) within *connected plant*; or
 - (3) on at least the half of a power line nearer to the *protection system*,
- should not exceed the relevant time in column 2 of Table S5.1a.2 for the nominal *voltage* that applies at the fault location.
- (c) The *fault clearance time* of a primary *protection system* for a *short circuit fault* of any *fault type* anywhere on the remote portion of a power line for which the near portion is protected by a primary *protection system* under clause S5.1a8(b) should not exceed the relevant time in column 3 of Table S5.1a.2 for the nominal *voltage* that applies at the fault location.
- (d) The *fault clearance time* of a *breaker fail protection system* or similar back-up *protection system* for a *short circuit fault* of any *fault type* should not exceed the relevant time in column 4 of Table S5.1a.2 for the nominal *voltage* that applies at the fault location.
- (e) The owner of the faulted element may require shorter *fault clearance times* to minimise *plant* damage.
- (f) The allowable *fault clearance times* specified in Table S5.1a.2 apply in accordance with the provisions of clause S5.1.9 to *facilities* constructed or modified on or after the *performance standards commencement date*.
- (g) For *facilities* other than those referred to in clause S5.1a.8(f), the applicable allowable *fault clearance times* must be derived by the relevant *Network Service Provider* from the existing capability of each *facility* on the *performance standards commencement date*.

Table S5.1a.2

Nominal voltage at fault location(kV)	Time(millisecond)		
Column 1	Column 2	Column 3	Column 4

400kV and above	80	100	175
at least 250kV but less than 400kV	100	120	250
more than 100kV but less than 250kV	120	220	430
less than or equal 100 kV	As necessary to prevent <i>plant</i> damage and meet stability requirements		

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

S5.1.1 Introduction

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

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

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

A *Network Service Provider* must:

- (1) fully describe the quantity and quality of *network services* which it agrees to provide to a person under a *connection agreement* in terms that apply to the *connection point* as well as to the *transmission or distribution system* as a whole;
- (2) ensure that the quantity and quality of those *network services* are not less than could be provided to the relevant person if the *national grid* were planned, designed and operated in accordance with the criteria set out in this clause S5.1.1 and recognising that levels of service will vary depending on location of the *connection point* in the *network*; and
- (3) observe and apply the relevant provisions of the *system standards* in accordance with this schedule 5.1.

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

This schedule includes provisions for *Network Service Providers* and *Registered Participants* to negotiate the criteria to apply to a *connection* within defined ranges between a lower bound (*minimum access standard*) and an upper bound (*automatic access standard*). All criteria which are intended to apply to a

connection must be recorded in a *connection agreement*. Where it is intended to apply a *negotiated access standard* in accordance with clause 5.3.4A of the *Rules*, the *Network Service Provider* must first be satisfied that the application of the *negotiated access standard* will not adversely affect other *Registered Participants*.

S5.1.2 Network reliability

S5.1.2.1 Credible contingency events

Network Service Providers must plan, design, maintain and operate their *transmission networks* and *distribution networks* to allow the transfer of power from *generating units* to *Customers* with all *facilities* or equipment associated with the *power system* in service and may be required by a *Registered Participant* under a *connection agreement* to continue to allow the transfer of power with certain facilities or *plant* associated with the *power system* out of service, whether or not accompanied by the occurrence of certain faults (called “*credible contingency events*”).

The following *credible contingency events* and practices must be used by *Network Service Providers* for planning and operation of *transmission networks* and *distribution networks* unless otherwise agreed by each *Registered Participant* who would be affected by the selection of *credible contingency events*:

- (a) The *credible contingency events* must include the *disconnection* of any single *generating unit* or *transmission line*, with or without the application of a single circuit two-phase-to-ground solid fault on lines operating at or above 220 kV, and a single circuit three-phase solid fault on lines operating below 220 kV. The *Network Service Provider* must assume that the fault will be cleared in primary protection time by the faster of the duplicate protections with installed intertrips available. For existing *transmission lines* operating below 220 kV but above 66 kV a two-phase to earth fault criterion may be used if the modes of operation are such as to minimise the probability of three-phase faults occurring and operational experience shows this to be adequate, and provided that the *Network Service Provider* upgrades performance when the opportunity arises.
- (b) For lines at any *voltage* above 66 kV which are not protected by an overhead earth wire and/or lines with tower footing resistances in excess of 10 ohms, the *Network Service Provider* may extend the criterion to include a single circuit three-phase solid fault to cover the increased risk of such a fault occurring. Such lines must be examined individually on their merits by the relevant *Network Service Provider*.
- (c) For lines at any *voltage* above 66 kV a *Network Service Provider* must adopt operational practices to minimise the risk of slow fault clearance in

case of inadvertent closing on to earths applied to equipment for maintenance purposes. These practices must include but not be limited to:

- (1) Not leaving lines equipped with intertrips alive from one end during maintenance; and
 - (2) *Off-loading* a three terminal (tee connected) line prior to restoration, to ensure switch on to fault *facilities* are operative.
- (d) The *Network Service Provider* must ensure that all *protection systems* for lines at a *voltage* above 66 kV, including associated intertripping, are well maintained so as to be available at all times other than for short periods (not greater than eight hours) while the maintenance of a *protection system* is being carried out.

S5.1.2.2 Network service within a region

The following paragraphs of this section set out minimum standards for certain *network services* to be provided to *Registered Participants* by *Network Service Providers* within a *region*. The amount of *network* redundancy provided must be determined by the process set out in clause 5.6.2 of the *Rules* and is expected to reflect the grouping of *generating units*, their expected capacity factors and availability and the size and importance of *Customer* groups.

The standard of service to be provided at each *connection point* must be included in the relevant *connection agreement*, and must include a *power transfer capability* such as that which follows:

- (a) In the *satisfactory operating state*, the *power system* must be capable of providing the highest reasonably expected requirement for *power transfer* (with appropriate recognition of diversity between individual peak requirements and the necessity to withstand *credible contingency events*) at any time.
- (b) During the most critical single element *outage* the *power transfer* available through the *power system* may be:
 - (1) zero (single element *supply*);
 - (2) the defined capacity of a backup *supply*, which, in some cases, may be provided by another *Network Service Provider*;
 - (3) a nominated proportion of the normal *power transfer capability* (eg 70 percent); or
 - (4) the normal *power transfer capability* of the *power system* (when required by a *Registered Participant*).

In the case of clauses S5.1.2.2(b)(2) and (3) the available capacity would be exceeded sufficiently infrequently to allow maintenance to be carried out on each *network* element by the *Network Service Provider*. A *connection agreement* may state the expected proportion of time that the normal capability will not be available, and the capability at those times, taking account of specific design, locational and seasonal influences which may affect performance, and the random nature of element *outages*.

A *connection agreement* may also state a conditional *power transfer capability* that allows for both circuits of a double circuit line or two closely parallel circuits to be out of service.

S5.1.2.3 Network service between regions

The *power transfer capability* between *regions* must be determined by the process set out in clauses 5.6.5 and 5.6.6 of the *Rules*.

The following paragraphs of this section set out a framework within which *Network Service Providers* must describe to *NEMMCO* the levels of *network service* that apply for *power transfer* between *regions*. In cases where *power transfer capability* is determined by stability considerations on the *power system* (refer to clause S5.1.8 of this schedule) it is expected that line *outages* within *transmission networks* within a region will weaken the *network* so as to result in reduced *power transfer capability* even in the absence of *outages* of the lines between *regions*.

- (a) In the *satisfactory operating state* the *power transfer capability* between *regions* is defined by a multi-term equation for each *connection* between *regions* which takes account of all *power system* operating conditions which can significantly impact on performance. The majority of these operating conditions are the result of *market* operation and are outside the control of the *Network Service Provider*. In the *satisfactory operating state* the *network* must be planned by the *Network Service Provider* and operated by *NEMMCO* to withstand the impact of any *single contingency* with severity less than the *credible contingency events* stated in clause S5.1.2.1.
- (b) During critical single element *outages* reduced *power transfer capabilities* will apply. In those cases where *outage* of the remaining element will result in breaking of the *connection* between the *regions* *NEMMCO* must provide for the effect on *power system frequency* in the separate *transmission systems* following this event when determining the maximum *power transfer*.

S5.1.3 Frequency variations

A *Network Service Provider* must ensure that within the *extreme frequency excursion tolerance limits* all of its *power system* equipment will remain in service unless that equipment is required to be switched to give effect to *load shedding* in

accordance with clause S5.1.10, or is required by *NEMMCO* to be switched for operational purposes.

Sustained operation outside the *extreme frequency excursion tolerance limits* need not be taken into account by *Network Service Providers* in the design of *plant* which may be *disconnected* if this is necessary for the protection of that *plant*.

S5.1.4 Magnitude of power frequency voltage

A *Transmission Network Service Provider* must plan and design its *transmission system* and equipment for control of *voltage* such that the minimum steady state *voltage* magnitude, the maximum steady state *voltage* magnitude and variations in *voltage* magnitude are consistent with the levels stipulated in clause S5.1a.4 of the *system standards*.

- (a) The *Network Service Provider* must determine the *automatic access standard* for the *voltage of supply* at the *connection point* such that the *voltage* may vary in accordance with clause S5.1a.4 of the *system standards*.
- (b) The *Network Service Provider* must determine the *minimum access standard* for the *voltage of supply* at the *connection point* such that the *voltage* may vary:
 - (1) as a consequence of a *credible contingency event* in accordance with clause S5.1a.4; and
 - (2) otherwise, between 95 percent and 105 percent of the target *voltage*.
- (c) For the purposes of clause S5.1.4(b) the target *voltage* must be determined as follows:
 - (1) if the *connection point* is connected to a *transmission line* (but not through a *transformer*), the *Network Service Provider* must determine the target *voltage* in consultation with *NEMMCO* taking into account the capability of existing *facilities* that are subject to that *supply voltage*; and
 - (2) otherwise, *Network Users* that share the same *supply voltage* must jointly determine the target *voltage* which may be specified to vary with aggregate *loading level*;

provided that at all times the *supply voltage* remains between 90 percent and 110 percent of the normal voltage determined in accordance with clause S5.1a.4 except as a consequence of a *contingency event*.

- (d) For the purposes of this clause, the *voltage of supply* is measured as the *RMS phase voltage*.

Where the independent control of *voltage* at the *connection point* is possible without adverse impact on *voltage* control at another *connection point*, the *Network Service Provider* must make reasonable endeavors to meet the request. The target *voltage* and any agreement to a target range of *voltage* magnitude must be specified in the relevant *connection agreement*. The agreement may include a different target range in the *satisfactory operating state* and after a *credible contingency event* (and how these target ranges may be required to vary with *loading*).

A *Network Service Provider* must ensure that each *facility* that is part of its *transmission network* or *distribution network* is capable of continuous uninterrupted operation in the event that variations in *voltage* magnitude occur due to faults external to the *facility*. The design of a *facility* should anticipate the likely time duration and magnitude of variations in the power-frequency phase *voltages* which may arise dependent on the nature and location of the fault.

S5.1.5 Voltage fluctuations

A *Network Service Provider* must use reasonable endeavours to design and operate its *transmission system* or *distribution system* and include conditions in *connection agreements* in relation to the permissible variation with time of the power generated or load taken by a *Network User* to ensure that other *Network Users* are supplied with a power-frequency *voltage* which fluctuates to an extent that is less than the levels stipulated in accordance with the provisions of clause S5.1a.5 of the *system standards* and this clause S5.1.5.

In accordance with AS/NZS 61000.3.7:2001 and guidelines published by *Standards Australia* and applying the assumption that *Customers* will comply with their obligations under schedule 5.3, a *Network Service Provider* must determine “Planning Levels” for *connection points* on their *network* in order to maintain *voltage* fluctuation levels for all supply points to customers supplied from their *network* below the “Compatibility Levels” defined in Table 1 of AS/NZS 61000.3.7:2001.

The *Network Service Provider* must allocate emission limits in response to a *connection* enquiry or an *application to connect* and evaluate the acceptability for *connection* of fluctuating sources as follows:

- (a) *Automatic access standard:* the *Network Service Provider* must allocate emission limits no more onerous than the lesser of the acceptance levels determined in accordance with either of the stage 1 or the stage 2 evaluation procedures defined in AS/NZS 61000.3.7:2001.
- (b) *Minimum access standard:* subject to clause S5.1.5(c), the determination by the *Network Service Provider* of acceptable emission limits must be undertaken in consultation with the party seeking *connection* using the stage 3 evaluation procedure defined in AS/NZS61000.3.7:2001.

- (c) In respect of each new *connection* at a level of performance below the *automatic access standard* the *Network Service Provider* must include provisions in the relevant *connection agreement* requiring the *Network User* if necessary to meet the *system standards* or allow connection of other *Network Users* to either upgrade to the *automatic access standard* or fund the reasonable cost of the works necessary to mitigate their effect of connecting at a standard below the *automatic access standard*.
- (d) If for existing customer *connections* the level of *voltage* fluctuation is, or may be, exceeded as a result of a proposed new *connection*, the *Network Service Provider* must, if the cause of that excessive level cannot be remedied by enforcing the provisions of existing *connection agreements*, undertake all reasonable works necessary to meet the technical standards in this schedule or to permit the proposed new *connection* within the requirements stated in this clause.

For other than a new *connection* in accordance with the preceding paragraph, the responsibility of a *Network Service Provider* for excursions in *voltage* fluctuations above the levels defined above is limited to *voltage* fluctuations caused by *network plant* and the pursuit of all reasonable measures available under the *Rules* and its *connection agreements*.

S5.1.6 Voltage harmonic or voltage notching distortion

A *Network Service Provider* must use reasonable endeavours to design and operate its *network* and include conditions in *connection agreements* to ensure that the effective harmonic *voltage* distortion at any point in the *network* will be limited to less than the levels stipulated in accordance with the provisions of clause S5.1a.6 of the *system standards* and this clause S5.1.6.

In accordance with AS/NZS 61000.3.6:2001 and guidelines published by *Standards Australia* and applying the assumption that *Customers* will comply with their obligations under schedule 5.3 *Network Service Providers* must determine “Planning Levels” for *connection points* on their *network* in order to maintain harmonic *voltage* distortion for all supply points to customers supplied from their *network* below the “Compatibility Levels” defined in Table 1 of AS/NZS 61000.3.6:2001.

The *Network Service Provider* must allocate emission limits to a connection enquiry or an *application to connect* and must evaluate the acceptability for *connection* of distorting sources as follows:

- (a) *Automatic access standard*: the *Network Service Provider* must allocate emission limits no more onerous than the lesser of the acceptance levels determined in accordance with either of the stage 1 or the stage 2 evaluation procedures defined in AS/NZS 61000.3.6:2001.

- (b) *Minimum access standard*: subject to clause S5.1.6(c), the determination by the *Network Service Provider* of acceptable emission limits must be undertaken in consultation with the party seeking *connection* using the Stage 3 evaluation procedure defined in AS/NZS61000.3.6:2001.
- (c) In respect of each new *connection* at a level of performance below the *automatic access standard* the *Network Service Provider* must include provisions in the relevant *connection agreement* requiring the *Network User* if necessary to meet the *system standards* or allow connection of other *Network Users* to either upgrade to the *automatic access standard* or fund the reasonable cost of the works necessary to mitigate their effect of connecting at a standard below the *automatic access standard*.
- (d) If for existing customer *connections* the level of harmonic *voltage* distortion is, or may be, exceeded as a result of a proposed new *connection*, the *Network Service Provider* must, if the cause of that excessive level cannot be remedied by enforcing the provisions of existing *connection agreements*, undertake all works necessary to meet the technical standards in this schedule or to permit a proposed new *connection* within the *automatic access standard* defined in clause S5.3.8 and the requirements stated in this clause.

For other than a new *connection* in accordance with the preceding paragraph, the responsibility of a *Network Service Provider* for harmonic *voltage* distortion outside the range defined above is limited to harmonic *voltage* distortion caused by *network plant* and the pursuit of all measures available under the *Rules* and its *connection agreements*.

S5.1.7 Voltage unbalance

- (a) A *Transmission Network Service Provider* must balance the effective impedance of the phases of its *network*, and a *Distribution Network Service Provider* must balance the current drawn in each phase at each of its *connection points*, so as to achieve average levels of negative sequence *voltage* at all *connection points* that are equal to or less than the values set out in Table S5.1a.1 as determined in accordance with the accompanying provisions of clause S5.1a.7 of the *system standards*.
- (b) A *Network Service Provider* must include conditions in *connection agreements* to ensure that a *Connection Applicant* will balance the current drawn in each phase at each of its *connection points* so as to achieve:
 - (1) for those *Network Users* listed in clause S5.3(a): the levels permitted in accordance with clause S5.3.6 of schedule 5.3;
 - (2) for *Market Network Service Providers*: the levels permitted in accordance with clause S5.3a.9 of schedule 5.3a;

- (3) otherwise: the average levels of negative sequence *voltage* at each of its *connection points* that are equal to or less than the values set out in Table S5.1a.1 and the accompanying provisions of clause S5.1a.7 of the *system standards*.

The responsibility of the *Network Service Provider* for *voltage* unbalance outside the ranges defined above is limited to *voltage* unbalance caused by the *network* and the pursuit of all measures available under the *Rules* and its *connection agreements*.

- (c) A *Network Service Provider* must include conditions in *connection agreements* to ensure that each *Generator* will balance:

- (1) the *voltage generated* in each phase of its *generating system*; and
- (2) when not generating, the current drawn in each phase,

in order to achieve average levels of negative sequence *voltage* at each of the *generating system connection points* due to phase imbalances within the *generating plant* that are not more than the values determined by the *Network Service Provider* to achieve average levels of negative sequence *voltage* at the *connection points* of other *Network Users* in accordance with clause S5.1a.7.

- (d) When including conditions under paragraph (c), the *Network Service Provider* must have regard to the capabilities of the relevant *generating plant* technology.

S5.1.8 Stability

In conforming with the requirements of the *system standards*, the following criteria must be used by *Network Service Providers* for both planning and operation:

For stable operation of the *national grid*, both in a *satisfactory operating state* and following any *credible contingency events* described in clause S5.1.2.1:

- (a) the *power system* will remain in synchronism;
- (b) damping of *power system* oscillations will be adequate; and
- (c) *voltage* stability criteria will be satisfied.

Damping of *power system* oscillations must be assessed for planning purposes according to the design criteria which states that *power system damping* is considered adequate if after the most critical *credible contingency event*, simulations calibrated against past performance indicate that the halving time of the least damped electromechanical mode of oscillation is not more than five seconds.

To assess the damping of *power system* oscillations during operation, or when analysing results of tests such as those carried out under clause 5.7.7 of the *Rules*, the *Network Service Provider* must take into account statistical effects. Therefore, the *power system damping* operational performance criterion is that at a given operating point, real-time monitoring or available test results show that there is less than a 10 percent probability that the halving time of the least damped mode of oscillation will exceed ten seconds, and that the average halving time of the least damped mode of oscillation is not more than five seconds.

The *voltage* control criterion is that stable *voltage* control must be maintained following the most severe *credible contingency event*. This requires that an adequate *reactive power* margin must be maintained at every *connection point* in a *network* with respect to the *voltage* stability limit as determined from the *voltage/reactive load* characteristic at that *connection point*. Selection of the appropriate margin at each *connection point* is at the discretion of the relevant *Network Service Provider*, subject only to the requirement that the margin (expressed as a capacitive *reactive power* (in MVar)) must not be less than one percent of the maximum fault level (in MVA) at the *connection point*.

In planning a *network* a *Network Service Provider* must consider *non-credible contingency events* such as *busbar* faults which result in tripping of several circuits, uncleared faults, double circuit faults and multiple contingencies which could potentially endanger the stability of the *power system*. In those cases where the consequences to any *network* or to any *Registered Participant* of such events are likely to be severe disruption a *Network Service Provider* and/or a *Registered Participant* must install emergency controls within the *Network Service Provider's* or *Registered Participant's* system or in both, as necessary, to minimise disruption to any *transmission* or *distribution network* and to significantly reduce the probability of cascading failure.

A *Registered Participant* must co-operate with a *Network Service Provider* to achieve stable operation of the *national grid* and must use all reasonable endeavours to negotiate with the *Network Service Provider* regarding the installation of emergency controls as described in the previous paragraph. The cost of installation, maintenance and operation of the emergency controls must be borne by the *Network Service Provider* who is entitled to include this cost when calculating the *Transmission Customer use of system* price.

S5.1.9 Protection systems and fault clearance times

Network Users

- (a) A *Network Service Provider* must determine the *automatic access standard* and *minimum access standard* that applies to the protection zone of each *protection system* in relation to the *connection point* and the *plant* to be *connected*, as follows:

- (1) The *automatic access standard* for *fault clearance time* for any *fault type* is the lesser of the *system standard* set out in clause S5.1a.8 that applies to the highest nominal *voltage* within the *protection system's* protection zone and the corresponding *minimum access standard* determined under clause S5.1.9(a)(2) or clause S5.1.9(a)(3) as applicable.
 - (2) The *minimum access standard* for *fault clearance time* of a primary *protection system* is:
 - (i) for a *fault type* that constitutes a *credible contingency event* in the relevant protection zone, the longest time such that a *short circuit fault* of that *fault type* that is cleared in that time would not cause the *power system* to become unstable when operating at any level of *inter-regional* or *intra-regional power transfer* that would be permissible (taking into account all other limiting criteria) if the *fault clearance time* for such a *fault* at the *connection point* were the *system standard* set out in clause S5.1a.8 that applies to the nominal *voltage* at the *connection point*; and
 - (ii) for a *fault type* that does not constitute a *credible contingency event* in the relevant protection zone:
 - (A) if a two phase to ground fault in that protection zone constitutes a *credible contingency event*, the corresponding *fault clearance time* for a two phase to ground *short circuit fault* in that protection zone as determined under clause S5.1.9(a)(2)(i); and
 - (B) otherwise, the shortest of the *fault clearance times* for a two phase to ground *short circuit fault* in each adjoining protection zone (excluding *transformer* protection zones and dead zones) as determined under clause S5.1.9(a)(2)(i) or clause S5.1.9(e).
 - (3) The *minimum access standard* for *fault clearance time* of a *breaker fail protection system* or similar back-up *protection system* is the longest time such that a *short circuit fault* of any *fault type* that is cleared in that time—would not damage any part of the *power system* (other than the faulted element) while the fault current is flowing or being interrupted.
- (b) The negotiation of access standards in relation to paragraph (a) must involve NEMMCO under clause 5.3.4A(c) of the *Rules*.

Transmission systems and distribution systems

- (c) Subject to clauses S5.1.9(k) and S5.1.9(l), a *Network Service Provider* must provide sufficient primary *protection systems* and back-up *protection systems* (including *breaker fail protection systems*) to ensure that a fault of any *fault type* anywhere on its *transmission system* or *distribution system* is automatically *disconnected* in accordance with clause S5.1.9(e) or clause S5.1.9(f).
- (d) If the *fault clearance time* determined under clause S5.1.9(e) of a primary *protection system* for a two phase to ground *short circuit fault* is less than 10 seconds, the primary *protection system* must have sufficient redundancy to ensure that it can clear *short circuit faults* of any *fault type* within the relevant *fault clearance time* with any single protection element (including any communications facility upon which the *protection system* depends) out of service.
- (e) The *fault clearance time* of a primary *protection system* of a *Network Service Provider* must not exceed:
 - (1) for any *fault type* that constitutes a *credible contingency event* in the relevant protection zone, the longest time such that a *short circuit fault* of that *fault type* that is cleared in that time would not cause the *power system* to become unstable when operating at any level of *inter-regional* or *intra-regional power transfer* that would be permissible (taking into account all other limiting criteria) if the *fault clearance time* for such a fault in that protection zone were the relevant *system standard* set out in clause S5.1.a.8; and
 - (2) for any *fault type* that does not constitute a *credible contingency event* in the relevant protection zone:
 - (i) if a two phase to ground fault in that protection zone is a *credible contingency event*, the corresponding *fault clearance time* for a two phase to ground fault in that protection zone as determined under clause S5.1.9(e)(1); and
 - (ii) otherwise, the shortest of the *fault clearance times* for a two phase to ground fault in each adjoining protection zone (excluding *transformer* protection zones and dead zones) as determined under clauses S5.1.9(a)(2)(i), S5.1.9(e)(1) or S5.1.9(e)(2)(i).
- (f) The *fault clearance time* of each *breaker fail protection system* or similar back-up *protection system* of a *Network Service Provider* must be such that a *short circuit fault* of any *fault type* that is cleared in that time would not damage any part of the *power system* (other than the faulted element) while the fault current is flowing or being interrupted.

- (g) A *Network Service Provider* must demonstrate to *NEMMCO* that each *fault clearance time* for a *primary protection system* that is longer than the relevant *system standard* set out in clause S5.1a.8 and is less than 10 seconds would not cause or require an *inter-regional* or *intra-regional power transfer capability* to be reduced.
- (h) A *Network Service Provider* must include in each *connection agreement* entered into after the *performance standards commencement date*:
 - (1) the *fault clearance times* for each *fault type* of each of its *protection systems* that could reasonably be expected to interrupt *supply* to or from the relevant *connection point*; and
 - (2) an agreement to not increase those *fault clearance times* without the prior written agreement of the other party.
- (i) *Network Service Providers* must coordinate and cooperate with *Network Users* to implement *breaker fail protection* for circuit breakers provided to isolate the *Network User's facility* from the *Network Service Provider's facilities*.
- (j) Where practicable and economic to achieve, new network investment should meet the *system standard* for *fault clearance times* as specified in clause S5.1a.8 for two phase to ground *short circuit faults*.
- (k) A *primary protection system* may clear faults other than *short circuit faults* slower than the relevant *fault clearance time*, provided that such faults would be cleared sufficiently promptly to not adversely impact on *power system security* compared with its operation for the corresponding *short circuit fault*. In the case of a fault within equipment at a station, the corresponding *short circuit fault* is to be taken as a two phase to ground *short circuit fault* at the external connections of the equipment.
- (l) *Protection systems* may rely on *breaker fail protection systems* or other back-up *protection systems* to completely clear faults of any *fault type* that:
 - (1) occur within a *substation* between a protection zone and a circuit breaker adjacent to that protection zone that is required to open to clear the fault (a “dead zone”); and
 - (2) remain connected through a power line or *transformer* after operation of a *primary protection system*,provided that the relevant *Network Service Provider* assesses that the likelihood of a fault occurring within the dead zone is not greater than the likelihood of a fault occurring on *busbars*.

- (m) For the purposes of this clause S5.1.9, a *credible contingency event* includes any event that clause S5.1.2.1 requires a *Network Service Provider* to consider as a *credible contingency event*.
- (n) The provisions of clause S5.1.9(d) apply to *facilities* constructed or modified on or after the *performance standards commencement date*.
- (o) For *facilities* other than those referred to in clause S5.1.9(n), the requirement for primary *protection system* redundancy must be derived by the *Network Service Provider* from the existing capability of each *facility* on the *performance standards commencement date*.

S5.1.10 Load and network control facilities

S5.1.10.1 General

Each *Network Service Provider* in consultation with *NEMMCO* must ensure that:

- (a) sufficient *load* is under the control of underfrequency relays where required to ensure that in the event of the sudden, unplanned simultaneous occurrence of multiple *contingency events*, the *power system frequency* does not move outside the *extreme frequency excursion tolerance limits*;
- (b) where determined to be necessary, sufficient *load* is under the control of undervoltage relays to minimize or reduce the risk of voltage collapse on the occurrence of multiple *contingency events*; and
- (c) there is sufficient *load* under manual or automatic control either locally or from remotely located *control centres* to allow the *load shedding procedures* to be implemented on instruction from *NEMMCO* to enable *NEMMCO* to maintain *power system security*.

A *Network Service Provider* may require *load shedding* arrangements to be installed to cater for abnormal operating conditions.

Arrangements for *load shedding* must be agreed between *Transmission Network Service Providers* and *connected Distribution Network Service Providers* and may include the opening of circuits in either a *transmission* or *distribution network*.

The *Transmission Network Service Provider* must specify, in the *connection agreement*, control and monitoring requirements to be provided by a *Distribution Network Service Provider* for *load shedding facilities*.

S5.1.10.2 Distribution Network Service Providers

A *Distribution Network Service Provider* must:

- (a) provide, install, operate and maintain *facilities* for *load shedding* in respect of any *connection point* at which the maximum *load* exceeds 10MW in accordance with clause 4.3.5 of the *Rules*;
- (b) in accordance with the provisions of the relevant *connection agreement*, co-operate with the *Transmission Network Service Providers* in conducting periodic functional testing of the *facilities*, which must not require *load* to be *disconnected*;
- (c) apply underfrequency settings to relays as determined by *NEMMCO* in consultation with the *Network Service Provider*; and
- (d) apply undervoltage settings to relays as notified by the *Transmission Network Service Provider* in accordance with clause S5.1.10.3(b).

S5.1.10.3 Transmission Network Service Providers

Transmission Network Service Providers must:

- (a) conduct periodic functional tests of the *load shedding facilities*; and
- (b) notify *Distribution Network Service Providers* regarding the settings of undervoltage *load shed* relays as determined by *NEMMCO* in consultation with the *Transmission Network Service Provider*.

S5.1.11 Automatic reclosure of transmission or distribution lines

Where *automatic reclose equipment* is provided on *transmission lines* or *distribution lines*, check or blocking *facilities* must be applied to the *automatic reclose equipment* in those circumstances where there is any possibility of the two ends of the *transmission line* or *distribution line* being *energised* from sources that are not in synchronism.

S5.1.12 Rating of transmission lines and equipment

For operational purposes each *Network Service Provider* must, on reasonable request, advise *NEMMCO* of the maximum current that may be permitted to flow (under conditions nominated by *NEMMCO*) through each *transmission line*, *distribution line* or other item of equipment that forms part of its *transmission system* or *distribution system*.

This maximum current is called a “*current rating*” of the *transmission line*, *distribution line* or item of equipment notwithstanding that it may be determined by equipment associated with its *connection* to the *power system* (including switchgear, droppers, current *transformers* and *protection systems*).

NEMMCO may request for a *transmission line*, *distribution line* or other item of equipment:

- (a) a continuous *current rating*, being the level of current that is permitted to flow in that item of equipment for an indefinite period; and
- (b) one or more short term *current ratings* for a period of time nominated by NEMMCO after consultation with the *Network Service Provider*, being the level of current that is permitted to flow in that item of equipment for that period of time if the current had been less than the corresponding continuous *current rating* for a reasonable prior period taking into account the thermal properties of the item of equipment.

The *Network Service Provider* may be required by NEMMCO to advise different *current ratings* to be applied under nominated conditions including, without limitation:

- (a) ambient weather conditions;
- (b) seasons and/or times of *day*;
- (c) ratios of the current during an emergency to the current prior to the emergency (taking into account pre-contingent loading history where applicable); and
- (d) period of loading at the nominated level.

A *Transmission Network Service Provider* is entitled to advise NEMMCO of short term *current ratings* which may apply for nominated periods of time to the relevant *transmission line* or item of equipment provided that these ratings do not materially affect the safety of the *transmission line* or item of equipment, or the safety of persons. Short-term ratings for *transmission lines* or items of equipment may be implemented by a methodology or algorithm in a format agreed with NEMMCO.

S5.1.13 Information to be provided

A *Network Service Provider* must, in response to a *connection* enquiry or an *application to connect* made in accordance with clause 5.3.2 of the *Rules*, provide the *connection applicant* electrical design information relevant to the nominal point of *connection* in accordance with a relevant requirement of schedules 5.2, 5.3 or 5.3a.

Schedule 5.2 - Conditions for Connection of Generators

S5.2.1 Outline of requirements

- (a) This schedule sets out details of additional requirements and conditions that *Generators* must satisfy as a condition of *connection* of a *generating system* to the *power system*.
- (b) This schedule does not apply to any *generating system* that is:
 - (1) subject to an exemption from registration under clause 2.2.1(c); or
 - (2) eligible for exemption under any guidelines issued under clause 2.2.1(c),and which is *connected* or intended for use in a manner the *Network Service Provider* considers is unlikely to cause a material degradation in the quality of *supply* to other *Network Users*.
- (c) This schedule also sets out the requirements and conditions which subject to clause 5.2.5 of the *Rules*, are obligations on *Generators*:
 - (1) to co-operate with the relevant *Network Service Provider* on technical matters when making a new *connection*; and
 - (2) to provide information to the *Network Service Provider* or *NEMMCO*.
- (d) The equipment associated with each *generating system* must be designed to withstand without damage the range of operating conditions which may arise consistent with the *system standards*.
- (e) *Generators* must comply with the *performance standards* and any attached terms or conditions of agreement agreed with the *Network Service Provider* or *NEMMCO* in accordance with a relevant provision of schedules 5.1a or 5.1.
- (f) This schedule does not set out arrangements by which a *Generator* may enter into an agreement or contract with *NEMMCO* to:
 - (1) provide additional services that are necessary to maintain *power system security*; or
 - (2) provide additional services to facilitate management of the *market*.
- (g) This schedule provides for *automatic access standards* and the determination of *negotiated access standards* derived from *minimum access standards* which once determined, must be recorded together with the

automatic access standards in a connection agreement and registered with NEMMCO as performance standards.

S5.2.2 Application of Settings

A *Generator* must only apply settings to a *control system* or a *protection system* that are necessary to comply with performance requirements of this schedule 5.2 if the settings have been approved in writing by the relevant *Network Service Provider* and, if the requirement is one that would involve *NEMMCO* under clause 5.3.4A(c) of the *Rules*, also by *NEMMCO*. A *Generator* must not allow its *generating unit* to supply electricity to the power system without such prior approval.

If a *Generator* seeks approval from the *Network Service Provider* to apply or change a setting, approval must not be withheld unless the *Network Service Provider* or, if the requirement is one that would involve *NEMMCO* under clause 5.3.4A(c) of the *Rules*, *NEMMCO*, reasonably determines that the changed setting would cause the *generating unit* to not comply with the relevant *performance standard* or cause an *inter-regional* or *intra-regional power transfer capability* to be reduced.

If the *Network Service Provider* or, if the requirement is one that would involve *NEMMCO* under clause 5.3.4A(c) of the *Rules*, *NEMMCO*, reasonably determines that a setting of a *generating unit's control system* or *protection system* needs to change to comply with the relevant *performance standard* or to maintain or restore an *inter-regional* or *intra-regional power transfer capability*, the *Network Service Provider* or *NEMMCO* (as applicable) must consult with the relevant *Generator*, and the *Network Service Provider* may request in writing that a setting be applied in accordance with the determination.

The *Network Service Provider* may also request a test to verify the performance of the relevant *plant* with the new setting. The *Network Service Provider* must provide *NEMMCO* with a copy of its request to a *Generator* to apply a setting or to conduct a test.

A *Generator* who receives such a request must arrange for the notified setting to be applied as requested and for a test to be conducted as requested. After the test, the *Generator* must, on request, provide both *NEMMCO* and the *Network Service Provider* with a report of a requested test, including evidence of its success or failure. Such a report of a test is *confidential information*.

A *Generator* must not change a setting requested by the *Network Service Provider* without its prior written agreement. If the *Network Service Provider* requires a *Generator* to change a setting within 18 months of a previous request, the *Network Service Provider* must pay the *Generator* its reasonable costs of changing the setting and conducting the tests as requested.

S5.2.3 Technical matters to be coordinated

- (a) A *Generator* and the relevant *Network Service Provider* must use all reasonable endeavours to agree upon relevant technical matters in respect of each new or altered *connection* of a *generating system* to a *network* including:
 - (1) design at the *connection point*;
 - (2) physical layout adjacent to the *connection point*;
 - (3) primary protection and backup protection (clause S5.2.5);
 - (4) control characteristics (clause S5.2.5);
 - (5) communications *facilities* (clause S5.2.6);
 - (6) insulation co-ordination and lightning protection (paragraph (b));
 - (7) fault levels and fault clearance (clause S5.2.8);
 - (8) switching and *isolation* facilities (clause S5.2.8);
 - (9) interlocking and *synchronising* arrangements; and
 - (10) *metering installations*.
- (b) A *Generator* must ensure that in designing a *generating system's* electrical *plant*, including any *substation* for the *connection* of the *generating system* to the *network*, to operate at the same *nominal voltage* as at the *connection point*:
 - (1) the *plant* complies with the relevant *Australian Standards* unless a provision of these *Rules* allows or requires otherwise;
 - (2) the earthing of the *plant* complies with the ENA EG1-2006: Substation Earthing Guide to reduce step and touch potentials to safe levels;
 - (3) the *plant* is capable of withstanding, without damage the *voltage* impulse levels specified in the *connection agreement*;
 - (4) the insulation levels of the *plant* are co-ordinated with the insulation levels of the *network* to which the *generating system* is *connected* as specified in the *connection agreement*; and
 - (5) safety provisions in respect of the *plant* comply with requirements applicable to the *participating jurisdiction* in which the *generating system* is located, as notified by the *Network Service Provider*.

- (c) If no relevant *Australian Standard* exists for the purposes of paragraph (b)(1), the *Generator* must agree with the *Network Service Provider* for the *Generator* to comply with another relevant standard.

S5.2.4 Provision of information

- (a) A *Generator* or person who is negotiating a *connection agreement* with a *Network Service Provider* must promptly on request by *NEMMCO* or the *Network Service Provider* provide all data in relation to that *generating system* specified in schedule 5.5.
- (b) A *Generator*, or person required under the *Rules* to register as the *Generator* in respect of a *generating system* comprised of *generating units* with a combined *nameplate rating* of 30 MW or more, by the earlier of:
 - (1) the day on which an *application to connect* is made under clause 5.3.4(a);
 - (2) the day on which amendments to *performance standards* are submitted under rule 4.14(p) or clause 5.3.9(b);
 - (3) three months before commissioning of a *generating system* or planned alteration to a *generating system*; or
 - (4) 5 *business days* before commissioning of a *generating system* alteration that is repairing *plant* after a *plant* failure, if *plant* performance after the alteration will differ from performance prior to the *plant* failure,

must provide:

- (5) to *NEMMCO* and the relevant *Network Service Providers* (including the relevant *Transmission Network Service Provider* in respect of an *embedded generating unit*) the following information about the *control systems* of the *generating system*:
 - (i) a set of functional block diagrams, including all functions between feedback signals and *generating system* output;
 - (ii) the parameters of each functional block, including all settings, gains, time constants, delays, deadbands and limits; and
 - (iii) the characteristics of non-linear elements,

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

- (6) to *NEMMCO*, model source code associated with the model in subparagraph (5) in an unencrypted form suitable for at least one of

the software simulation products nominated by *NEMMCO* and in a form that would allow conversion for use with other software simulation products by *NEMMCO*;

(7) **[Deleted]**

(8) to *NEMMCO* and the relevant *Network Service Providers* (including the relevant *Transmission Network Service Provider* in respect of an *embedded generating unit*) a *releasable user guide*.

(c) The information provided under paragraph (b) must:

- (1) encompass all *control systems* that respond to *voltage* or *frequency* disturbances on the *power system*, and which are either integral to the *generating units* or otherwise part of the *generating system*, including those applying to *reactive power* equipment that forms part of the *generating system*; and
- (2) conform with the applicable models developed in accordance with the *Generating System Model Guidelines*, or an alternative model agreed with *NEMMCO* to be necessary to adequately represent the *generating plant* to carry out load flow and dynamic simulations.

(d) The *Generator* must provide to *NEMMCO* information that updates the information provided under clause S5.2.4(b) and must provide to the relevant *Network Service Providers* information that updates the information provided under clause S5.2.4(b)(5):

- (1) within 3 months after commissioning tests or other tests undertaken in accordance with clause 5.7.3 are completed;
- (2) when the *Generator* becomes aware that the information is incomplete, inaccurate or out of date; or
- (3) on request by *NEMMCO* or the relevant *Network Service Provider*, where *NEMMCO* or the relevant *Network Service Provider* considers that the information is incomplete, inaccurate or out of date.

(d1) A *Generator* is only required to provide new information under clause S5.2.4(d) to the extent that it is different to the information previously provided under clause S5.2.4(b).

(e) For the purposes of clause S5.2.4(e1), a *Connection Applicant* must be registered as an *Intending Participant* in accordance with rule 2.7.

(e1) For the purposes of clause 5.3.2(f), the technical information that a *Network Service Provider* must, if requested, provide to a *Connection Applicant* in respect of a proposed *connection* for a *generating system* includes:

- (1) the highest expected single phase and three phase fault levels at the *connection point* with the *generating system* not connected;
- (2) the clearing times of the existing *protection systems* that would clear a fault at the location at which the new *connection* would be connected into the existing *transmission system* or *distribution system*;
- (3) the expected limits of *voltage* fluctuation, harmonic *voltage* distortion and *voltage* unbalance at the *connection point* with the *generating system* not connected;
- (4) technical information relevant to the *connection point* with the *generating system* not *synchronised* including equivalent source impedance information, sufficient to estimate fault levels, *voltage* fluctuations, harmonic *voltage* distortion (for harmonics relevant to the *generating system*) and *voltage* unbalance; and
- (5) information relating to the performance of the *national grid* that is reasonably necessary for the *Connection Applicant* to prepare an *application to connect*, including:
 - (i) a model of the *power system*, including relevant *considered projects* and the range of expected operating conditions, sufficient to carry out load flow and dynamic simulations; and
 - (ii) information on *inter-regional* and *intra-regional power transfer capabilities* and relevant *plant* ratings.
- (f) All information provided under this clause S5.2.4 must be treated as *confidential information*.

S5.2.5 Technical requirements

S5.2.5.1 Reactive power capability

Automatic access standard

- (a) The *automatic access standard* is a *generating system* operating at:
 - (1) any level of *active power* output; and
 - (2) any *voltage* at the *connection point* within the limits established under clause S5.1a.4 without a *contingency event*,must be capable of supplying and absorbing continuously at its *connection point* an amount of *reactive power* of at least the amount equal to the product of the *rated active power* of the *generating system* and 0.395.

Minimum access standard

- (b) The *minimum access standard* is no capability is required to supply or absorb *reactive power* at the *connection point*.

Negotiated access standard

- (c) When negotiating a *negotiated access standard*, the *Generator* and the *Network Service Provider*:
 - (1) must subject to any agreement under paragraph (d)(4), ensure that the *reactive power capability* of the *generating system* is sufficient to ensure that all relevant *system standards* are met before and after *credible contingency events* under normal and planned *outage* operating conditions of the *power system*, taking into account at least existing projects and *considered projects*;
 - (2) may negotiate either a range of *reactive power* absorption and supply, or a range of *power factor*, at the *connection point*, within which the *plant* must be operated; and
 - (3) may negotiate a limit that describes how the *reactive power capability* varies as a function of *active power* output due to a design characteristic of the *plant*.
- (d) If the *generating system* is not capable of the level of performance established under paragraph (c)(1) the *Generator*, depending on what is reasonable in the circumstances, must:
 - (1) pay compensation to the *Network Service Provider* for the provision of the deficit of *reactive power* (supply and absorption) from within the *network*;
 - (2) install additional equipment *connecting* at the *generating system's connection point* or another location, to provide the deficit of *reactive power* (supply and absorption), and such equipment is deemed to be part of the *generating system*;
 - (3) reach a commercial arrangement with a *Registered Participant* to provide the deficit of *reactive power* (supply and absorption); or
 - (4) if the inability to meet the performance level only occurs for particular operating conditions, agree to and document as part of the proposed *negotiated access standard*, operational arrangements by which the *plant* can achieve an agreed level of performance for those operating conditions.
- (e) The *Generator* may select one or more options referred to in paragraph (d).

General requirements

- (f) An *access standard* must record the agreed value for *rated active power* and where relevant the method of determining the value.
- (g) An *access standard* for consumption of *energy* by a *generating system* when not supplying or absorbing *reactive power* under an *ancillary services agreement* is to be established under clause S5.3.5 as if the *Generator* were a *Market Customer*.

S5.2.5.2 Quality of electricity generated

- (a) For the purpose of this clause S5.2.5.2 in respect of a *synchronous generating unit*, AS 1359.101 and IEC 60034-1 are *plant standards* for harmonic *voltage* distortion.

Automatic access standard

- (b) The *automatic access standard* is a *generating system* when generating and when not generating must not produce at any of its *connection points* for *generation*:
 - (1) *voltage* fluctuation greater than the limits allocated by the *Network Service Provider* under clause S5.1.5(a);
 - (2) harmonic *voltage* distortion greater than the emission limits specified by a *plant standard* under paragraph (a) or allocated by the *Network Service Provider* under clause S5.1.6(a); and
 - (3) *voltage* unbalance greater than the limits allocated by the *Network Service Provider* in accordance with clause S5.1.7(c).

Minimum access standard

- (c) The *minimum access standard* is a *generating system* when generating and when not generating must not produce at any of its *connection points* for *generation*:
 - (1) *voltage* fluctuations greater than limits determined under clause S5.1.5(b);
 - (2) harmonic *voltage* distortion more than the lesser of the emission limits determined by the relevant *Network Service Provider* under clause S5.1.6(b) and specified by a *plant standard* under paragraph (a); and
 - (3) *voltage* unbalance more than limits determined under clause S5.1.7(c).

Negotiated access standard

- (d) A *negotiated access standard* negotiated under this clause S5.2.5.2 must not prevent the *Network Service Provider* meeting the *system standards* or contractual obligations to existing *Network Users*.

S5.2.5.3 Generating unit response to frequency disturbances

- (a) For the purposes of this clause S5.2.5.3:

normal operating frequency band, operational frequency tolerance band, or extreme frequency excursion tolerance limits are references to the widest range specified for those terms for any condition (including an “island” condition) in the *frequency operating standards* that apply to the *region* in which the *generating unit* is located.

stabilisation time and recovery time mean the longest times allowable for *system frequency* to remain outside the operational frequency tolerance band and the normal operating frequency band, respectively, for any condition (including an “island” condition) in the *frequency operating standards* that apply to the region in which the *generating unit* is located.

transient frequency limit and transient frequency time mean the values of 47.5 Hz and 9 seconds respectively, or such other values determined by the *Reliability Panel*.

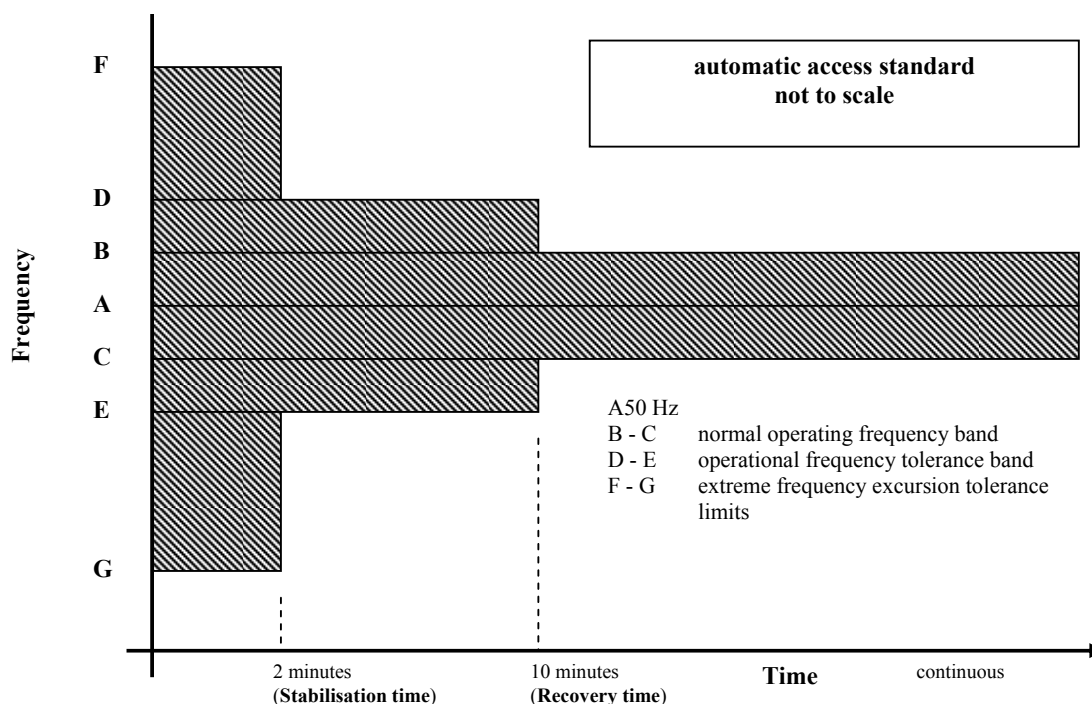
Automatic access standard

- (b) The *automatic access standard* is a *generating system* and each of its *generating units* must be capable of *continuous uninterrupted operation* for *frequencies* in the following ranges:
 - (1) the lower bound of the extreme frequency excursion tolerance limits to the lower bound of the operational frequency tolerance band for at least the stabilisation time;
 - (2) the lower bound of the operational frequency tolerance band to the lower bound of the normal operating frequency band, for at least the recovery time including any time spent in the range under subparagraph (1);
 - (3) the normal operating frequency band for an indefinite period;
 - (4) the upper bound of the normal operating frequency band to the upper bound of the operational frequency tolerance band, for at least the recovery time including any time spent in the range under subparagraph (5); and

- (5) the upper bound of the operational frequency tolerance band to the upper bound of the extreme frequency excursion tolerance limits for at least the stabilisation time,

unless the rate of change of *frequency* is outside the range of -4 Hz to 4 Hz per second for more than 0.25 seconds or such other range as determined by the *Reliability Panel* from time to time.

Note: The automatic access standard is illustrated in the following diagram. To the extent of any inconsistency between the diagram and paragraph (b), paragraph (b) prevails.



Minimum access standard

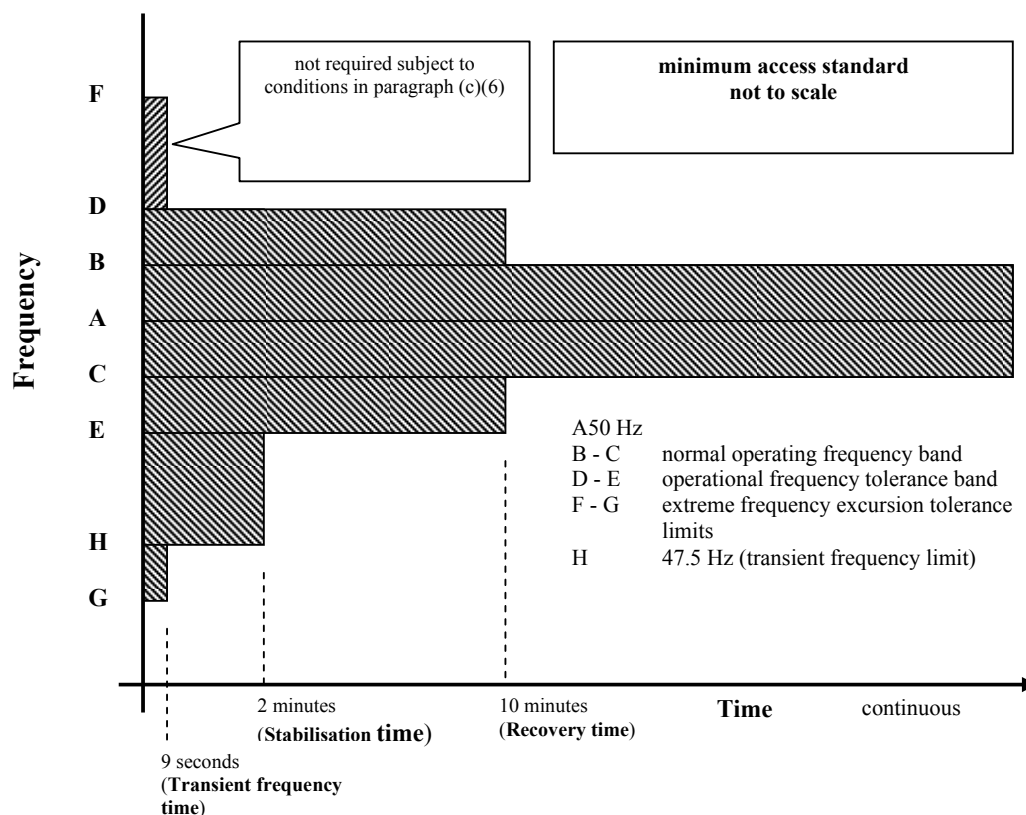
- (c) The *minimum access standard* is a *generating system* and each of its *generating units* must be capable of *continuous uninterrupted operation* for *frequencies* in the following ranges:
- (1) the lower bound of the extreme frequency excursion tolerance limits to the transient frequency limit for at least the transient frequency time;

- (2) the transient frequency limit to the lower bound of the operational frequency tolerance band for at least the stabilisation time;
- (3) the lower bound of the operational frequency tolerance band to the lower bound of the normal operating frequency band for at least the recovery time including any time spent in the ranges under subparagraphs (1) and (2);
- (4) the normal operating frequency band for an indefinite period;
- (5) the upper bound of the normal operating frequency band to the upper bound of the operational frequency tolerance band for at least the recovery time including any time spent in the ranges under subparagraph (6) unless the *generating system* has a *protection system* to trip a *generating unit* if the *frequency* exceeds a level agreed with NEMMCO; and
- (6) in respect of a *generating system*:
 - (i) of 30 MW or more; and
 - (ii) that does not have a *protection system* to trip the *generating unit* if the *frequency* exceeds a level agreed with NEMMCO,

the upper bound of the operational frequency tolerance band to the upper bound of the extreme frequency excursion tolerance limits (including an “island” condition) for at least the transient frequency time,

unless the rate of change of *frequency* is outside the range of -1 Hz to 1 Hz per second for more than one second or such other range as determined by the *Reliability Panel* from time to time.

Note: The minimum access standard is illustrated in the following diagram. To the extent of any inconsistency between the diagram and paragraph (c), paragraph (c) prevails.



Negotiated access standard

- (d) A *negotiated access standard* can be accepted by the *Network Service Provider* provided that *NEMMCO* and the *Network Service Provider* agree that:
- (1) the *negotiated access standard* is as close as practicable to the *automatic access standard* while respecting the need to protect the *plant* from damage;
 - (2) the *frequency* would be unlikely to fall below the lower bound of the operational frequency tolerance band as a result of over-frequency tripping of *generating units*; and
 - (3) there would be no material adverse impact on quality of *supply* to other *Network Users* or *power system security*.
- (e) *NEMMCO* must advise on matters relating to *negotiated access standards* under this clause S5.2.5.3.

S5.2.5.4 Generating system response to voltage disturbances

Automatic access standard

- (a) The *automatic access standard* is a *generating system* and each of its *generating units* must be capable of *continuous uninterrupted operation* where a *power system* disturbance causes the *voltage* at the *connection point* to vary within the following ranges:
- (1) *voltages* over 110% for the durations permitted under clause S5.1a.4;
 - (2) 90% to 110% of *normal voltage* continuously;
 - (3) 80% to 90% of *normal voltage* for a period of at least 10 seconds; and
 - (4) 70% to 80% of *normal voltage* for a period of at least 2 seconds.

Minimum access standard

- (b) The *minimum access standard* is a *generating system* including all operating *generating units* must be capable of *continuous uninterrupted operation* where a *power system* disturbance causes the *voltage* at the *connection point* to vary in the range of 90% to 110% of *normal voltage*, provided that the ratio of *voltage* to *frequency* (as measured at the *connection point* and expressed as percentage of *normal voltage* and a percentage of 50 Hz) does not exceed:
- (1) a value of 1.15 for more than two minutes; or
 - (2) a value of 1.10 for more than 10 minutes.

Negotiated access standard

- (c) In negotiating a *negotiated access standard*, a *generating system* and each of its operating *generating units* must be capable of *continuous uninterrupted operation* for the range of *voltages* specified in the *automatic access standard* except where *NEMMCO* and the *Network Service Provider* agree that:
- (1) the *negotiated access standard* is as close as practicable to the *automatic access standard* while respecting the need to protect the *plant* from damage;
 - (2) the *generating plant* that would be tripped as a result of any *voltage* excursion within levels specified by the *automatic access standard*, is not more than 100 MW or a greater limit based on what *NEMMCO* and the *Network Service Provider* both consider to be reasonable in the circumstances; and

- (3) there would be no material adverse impact on the quality of *supply* to other *Network Users* or *power system security*.
- (d) In carrying out assessments of proposed *negotiated access standards* under this clause S5.2.5.4, *NEMMCO* and the *Network Service Provider* must at a minimum, take into account:
 - (1) the expected performance of existing *networks* and *considered projects*;
 - (2) the expected performance of existing *generating plant* and other relevant projects; and
 - (3) any corresponding *performance standard* (or where no *performance standard* has been registered, the *access standard*) that allows *generating plant* to trip for *voltage* excursions in ranges specified under the *automatic access standards*.
- (e) *NEMMCO* must advise on matters relating to *negotiated access standards* under this clause S5.2.5.4.

General requirement

- (f) The *access standard* must include any operational arrangements necessary to ensure the *generating system* and each of its *generating units* will meet its agreed performance levels under abnormal *network* or *generating system* conditions.

S5.2.5.5 Generating system response to disturbances following contingency events

- (a) In this clause S5.2.5.5 a fault includes:
 - (1) a fault of the relevant type having a metallic conducting path; and
 - (2) a fault of the relevant type resulting from reclosure onto a fault by the operation of *automatic reclose equipment*.

Automatic access standard

- (b) The *automatic access standard* is:
 - (1) a *generating system* and each of its *generating units* must remain in *continuous uninterrupted operation* for a disturbance caused by an event that is:
 - (i) a *credible contingency event* other than a fault referred to in subparagraph (iv);

- (ii) a three phase fault in a *transmission system* cleared by all relevant primary *protection systems*;
- (iii) a two phase to ground, phase to phase or phase to ground fault in a *transmission system* cleared in:
 - (A) the longest time expected to be taken for a relevant *breaker fail protection system* to clear the fault; or
 - (B) if a *protection system* referred to in subparagraph (A) is not installed, the greater of the time specified in column 4 of Table S5.1a.2 (or if none is specified, 430 milliseconds) and the longest time expected to be taken for all relevant primary *protection systems* to clear the fault; and
- (iv) a three phase, two phase to ground, phase to phase or phase to ground fault in a *distribution network* cleared in:
 - (A) the longest time expected to be taken for the *breaker fail protection system* to clear the fault; or
 - (B) if a *protection system* referred to in subparagraph (A) is not installed, the greater of 430 milliseconds and the longest time expected to be taken for all relevant primary *protection systems* to clear the fault,

provided that the event is not one that would *disconnect* the *generating unit* from the *power system* by removing *network elements* from service; and

- (2) subject to any changed *power system* conditions or energy source availability beyond the *Generator's* reasonable control, a *generating system* and each of its *generating units*, in respect of the types of fault described in subparagraphs (1)(ii) to (iv), must supply to or absorb from the *network*:
 - (i) to assist the maintenance of *power system voltages* during the application of the fault, capacitive reactive current of at least the greater of its pre-disturbance reactive current and 4% of the maximum continuous current of the *generating system* including all operating *generating units* (in the absence of a disturbance) for each 1% reduction (from its pre-fault level) of *connection point voltage* during the fault;
 - (ii) after *disconnection* of the faulted element, *reactive power* sufficient to ensure that the *connection point voltage* is within the range for *continuous uninterrupted operation* under clause S5.2.5.4; and

- (iii) from 100 milliseconds after *disconnection* of the faulted element, *active power* of at least 95% of the level existing just prior to the fault.

Minimum access standard

- (c) The *minimum access standard* is:

- (1) a *generating system* and each of its *generating units* must remain in *continuous uninterrupted operation* for the disturbance caused by an event that is:

- (i) a *credible contingency event* other than a fault referred to in subparagraph (iii);

- (ii) a single phase to ground, phase to phase or two phase to ground fault in a *transmission system* cleared in the longest time expected to be taken for all relevant primary *protection systems* to clear the fault unless *NEMMCO* and the *Network Service Provider* agree that:

- (A) the total reduction of *generation* in the *power system* due to that fault would not exceed 100 MW;

- (B) there is unlikely to be an adverse impact on quality of *supply* to other *Network Users*; and

- (C) there is unlikely to be a material adverse impact on *power system security*; and

- (iii) a single phase to ground, phase to phase or two phase to ground fault in a *distribution network*, cleared in the longest time expected to be taken for all relevant primary *protection systems* to clear the fault, unless *NEMMCO* and the *Network Service Provider* agree that:

- (A) the total reduction of *generation* in the *power system* due to that fault would not exceed 100 MW;

- (B) there is unlikely to be a material adverse impact on quality of *supply* to other *Network Users*; and

- (C) there is unlikely to be a material adverse impact on *power system security*,

provided that the event is not one that would *disconnect* the *generating unit* from the *power system* by removing *network elements* from service; and

- (2) subject to any changed *power system* conditions or energy source availability beyond the *Generator's* reasonable control after *disconnection* of the faulted *element*, each *generating system* must, in respect of the types of fault described in subparagraphs (1)(ii) and (iii), deliver to the *network*, *active power* and supply or absorb leading or lagging *reactive power*, sufficient to ensure that the *connection point voltage* is within the range for *continuous uninterrupted operation* agreed under clause S5.2.5.4.

Negotiated access standard

- (d) In carrying out assessments of proposed *negotiated access standards* under this clause S5.2.5.5, the *Network Service Provider* and *NEMMCO* must take into account, without limitation:
 - (1) the expected performance of:
 - (i) existing *networks* and *considered projects*;
 - (ii) existing *generating plant* and other relevant projects; and
 - (iii) *control systems* and *protection systems*, including auxiliary systems and *automatic reclose equipment*; and
 - (2) the expected range of *power system* operating conditions.
- (e) A proposed *negotiated access standard* may be accepted if the *connection* of the *plant* at the proposed access level would not cause other generating *plant* or *loads* to trip as a result of an event, when they would otherwise not have tripped for the same event.
- (f) *NEMMCO* must advise on matters relating to *negotiated access standards* under this clause S5.2.5.5.

General requirement

- (g) The *access standard* must include any operational arrangements to ensure the *generating system* including all operating *generating units* will meet its agreed performance levels under abnormal *network* or *generating system* conditions.

S5.2.5.6 Quality of electricity generated and continuous uninterrupted operation

Minimum access standard

The *minimum access standard* is a *generating system* including each of its operating *generating units* and *reactive plant*, must not *disconnect* from the *power system* as a result of *voltage* fluctuation, harmonic *voltage* distortion and *voltage*

unbalance conditions at the *connection point* within the levels specified in clauses S5.1a.5, S5.1a.6 and S5.1a.7.

S5.2.5.7 Partial load rejection

- (a) For the purposes of this clause S5.2.5.7 **minimum load** means minimum *sent out generation* for continuous stable operation.
- (b) This clause S5.2.5.7 does not apply to an *asynchronous generating unit*.

Automatic access standard

- (c) The *automatic access standard* is a *generating unit* must be capable of *continuous uninterrupted operation* during and following a *power system load* reduction of 30% from its predisturbance level or equivalent impact from separation of part of the *power system* in less than 10 seconds, provided that the *loading level* remains above minimum load.

Minimum access standard

- (d) The *minimum access standard* is a *generating unit* must be capable of *continuous uninterrupted operation* during and following a *power system load* reduction of 5% or equivalent impact from separation of part of the *power system* in less than 10 seconds provided that the *loading level* remains above minimum load.

Negotiated access standard

- (e) If in accordance with clause 5.3.4A the *Generator* and the *Network Service Provider* determine a *negotiated access standard* is to apply, the *Network Service Provider* must consult NEMMCO to ensure that the *negotiated access standard* does not materially adversely affect *power system security*.
- (f) NEMMCO must advise on matters relating to *negotiated access standards* under this clause S5.2.5.7.

General requirements

- (g) The actual partial load rejection performance must be recorded in the *access standards*.

S5.2.5.8 Protection of generating systems from power system disturbances

Minimum access standard

- (a) The *minimum access standard* is:

- (1) subject to subparagraph (2) and paragraph (e), for a *generating system* or any of its *generating units* that is required by a *Generator* or *Network Service Provider* to be automatically *disconnected* from the *power system* in response to abnormal conditions arising from the *power system*, the relevant *protection system* or *control system* must not *disconnect* the *generating system* for:
 - (i) conditions for which it must remain in *continuous uninterrupted operation*; or
 - (ii) conditions it must withstand under the *Rules*; and
- (2) a *generating system* with a *nameplate rating* of 30MW or more, or *generating system* comprised of *generating units* with a combined *nameplate rating* of 30 MW or more, *connected* to a *transmission system* must have *facilities* to automatically and rapidly reduce its *generation*:
 - (i) by at least half, if the *frequency* at the *connection point* exceeds a level nominated by *NEMMCO* (not less than the upper limit of the *operational frequency tolerance band*) and the duration above this *frequency* exceeds a value nominated by *NEMMCO* where the reduction may be achieved:
 - (A) by reducing the output of the *generating system* within 3 seconds, and holding the output at the reduced level until the *frequency* returns to within the *normal operating frequency band*; or
 - (B) by disconnecting the *generating system* from the *power system* within 1 second; or
 - (ii) in proportion to the difference between the *frequency* at the *connection point* and a level nominated by *NEMMCO* (not less than the upper limit of the *operational frequency tolerance band*), such that the *generation* is reduced by at least half, within 3 seconds of the *frequency* reaching the upper limit of the *extreme frequency excursion tolerance limits*.

Negotiated access standard

- (b) *NEMMCO* must advise on matters relating to *negotiated access standards* under this clause S5.2.5.8.

General requirements

- (c) *NEMMCO* or the *Network Service Provider* may require that an *access standard* include a requirement for the *generating system* to be automatically *disconnected* by a local or remote control scheme whenever

the part of the *network* to which it is *connected* has been *disconnected* from the *national grid*, forming an island that *supplies* a *Customer*.

- (d) The *access standard* must include specification of conditions for which the *generating unit* or *generating system* must trip and must not trip.
- (e) Notwithstanding clauses S5.2.5.3, S5.2.5.4, S5.2.5.5, S5.2.5.6 and S5.2.5.7, a *generating system* may be automatically *disconnected* from the *power system* under any of the following conditions:
 - (1) in accordance with an *ancillary services agreement* between the *Generator* and *NEMMCO*;
 - (2) where a *load* that is not part of the *generating system* has the same *connection point* as the *generating system* and *NEMMCO* and the *Network Service Provider* agree that the *disconnection* would in effect be under-frequency *load shedding*;
 - (3) where the *generating system* is automatically *disconnected* under paragraph (a) or clause S5.2.5.9;
 - (4) where the *generating system* is automatically *disconnected* under clause S5.2.5.10 due to a failure of the *generating plant*; or
 - (5) in accordance with an agreement between the *Generator* and a *Network Service Provider* (including an agreement in relation to an emergency control scheme under clause S5.1.8) to provide a service that *NEMMCO* agrees is necessary to maintain or restore *power system security* in the event of a specified *contingency event*.
- (f) The *Network Service Provider* is not liable for any loss or damage incurred by the *Generator* or any other person as a consequence of a fault on either the *power system*, or within the *Generator's facility*.

S5.2.5.9 Protection systems that impact on power system security

Automatic access standard

- (a) The *automatic access standard* is:
 - (1) subject to clauses S5.1.9(k) and S5.1.9(l), primary *protection systems* must be provided to *disconnect* from the *power system* any faulted element in a *generating system* and in protection zones that include the *connection point* within the applicable *fault clearance time* determined under clause S5.1.9(a)(1);
 - (2) each primary *protection system* must have sufficient redundancy to ensure that a faulted element within its protection zone is *disconnected*

from the *power system* within the applicable *fault clearance time* with any single protection element (including any communications *facility* upon which that *protection system* depends) out of service; and

- (3) *breaker fail protection systems* must be provided to clear faults that are not cleared by the circuit breakers controlled by the primary *protection system* within the applicable *fault clearance time* determined under clause S5.1.9(a)(1).
- (b) In relation to an *automatic access standard* under this clause S5.2.5.9, the *Generator* must provide redundancy in the primary *protection systems* under paragraph (a)(2) and provide *breaker fail protection systems* under paragraph (a)(3) if *NEMMCO* or the *Network Service Provider* consider that a lack of these *facilities* could result in:
- (1) a material adverse impact on *power system security* or quality of supply to other *Network Users*; or
 - (2) a reduction in *inter-regional* or *intra-regional power transfer capability*,
- through any mechanism including:
- (3) consequential tripping of, or damage to, other *network* equipment or *facilities* of other *Network Users*, that would have a *power system security* impact; or
 - (4) instability that would not be detected by other *protection systems* in the *network*.

Minimum access standard

- (c) The *minimum access standard* is:
- (1) subject to clauses S5.1.9(k) and S5.1.9(l), *protection systems* must be provided to *disconnect* from the *power system* any faulted element within a *generating system* and in protection zones that include the *connection point* within the applicable *fault clearance time* determined under clause S5.1.9(a)(2); and
 - (2) if a *fault clearance time* determined under clause S5.1.9(a)(2) for a protection zone is less than 10 seconds, a *breaker fail protection system* must be provided to clear from the *power system* any fault within that protection zone that is not cleared by the circuit breakers controlled by the primary *protection system* within the applicable *fault clearance time* determined under clause S5.1.9(a)(3).

Negotiated access standard

- (d) *NEMMCO* must advise on matters relating to *negotiated access standards* under this clause S5.2.5.9.

General requirements

- (e) The *Network Service Provider* and the *Generator* must cooperate in the design and implementation of *protection systems* to comply with this clause S5.2.5.9, including cooperation on:
 - (1) the use of *current transformer* and *voltage transformer* secondary circuits (or equivalent) of one party by the *protection system* of the other;
 - (2) tripping of one party's circuit breakers by a *protection system* of the other party; and
 - (3) co-ordination of *protection system* settings to ensure inter-operation.
- (f) The *protection system* design referred to in paragraphs (a) and (c) must:
 - (1) be coordinated with other *protection systems*;
 - (2) avoid consequential *disconnection* of other *Network Users' facilities*; and
 - (3) take into account existing obligations of the *Network Service Provider* under *connection agreements* with other *Network Users*.

S5.2.5.10 Protection to trip plant for unstable operation

Automatic access standard

- (a) The *automatic access standard* is:
 - (1) a *synchronous generating unit* must have a *protection system* to *disconnect* it promptly when a condition that would lead to pole slipping is detected in order to prevent pole slipping or other conditions where a *generating unit* causes *active power*, *reactive power* or *voltage* at the *connection point* to become unstable as assessed in accordance with the *power system* stability guidelines established under clause 4.3.4(h); and
 - (2) an *asynchronous generating unit* must have a *protection system* to *disconnect* it promptly for conditions where the *active power*, *reactive power* or *voltage* at the *connection point* becomes unstable as assessed in accordance with the guidelines for *power system* stability established under clause 4.3.4(h).

Minimum access standard

- (b) The *minimum access standard* is a *generating unit* must not cause a *voltage disturbance* at the *connection point* due to sustained unstable behaviour of more than the maximum level specified in Table 7 of *Australian Standard AS/NZS 61000.3.7:2001*.

Negotiated access standard

- (c) If the *Network Service Provider* and the *Generator* agree, a *protection system* may also trip any other part of the *generating system* in order to cease the instability.
- (d) Notwithstanding paragraph (c), a *protection system* must be provided in the *access standard* to trip the affected *generating unit* where:
 - (1) the *Network Service Provider* considers it necessary to prevent consequential tripping of, or damage to, other *generating units*, *network equipment* or other *Network Users' facilities*, or
 - (2) *NEMMCO* considers it necessary to prevent unstable operation having an adverse impact on *power system security*.
- (e) *NEMMCO* must advise on matters relating to *negotiated access standards* under this clause S5.2.5.10

S5.2.5.11 Frequency control

- (a) For the purpose of this clause S5.2.5.11:

maximum operating level means in relation to:

- (1) a *non-scheduled generating unit*, the maximum *sent out generation* consistent with its *nameplate rating*;
- (2) a *scheduled generating unit* or *semi-scheduled generating unit*, the maximum *sent out generation* (but not emergency generation) consistent with its *registered bid and offer data*;
- (3) a *non-scheduled generating system*, the combined maximum *sent out generation* consistent with the *nameplate ratings* of its in-service *generating units*; and
- (4) a *scheduled generating system* or *semi-scheduled generating system*, the combined maximum *sent out generation* (but not emergency generation) of its in-service *generating units*, consistent with its *registered bid and offer data*.

minimum operating level means in relation to:

- (1) a *non-scheduled generating unit*, its minimum *sent out generation* for continuous stable operation;
- (2) a *scheduled generating unit* or *semi-scheduled generating unit*, its minimum *sent out generation* for continuous stable operation consistent with its *registered bid and offer data*;
- (3) a *non-scheduled generating system*, the combined *minimum operating level* of its in-service *generating units*; and
- (4) a *scheduled generating system* or *semi-scheduled generating system*, the combined minimum *sent out generation* of its in-service *generating units*, consistent with its *registered bid and offer data*.

pre-disturbance level means in relation to a *generating unit* and a *frequency disturbance*, the *generating unit's* level of output just before the *system frequency* first exceeds the upper or lower limit of the *normal operating frequency band* during the *frequency disturbance*.

system frequency means the *frequency* of the *transmission system* or *distribution system* to which the *generating unit* or *generating system* is *connected*.

Automatic access standard

(b) The *automatic access standard* is:

- (1) a *generating system's active power* transfer to the *power system* must not:
 - (i) increase in response to a rise in *system frequency*; or
 - (ii) decrease in response to a fall in *system frequency*;
- (2) a *generating system* must be capable of automatically reducing its *active power* transfer to the *power system*:
 - (i) whenever the *system frequency* exceeds the upper limit of the *normal operating frequency band*;
 - (ii) by an amount that equals or exceeds the least of:
 - (A) 20% of its maximum operating level times the *frequency difference* between *system frequency* and the upper limit of the *normal operating frequency band*;
 - (B) 10% of its maximum operating level; and

- (C) the difference between the *generating unit's* pre-disturbance level and minimum operating level, but zero if the difference is negative; and
- (iii) sufficiently rapidly for the *Generator* to be in a position to offer measurable amounts of lower services to the *spot market* for *market ancillary services*; and
- (3) a *generating system* must be capable of automatically increasing its *active power* transfer to the *power system*:
 - (i) whenever the system frequency falls below the lower limit of the *normal operating frequency band*;
 - (ii) by the amount that equals or exceeds the least of:
 - (A) 20% of its maximum operating level times the percentage *frequency* difference between the lower limit of the *normal operating frequency band* and system frequency;
 - (B) 5% of its maximum operating level; and
 - (C) one third of the difference between the *generating unit's* maximum operating level and pre-disturbance level, but zero if the difference is negative; and
 - (iii) sufficiently rapidly for the *Generator* to be in a position to offer measurable amounts of raise services to the *spot market* for *market ancillary services*.

Minimum access standard

- (c) The *minimum access standard* is a *generating system* under relatively stable input energy, *active power* transfer to the *power system* must not:
 - (1) increase in response to a rise in system frequency; and
 - (2) decrease more than 2% per Hz in response to a fall in system frequency.

Negotiated access standard

- (d) A *Generator* proposing a *negotiated access standard* in respect of paragraph (c)(2) must demonstrate to *NEMMCO* that the proposed increase and decrease in *active power* transfer to the *power system* are as close as practicable to the *automatic access standard* for that *plant*.
- (e) The *negotiated access standard* must record the agreed values for maximum operating level and minimum operating level, and where relevant the

method of determining the values and the values for a *generating system* must take into account its in-service *generating units*.

- (f) *NEMMCO* must advise on matters relating to *negotiated access standards* under this clause S5.2.5.11.

General requirements

- (g) Each *control system* used to satisfy this clause S5.2.5.11 must be *adequately damped*.
- (h) The amount of a relevant *market ancillary service* for which the *plant* may be registered must not exceed the amount that would be consistent with the *performance standard* registered in respect of this requirement.

S5.2.5.12 Impact on network capability

Automatic access standard

- (a) The *automatic access standard* is a *generating system* must have *plant capabilities* and *control systems* that are sufficient so that when *connected* it does not reduce any *inter-regional* or *intra-regional power transfer capability* below the level that would apply if the *generating system* were not *connected*.

Minimum access standard

- (b) The *minimum access standard* is a *generating system* must have *plant capabilities*, *control systems* and operational arrangements sufficient to ensure there is no reduction in:
 - (1) the ability to *supply Customer load* as a result of a reduction in *power transfer capability*; and
 - (2) *power transfer capabilities* into a region by more than the combined *sent out generation* of its *generating units*.

Negotiated access standard

- (c) In carrying out assessments of proposed *negotiated access standards* under this clause S5.2.5.12, the *Network Service Provider* and *NEMMCO* must take into account:
 - (1) the expected performance of:
 - (i) existing *networks* and *considered projects*;
 - (ii) existing *generating plant* and other relevant projects; and

- (iii) *control systems* and *protection systems*, including *automatic reclose equipment*; and
- (2) the expected range of *power system* operating conditions.
- (d) The *negotiated access standard* must include:
 - (1) *control systems* to minimise any reduction in *power transfer capabilities*; and
 - (2) operational arrangements, including curtailment of the *generating system's* output if necessary to ensure that the *generating plant* is operated in a way that meets at least the *minimum access standard* under abnormal *network* and *generating system* conditions, so that *power system security* can be maintained.
- (e) A *negotiated access standard* under this clause S5.2.5.12 must detail the *plant capabilities*, *control systems* and operational arrangements that will be maintained by the *Generator*, notwithstanding that change to the *power system*, but not changes to the *generating system*, may reduce the efficacy of the *plant capabilities*, *control systems* and operational arrangements over time.
- (f) *NEMMCO* must advise on matters relating to *negotiated access standards* under this clause S5.2.5.12.

General requirement

- (g) If a *Network Service Provider* considers that *power transfer capabilities* of its *network* would be increased through provision of additional *control system facilities* to a *generating system* (such as a *power system* stabiliser), the *Network Service Provider* and the *Generator* may negotiate for the provision of such additional *control system facilities* as a commercial arrangement.

S5.2.5.13 Voltage and reactive power control

- (a) For the purpose of this clause S5.2.5.13:

rise time means in relation to a step response test or simulation of a *control system*, the time taken for an output quantity to rise from 10% to 90% of the maximum change induced in that quantity by a step change of an input quantity.

settling time means in relation to a step response test or simulation of a *control system*, the time measured from initiation of a step change in an input quantity to the time when the magnitude of error between the output quantity and its final settling value remains less than 10% of:

- (1) if the sustained change in the quantity is less than half of the maximum change in that output quantity, the maximum change induced in that output quantity; or
- (2) the sustained change induced in that output quantity.

static excitation system means in relation to a *synchronous generating unit*, an *excitation control system* that does not use rotating machinery to produce the field current.

Automatic access standard

(b) The *automatic access standard* is:

- (1) a *generating system* must have *plant capabilities* and *control systems* sufficient to ensure that:
 - (i) *power system* oscillations, for the frequencies of oscillation of the *generating unit* against any other *generating unit*, are *adequately damped*;
 - (ii) operation of the *generating system* does not degrade the damping of any critical mode of oscillation of the *power system*; and
 - (iii) operation of the *generating system* does not cause instability (including hunting of *tap-changing transformer control systems*) that would adversely impact other *Registered Participants*;
- (2) a *control system* must have:
 - (i) for the purposes of disturbance monitoring and testing, permanently installed and operational, monitoring and recording *facilities* for key variables including each input and output; and
 - (ii) *facilities* for testing the *control system* sufficient to establish its dynamic operational characteristics;
- (3) a *synchronous generating system* must have an *excitation control system* that:
 - (i) regulates *voltage* at the *connection point* or another agreed location in the *power system* (including within the *generating system*) to within 0.5% of the setpoint;
 - (ii) is able to operate the stator continuously at 105% of *nominal voltage* with *rated active power* output;

- (iii) regulates *voltage* in a manner that helps to support *network voltages* during faults and does not prevent the *Network Service Provider* from achieving the requirements of clause S5.1a.3 and S5.1a.4;
- (iv) allows the *voltage* setpoint to be continuously controllable in the range of at least 95% to 105% of *normal voltage* at the *connection point* or the agreed location, without reliance on a *tap-changing transformer*;
- (v) has limiting devices to ensure that a *voltage* disturbance does not cause the *generating unit* to trip at the limits of its operating capability;
- (vi) has an excitation ceiling *voltage* of at least:
 - (A) for a static excitation system, 2.3 times; or
 - (B) for other *excitation control systems*, 1.5 times, the excitation required to achieve *generation* at the *nameplate rating* for rated *power factor*, rated speed and *nominal voltage*;
- (vii) has *settling times* for a step change of *voltage* setpoint or *voltage* at the location agreed under subparagraph (i) of:
 - (A) generated *voltage* less than 2.5 seconds for a 5% *voltage* disturbance with the *generating unit* not *synchronised*;
 - (B) *active power*, *reactive power* and *voltage* less than 5.0 seconds for a 5% *voltage* disturbance with the *generating unit synchronised*, from an operating point where the *voltage* disturbance would not cause any limiting device to operate; and
 - (C) in respect of each limiting device, *active power*, *reactive power* and *voltage* less than 7.5 seconds for a 5% *voltage* disturbance with the *generating unit synchronised*, when operating into a limiting device from an operating point where a *voltage* disturbance of 2.5% would just cause the limiting device to operate;
- (viii) is able to increase field *voltage* from rated field *voltage* to the excitation ceiling *voltage* in less than:
 - (A) 0.05 second for a static excitation system; or
 - (B) 0.5 second for other *excitation control systems*;

- (ix) has a *power system* stabiliser with sufficient flexibility to enable damping performance to be maximised, with characteristics as described in paragraph (c); and
- (x) has reactive current compensation settable for boost or droop; and
- (4) a *generating system*, other than one comprised of *synchronous generating units*, must have a *voltage control system* that:
 - (i) regulates *voltage* at the *connection point* or an agreed location in the *power system* (including within the *generating system*) to within 0.5% of its setpoint;
 - (ii) regulates *voltage* in a manner that helps to support *network voltages* during faults and does not prevent the *Network Service Provider* from achieving the requirements of clauses S5.1a.3 and S5.1a.4;
 - (iii) allows the *voltage* setpoint to be continuously controllable in the range of at least 95% to 105% of *normal voltage* at the *connection point* or agreed location in the *power system*, without reliance on a *tap changing transformer*;
 - (iv) has limiting devices to ensure that a *voltage* disturbance does not cause the *generating unit* to trip at the limits of its operating capability;
 - (v) with the *generating system connected* to the *power system*, has *settling times* for *active power*, *reactive power* and *voltage* due to a step change of *voltage* setpoint or *voltage* at the location agreed under clause subparagraph (i), of less than:
 - (A) 5.0 seconds for a 5% *voltage* disturbance with the *generating system connected* to the *power system*, from an operating point where the *voltage* disturbance would not cause any limiting device to operate; and
 - (B) 7.5 seconds for a 5% *voltage* disturbance with the *generating system connected* to the *power system*, when operating into any limiting device from an operating point where a *voltage* disturbance of 2.5% would just cause the limiting device to operate;
 - (vi) has *reactive power* rise time, for a 5% step change in the *voltage* setpoint, of less than 2 seconds;

- (vii) has a *power system* stabiliser with sufficient flexibility to enable damping performance to be maximised, with characteristics as described in paragraph (c); and
 - (viii) has reactive current compensation.
- (c) A *power system* stabiliser provided under paragraph (b) must have:
- (1) for a *synchronous generating unit*, measurements of rotor speed and *active power* output of the *generating unit* as inputs, and otherwise, measurements of *power system frequency* and *active power* output of the *generating unit* as inputs;
 - (2) two washout filters for each input, with ability to bypass one of them if necessary;
 - (3) sufficient (and not less than two) lead-lag transfer function blocks (or equivalent number of complex poles and zeros) with adjustable gain and time-constants, to compensate fully for the phase lags due to the *generating plant*;
 - (4) an output limiter, which for a *synchronous generating unit* is continually adjustable over the range of -10% to +10% of stator voltage;
 - (5) monitoring and recording *facilities* for key variables including inputs, output and the inputs to the lead-lag transfer function blocks; and
 - (6) *facilities* to permit testing of the *power system* stabiliser in isolation from the *power system* by injection of test signals, sufficient to establish the transfer function of the *power system* stabiliser.

Minimum access standard

- (d) The *minimum access standard* is:
- (1) a *generating system* must have *plant* capabilities and *control systems*, including, if appropriate, a *power system* stabiliser, sufficient to ensure that:
 - (i) *power system* oscillations, for the frequencies of oscillation of the *generating unit* against any other *generating unit*, are *adequately damped*;
 - (ii) operation of the *generating unit* does not degrade:
 - (A) any mode of oscillation that is within 0.3 nepers per second of being unstable, by more than 0.01 nepers per second; and

- (B) any other mode of oscillation to within 0.29 nepers per second of being unstable; and
 - (iii) operation of the *generating unit* does not cause instability (including hunting of *tap-changing transformer control systems*) that would adversely impact other *Registered Participants*;
- (2) a *generating system* comprised of *generating units* with a combined *nameplate rating* of 30 MW or more must have *facilities* for testing its *control systems* sufficient to establish their dynamic operational characteristics;
- (3) a *generating unit* or *generating system* must have *facilities*:
- (i) where the *connection point nominal voltage* is 100 kV or more, to regulate *voltage* in a manner that does not prevent the *Network Service Provider* from achieving the requirements of clauses S5.1a.3 and S5.1a.4; or
 - (ii) where the *connection point nominal voltage* is less than 100 kV, to regulate *voltage* or *reactive power* or *power factor* in a manner that does not prevent the *Network Service Provider* from achieving the requirements of clauses S5.1a.3 and S5.1a.4,
- and sufficient to achieve the performance agreed in respect of clauses S5.2.5.1, S5.2.5.2, S5.2.5.3, S5.2.5.4, S5.2.5.5, S5.2.5.6 and S5.2.5.12;
- (4) a *synchronous generating unit*, that is part of a *generating system* comprised of *generating units* with a combined *nameplate rating* of 30 MW or more, must have an *excitation control system* that:
- (i) regulates *voltage*, *power factor* or *reactive power* as agreed with the *Network Service Provider* and NEMMCO;
 - (ii) has excitation ceiling *voltage* of at least 1.5 times the excitation required to achieve *generation* at the *nameplate rating* for rated *power factor*, rated speed and *nominal voltage*;
 - (iii) subject to co-ordination under paragraph (i), has a *settling time* of less than 5.0 seconds for a 5% *voltage* disturbance with the *generating unit* synchronised, from an operating point where such a *voltage* disturbance would not cause any limiting device to operate; and
 - (iv) has over and under excitation limiting devices sufficient to ensure that a *voltage* disturbance does not cause the *generating unit* to trip at the limits of its operating capability; and

- (5) a *generating system* comprised of *generating units* with a combined *nameplate rating* of 30 MW or more and which are *asynchronous generating units*, must have a *control system* that:
 - (i) regulates *voltage*, *power factor* or *reactive power* as agreed with the *Network Service Provider* and *NEMMCO*;
 - (ii) subject to co-ordination under subparagraph (i), has a settling time less than 7.5 seconds for a 5% *voltage* disturbance with the *generating unit* electrically connected to the *power system* from an operating point where such a *voltage* disturbance would not cause any limiting device to operate; and
 - (iii) has limiting devices to ensure that a *voltage* disturbance would not cause the *generating unit* to trip at the limits of its operating capability.

Negotiated access standard

- (e) If a *generating system* cannot meet the *automatic access standard*, the *Generator* must demonstrate to the *Network Service Provider* why that standard could not be reasonably achieved and propose a *negotiated access standard*.
- (f) The *negotiated access standard* proposed by the *Generator* under paragraph (e) must be the highest level that the *generating system* can reasonably achieve, including by installation of additional dynamic *reactive power* equipment, and through optimising its *control systems*.
- (g) *NEMMCO* must advise on matters relating to *negotiated access standards* under this clause S5.2.5.13.

General requirements

- (h) A limiting device provided under paragraphs (b) and (c) must:
 - (1) not detract from the performance of any *power system* stabiliser; and
 - (2) be co-ordinated with all *protection systems*.
- (i) The *Network Service Provider* may require that the design and operation of the *control systems* of a *generating unit* or *generating system* be coordinated with the existing *voltage control systems* of the *Network Service Provider* and of other *Network Users*, in order to avoid or manage interactions that would adversely impact on the *Network Service Provider* and other *Network Users*.
- (j) Any requirements imposed by the *Network Service Provider* under paragraph (i) must be recorded in the *access standard*.

- (k) The assessment of impact of the *generating units* on *power system* stability and damping of *power system* oscillations shall be in accordance with the guidelines for *power system* stability established under clause 4.3.4(h).

S5.2.5.14 Active power control

- (a) The *automatic access standard* is a *generating system* comprised of *generating units* with a combined *nameplate rating* of 30 MW or more must have an *active power control system* capable of:
 - (1) for a *scheduled generating unit* or a *scheduled generating system*:
 - (i) maintaining and changing its *active power* output in accordance with its *dispatch instructions*; and
 - (ii) ramping its *active power* output linearly from one level of *dispatch* to another;
 - (2) subject to energy source availability, for a *non-scheduled generating unit* or *non-scheduled generating system*:
 - (i) automatically reducing or increasing its *active power* output within 5 minutes, at a constant rate, to or below the level specified in an instruction electronically issued by a *control centre*, subject to subparagraph (iii);
 - (ii) automatically limiting its *active power* output, to below the level specified in subparagraph (i); and
 - (iii) not changing its *active power* output within 5 minutes by more than the raise and lower amounts specified in an instruction electronically issued by a *control centre*; and
 - (3) subject to energy source availability, for a *semi-scheduled generating unit* or a *semi-scheduled generating system*:
 - (i) automatically reducing or increasing its *active power* output within 5 minutes at a constant rate, to or below the level specified in an instruction electronically issued by a *control centre*;
 - (ii) automatically limiting its *active power* output, to or below the level specified in subparagraph (i);
 - (iii) not changing its *active power* output within 5 minutes by more than the raise and lower amounts specified in an instruction electronically issued by a *control centre*; and

- (iv) ramping its *active power* output linearly from one level of *dispatch* to another.

Minimum access standard

- (b) The *minimum access standard* is a *generating system* comprised of *generating units* with a combined *nameplate rating* of 30 MW or more must have an *active power control system* capable of:
 - (1) for a *scheduled generating unit* or a *scheduled generating system*, maintaining and changing its *active power* output in accordance with its *dispatch instructions*;
 - (2) for a *non-scheduled generating system*:
 - (i) reducing its *active power* output, within 5 minutes, to or below the level required to manage *network* flows that is specified in a verbal instruction issued by the *control centre*;
 - (ii) limiting its *active power* output, to or below the level specified in subparagraph (i);
 - (iii) subject to energy source availability, ensuring that the change of *active power* output in a 5 minute period does not exceed a value specified in a verbal instruction issued by the *control centre*; and
 - (iv) being upgraded to receive electronic instructions from the *control centre* and fully implement them within 5 minutes; and
 - (3) for a *semi-scheduled generating unit* or a *semi-scheduled generating system*, maintaining and changing its *active power* output in accordance with its *dispatch instructions*.

Negotiated access standard

- (c) A *negotiated access standard* may provide that if the number or frequency of verbal instructions becomes difficult for a *control centre* to manage, NEMMCO may require the *Generator* to upgrade its *facilities* to receive electronic instructions and fully implement them within 5 minutes.
- (d) The *negotiated access standard* must document to NEMMCO's satisfaction any operational arrangements necessary to manage *network* flows that may include a requirement for the *generating system* to be operated in a manner that prevents its output changing within 5 minutes by more than an amount specified by a *control centre*.
- (e) NEMMCO must advise on matters relating to *negotiated access standards* under this clause S5.2.5.14.

General requirements

- (f) Each *control system* used to satisfy the requirements of paragraphs (a) and (b) must be *adequately damped*.

S5.2.6 Monitoring and control requirements

S5.2.6.1 Remote Monitoring

Automatic access standard

- (a) The *automatic access standard* is a:
 - (1) *scheduled generating unit*;
 - (2) *scheduled generating system*;
 - (3) *non-scheduled generating unit* with a *nameplate rating* of 30 MW or more;
 - (4) *non-scheduled generating system* with a combined *nameplate rating* of 30 MW or more;
 - (5) *semi-scheduled generating unit*; or
 - (6) *semi-scheduled generating system*,

must have *remote monitoring equipment* to transmit to *NEMMCO's control centres* in real time in accordance with rule 4.11 the quantities that *NEMMCO* reasonably requires to discharge its *market* and *power system security* functions set out in Chapters 3 and 4.

- (b) The quantities referred to under paragraph (a) that *NEMMCO* may request include:
 - (1) in respect of a *generating unit* with a *nameplate rating* of 30 MW or more:
 - (i) *current, voltage, active power and reactive power* in respect of *generating unit* stators or power conversion systems (as applicable);
 - (ii) the status of all switching devices that carry the *generation*; and
 - (iii) *tap-changing transformer* tap position;
 - (2) in respect of a *generating system* that includes a *generating unit* with a *nameplate rating* of less than 30 MW:

- (i) its connected status, *tap-changing transformer* tap position and *voltages*;
 - (ii) *active power* and *reactive power* aggregated for groups of identical *generating units*;
 - (iii) either the number of identical *generating units* operating or the operating status of each non-identical *generating unit*; and
 - (iv) *active power* and *reactive power* for the *generating system*;
- (3) in respect of an auxiliary supply system with a capacity of 30 MW or more associated with a *generating unit* or *generating system*, *active power* and *reactive power*;
 - (4) in respect of *reactive power* equipment that is part of a *generating system* but not part of a particular *generating unit*, its *reactive power*;
 - (5) in respect of a wind farm type of *generating system*:
 - (i) wind speed;
 - (ii) wind direction;
 - (iii) ambient temperature; and
 - (6) any other quantity that *NEMMCO* reasonably requires to discharge its *market* and *power system security* functions as set out in Chapters 3 and 4.

Minimum access standard

(c) The *minimum access standard* is a:

- (1) *scheduled generating unit*;
- (2) *scheduled generating system*;
- (3) *non-scheduled generating system* with a combined *nameplate rating* of 30 MW or more;
- (4) *semi-scheduled generating unit*; or
- (5) *semi-scheduled generating system*,

must have *remote monitoring equipment* to transmit to *NEMMCO's control centres* in real time:

- (6) the *active power* output of the *generating unit* or *generating system* (as applicable);

- (7) if *connected to a transmission system*, the *reactive power* output of the *generating unit* or *generating system* (as applicable); and
- (8) if a wind farm type of *generating system*:
 - (i) number of units operating;
 - (ii) wind speed; and
 - (iii) wind direction,

in accordance with rule 4.11.

Negotiated access standard

- (d) *NEMMCO* may advise on matters relating to *negotiated access standards* under this clause S5.2.6.1.

S5.2.6.2 Communications equipment

Automatic access standard

- (a) The *automatic access standard* is a *Generator* must:
 - (1) provide and maintain two separate telephone *facilities* using independent telecommunications service providers, for the purposes of operational communications between the *Generator's* responsible operator under clause 4.11.3(a) and *NEMMCO's control centre*; and
 - (2) provide electricity supplies for *remote monitoring equipment* and *remote control equipment* installed in relation to its *generating system* capable of keeping such equipment available for at least 3 hours following total loss of *supply* at the *connection point* for the relevant *generating unit*.

Minimum access standard

- (b) The *minimum access standard* is a *Generator* must:
 - (1) provide and maintain a telephone facility for the purposes of operational communications between the *Generator's* responsible operator under clause 4.11.3(a) and *NEMMCO's control centre*; and
 - (2) provide electricity supplies for *remote monitoring equipment* and *remote control equipment* installed in relation to its *generating system* capable of keeping such equipment available for at least 1 hour following total loss of *supply* at the *connection point* for the relevant *generating unit*.

Negotiated access standard

- (c) A *negotiated access standard* must include, where the *Network Service Provider* or *NEMMCO* reasonably require, a back-up telephone facility be independent of commercial telephone service providers, and the *Network Service Provider* must provide and maintain the separate facility on a cost-recovery basis only through the charge for *connection*.
- (d) A *negotiated access standard* must include that a *Generator* must provide communications paths (with appropriate redundancy) from the *remote monitoring equipment* or *remote control equipment* installed for each of its *generating systems* as appropriate, to a communications interface in a location reasonably acceptable to the *Network Service Provider* at the relevant *generation facility*.
- (e) Communications systems between the communications interface under paragraph (d) and the *control centre* must be the responsibility of the *Network Service Provider* unless otherwise agreed by the *Generator* and the *Network Service Provider*.
- (f) A *negotiated access standard* must include that the *Generator* provide accommodation and secure power supplies for communications *facilities* provided by the *Network Service Provider* under this clause S5.2.6.2.
- (g) *NEMMCO* may advise on matters relating to *negotiated access standards* under this clause S5.2.6.2.

S5.2.7 Power station auxiliary supplies

In cases where a *generating system* takes its auxiliary supplies via a *connection point* through which its *generation* is not transferred to the *network*, the *access standards* must be established under clause S5.3.5 as if the *Generator* were a *Market Customer*.

S5.2.8 Fault current

Automatic access standard

- (a) The *automatic access standard* is:
 - (1) the contribution of the *generating system* to the fault current on the *connecting network* through its *connection point* must not exceed the contribution level that will ensure that the total fault current can be safely interrupted by the circuit breakers of the *connecting network* and safely carried by the *connecting network* for the duration of the applicable *breaker fail protection system fault clearance times*, as specified for the relevant *connection point* by the *Network Service Provider*;

- (2) a *generating system's connected plant* must be capable of withstanding fault current through the *connection point* up to the higher of:
 - (i) the level specified in clause S5.2.4(e1)(1) ; and
 - (ii) the highest level of current at the *connection point* that can be safely interrupted by the circuit breakers of the *connecting network* and safely carried by the *connecting network* for the duration of the applicable *breaker fail protection system fault clearance times*, as specified by the *Network Service Provider*; and
- (3) a circuit breaker provided to isolate a *generating unit* or *generating system* from the *network* must be capable of breaking, without damage or restrike, the maximum fault currents that could reasonably be expected to flow through the circuit breaker for any fault in the *network* or in the *generating unit* or *generating system*, as specified in the *connection agreement*.

Minimum access standard

- (b) The *minimum access standard* is:
 - (1) the *generating system* does not need to limit fault current contribution;
 - (2) a *generating system's connected plant* must be capable of withstanding fault current through the *connection point* up to the level specified in clause S5.2.4(e1)(1) ; and
 - (3) a circuit breaker provided to isolate a *generating unit* or *generating system* from the *network* must be capable of breaking, without damage or restrike, the maximum fault currents that could reasonably be expected to flow through the circuit breaker for any fault in the *network* or in the *generating unit* or *generating system*, as specified in the *connection agreement*.

Negotiated access standard

- (c) In negotiating a *negotiated access standard*, the *Network Service Provider* must consider alternative *network* configurations in the determination of the applicable fault current level and must prefer those options that maintain an equivalent level of service to other *Network Users* and which, in the opinion of the *Generator*, impose the least obligation on the *Generator*.
- (d) In carrying out assessments of proposed *negotiated access standards* under this clause S5.2.8, the *Network Service Provider* must take into account, without limitation:

- (1) the expected performance of existing *networks* and *considered projects*;
- (2) the expected performance of existing *generating plant* and other relevant projects; and
- (3) the expected range of *power system* operating conditions.

Schedule 5.3 - Conditions for Connection of Customers

S5.3.1a Introduction to the schedule

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

- (2) establish the *automatic access standards* and *minimum access standards* that will apply to the process of negotiating access standards under clause 5.3.4A of the *Rules*; and
- (3) establish obligations to apply prudent design standards for the *plant* to be *connected*.

S5.3.1 Information

- (a) Before a *Network User* connects any new or additional equipment to a *network*, the *Network User* must submit the following kinds of information to the *Network Service Provider*:
 - (1) a single line diagram with the protection details;
 - (2) *metering system* design details for any metering equipment being provided by the *Network User*;
 - (3) a general arrangement locating all the equipment on the site;
 - (4) a general arrangement for each new or altered *substation* showing all exits and the position of all electrical equipment;
 - (5) type test certificates for all new switchgear and *transformers*, including measurement *transformers* to be used for *metering* purposes in accordance with Chapter 7 of the *Rules*;
 - (6) earthing details;
 - (7) the proposed methods of earthing cables and other equipment to comply with the regulations of the relevant *participating jurisdiction*;
 - (8) *plant* and earth grid test certificates from approved test authorities;
 - (9) a secondary injection and trip test certificate on all circuit breakers;
 - (10) certification that all new equipment has been inspected before being *connected* to the *supply*; and
 - (11) operational arrangements.
- (b) For the purposes of clause 5.3.2(f) of the *Rules*, the technical information that a *Network Service Provider* must, if requested, provide to a *Connection Applicant* in respect of the proposed *connection* includes:
 - (1) the highest expected single phase and three phase fault levels at the *connection point* without the proposed *connection*;

- (2) the clearing times of the existing *protection systems* that would clear a fault at the location at which the new *connection* would be connected into the existing *transmission system* or *distribution system*;
- (3) the expected limits of *voltage* fluctuation, harmonic *voltage* distortion and *voltage* unbalance at the *connection point* without the proposed *connection*;
- (4) technical information relevant to the *connection point* without the proposed *connection* including equivalent source impedance information, sufficient to estimate fault levels, *voltage* fluctuations, harmonic *voltage* distortion and *voltage* unbalance; and
- (5) any other information or data not being *confidential information* relating to the performance of the *Network Service Provider's facilities* that is reasonably necessary for the *Connection Applicant* to prepare an *application to connect*;

except where the *Connection Applicant* agrees the *Network Service Provider* may provide alternative or less detailed technical information in satisfaction of this clause S5.3.1.(b).

S5.3.2 Design standards

A *Network User* must ensure that:

- (a) the electrical *plant* in its *facility* complies with the relevant *Australian Standards* as applicable at the time of first installation of that electrical *plant* in the *facility*;
- (b) circuit breakers provided to isolate the *Network User's facilities* from the *Network Service Provider's facilities* are capable of breaking, without damage or restrike, fault currents nominated by the *Network Service Provider* in the relevant *connection agreement*; and
- (c) new equipment including circuit breakers provided to isolate the *Network User's facilities* from the *Network Service Provider's facilities* is capable of withstanding, without damage, power *frequency voltages* and impulse levels nominated by the *Network Service Provider* to apply at the *connection point* in accordance with the relevant provisions of the *system standards* and recorded in the relevant *connection agreement*.

S5.3.3 Protection systems and settings

A *Network User* must ensure that all *connections* to the *network* are protected by protection devices which effectively and safely *disconnect* any faulty circuit automatically within a time period specified by the *Network Service Provider* in accordance with the following provisions:

- (a) The *automatic access standard* is:
 - (1) Primary *protection systems* must be provided to *disconnect* any faulted element from the *power system* within the applicable *fault clearance time* determined under clause S5.1.9(a)(1), but subject to clauses S5.1.9(k) and S5.1.9(l).
 - (2) Each primary *protection system* must have sufficient redundancy to ensure that a faulted element within its protection zone is *disconnected* from the *power system* within the applicable *fault clearance time* with any single protection element (including any communications facility upon which that *protection system* depends) out of service.
 - (3) *Breaker fail protection systems* must be provided to clear faults that are not cleared by the circuit breakers controlled by the primary *protection system*, within the applicable *fault clearance time* determined under clause S5.1.9(a)(1).
- (b) The *minimum access standard* is:
 - (1) Primary *protection systems* must be provided to *disconnect* from the *power system* any faulted element within their respective protection zones within the applicable *fault clearance time* determined under clause S5.1.9(a)(2), but subject to clauses S5.1.9(k) and S5.1.9(l).
 - (2) If a *fault clearance time* determined under clause S5.1.9(a)(2) for a protection zone is less than 10 seconds, a *breaker fail protection system* must be provided to clear from the *power system* any fault within that protection zone that is not cleared by the circuit breakers controlled by the primary *protection system*, within the applicable *fault clearance time* determined under clause S5.1.9(a)(3).
- (c) The *Network Service Provider* and the *Network User* must cooperate in the design and implementation of *protection systems* to comply with this clause, including cooperation with regard to:
 - (1) the use of *current transformer* and *voltage transformer* secondary circuits (or equivalent) of one party by the *protection system* of the other;
 - (2) tripping of one party's circuit breakers by a *protection system* of the other party; and
 - (3) co-ordination of *protection system* settings to ensure inter-operation.

Before the *Network User's* installation is *connected* to the *Network Service Provider's* transmission or distribution system the *Network User's* *protection system* must be tested and the *Network User* must submit the appropriate test certificate to the *Network Service Provider*.

The application of settings of the protection scheme must be undertaken in accordance with clause S5.3.4.

S5.3.4 Settings of protection and control systems

A *Network User* must only apply settings to a *control system* or a *protection system* that are necessary to comply with performance requirements of this schedule 5.3 if the settings have been approved in writing by the *Network Service Provider* and, if the requirement is one that would involve *NEMMCO* under clause 5.3.4A(c) of the *Rules*, also by *NEMMCO*. A *Network User* must not allow its *plant* to take *supply* of electricity from the *power system* without such prior approval.

If a *Network User* seeks approval from the *Network Service Provider* to apply or change a setting, approval must not be withheld unless the *Network Service Provider* or, if the requirement is one that would involve *NEMMCO* under clause 5.3.4A(c) of the *Rules*, *NEMMCO*, reasonably determines that the changed setting would cause the *plant* to not comply with the relevant *performance standard* or cause an *inter-regional* or *intra-regional power transfer capability* to be reduced.

If the *Network Service Provider* or, if the requirement is one that would involve *NEMMCO* under clause 5.3.4A(c) of the *Rules*, *NEMMCO*, reasonably determines that a setting of a *control system* or *protection system* of the *plant* needs to change to comply with the relevant *performance standard* or to maintain or restore an *inter-regional* or *intra-regional power transfer capability*, the *Network Service Provider* or *NEMMCO* (as applicable) must consult with the *Network User*, and the *Network Service Provider* may request in writing that a setting be applied in accordance with the determination.

The *Network Service Provider* may also request a test to verify the performance of the relevant *plant* with the new setting.

A *Network User* who receives such a request must arrange for the notified setting to be applied as requested and for a test to be conducted as requested. After the test, the *Network User* must, on request, provide both *NEMMCO* and the *Network Service Provider* with a report of a requested test, including evidence of its success or failure. Such a report of a test is *confidential information*.

A *Network User* must not change a setting requested by the *Network Service Provider* without its prior written agreement. If the *Network Service Provider* requires a *Network User* to change a setting within 18 months of a previous request, the *Network Service Provider* must pay the *Network User* its reasonable costs of changing the setting and conducting the tests as requested.

S5.3.5 Power factor requirements

Automatic access standard: For loads equal to or greater than 30 percent of the maximum demand at the connection point the power factors for Network Users and for distribution networks connected to another transmission network or distribution network are shown in Table S5.3.1:

Table S5.3.1

Permissible Range	
Supply Voltage (nominal)	Power Factor Range
> 400 kV	0.98 lagging to unity
250 kV - 400 kV	0.96 lagging to unity
50 kV - 250 kV	0.95 lagging to unity
1 kV < 50 kV	0.90 lagging to 0.90 leading

For load less than 30 percent of the maximum demand at the connection point a Network Service Provider may accept a power factor outside the range stipulated in Table S5.3.1 provided this does not cause the system standards to be violated.

Minimum access standard: A Network Service Provider may permit a lower lagging or leading power factor where the Network Service Provider is advised by NEMMCO that this will not detrimentally affect power system security or reduce intra-regional or inter-regional power transfer capability.

General:

If the power factor falls outside the relevant performance standard over any critical loading period nominated by the Network Service Provider, the Network User must, where required by the Network Service Provider in order to maintain satisfactory voltage levels at the connection point or to restore intra-regional or inter-regional power transfer capability, take action to ensure that the power factor falls within range as soon as reasonably practicable. This may be achieved by installing additional reactive plant or reaching a commercial agreement with the Network Service Provider to install, operate and maintain equivalent reactive plant as part of the connection assets or by alternative commercial arrangements with another party.

A Registered Participant who installs shunt capacitors to comply with power factor requirements must comply with the Network Service Provider's reasonable requirements to ensure that the design does not severely attenuate audio frequency signals used for load control or operations, or adversely impact on harmonic voltage levels at the connection point.

S5.3.6 Balancing of load currents

A *Network Service Provider* may require a *connected Registered Participant's load* to be balanced across all phases in order to maintain the negative sequence voltage at each *connection point* at less than or equal to the limits set out in Table S5.1a.1 of the *system standards* for the applicable nominal *supply voltage* level.

Automatic access standard: A *Network User* must ensure that:

- (a) for *connections* at 30 kV or higher *voltage*, the current in any phase is not greater than 102 percent or less than 98 percent of the average of the currents in the three phases; and
- (b) for *connections* at *voltages* less than 30 kV, that the current in any phase is not greater than 105 percent or less than 95 percent of the average of the currents in the three phases.

Minimum access standard: Where agreed with the relevant *Network Service Provider* and subject to any specific conditions imposed, a *Network User* may cause current unbalance greater than that specified in the *automatic access standard* provided the *Network User* does not cause the limits specified in clause S5.1a.7 to be exceeded at any point in the *network*.

General:

The limit to *load* current unbalance must be included in the *connection agreement* and is subject to verification of compliance by the *Network Service Provider*.

Where these requirements cannot be met the *Registered Participant* may enter into a commercial arrangement with the *Network Service Provider* for the installation of equipment to correct the phase unbalance. Such equipment must be considered as part of the *connection assets* for the *Registered Participant*.

The limit to *load* current unbalance must be included in the *connection agreement* and is subject to verification of compliance by the *Network Service Provider*.

S5.3.7 Voltage fluctuations

- (a) *Automatic access standard:* The *voltage* fluctuations caused by variations in *loading level* at the *connection point*, including those arising from *energisation*, de-energisation or other operation of *plant*, must not exceed the limits determined under clause S5.1.5(a).
- (b) *Minimum access standard:* The *voltage* fluctuations caused by variations in *loading level* at the *connection point*, including those arising from *energisation*, de-energisation or other operation of *plant*, must not exceed the limits determined under clause S5.1.5(b).

The *voltage* fluctuation emission limits and any specified conditions must be included in the *connection agreement*, and are subject to verification of compliance by the *Network Service Provider*.

S5.3.8 Harmonics and voltage notching

- (a) *Automatic access standard*: The harmonic *voltage* distortion caused by non-linearity, commutation of power electronic equipment, harmonic resonance and other effects within the *plant*, must not exceed the limits determined under clause S5.1.6(a).
- (b) *Minimum access standard*: The harmonic *voltage* distortion caused by non-linearity, commutation of power electronic equipment, harmonic resonance and other effects within the *plant*, must not exceed the limits determined under clause S5.1.6(b).

The harmonic *voltage* distortion emission limits and any special conditions must be included in the *connection agreement*, and is subject to verification of compliance by the *Network Service Provider*.

S5.3.9 Design requirements for Network Users' substations

A *Network User* must comply with the following requirements applicable to the design, station layout and choice of equipment for a *substation*:

- (a) safety provisions must comply with requirements applicable to the *participating jurisdiction* notified by the *Network Service Provider*;
- (b) where required by the *Network Service Provider*, appropriate interfaces and accommodation must be incorporated for communication *facilities*, remote monitoring and control and protection of *plant* which is to be installed in the *substation*;
- (c) a *substation* must be capable of continuous uninterrupted operation with the levels of *voltage*, harmonics, unbalance and *voltage* fluctuation specified in the *system standards* as modified in accordance with the relevant provisions of schedule 5.1;
- (d) earthing of primary *plant* in the *substation* must be in accordance with the Electricity Supply Association of Australia Safe Earthing Guide and must reduce step and touch potentials to safe levels;
- (e) *synchronisation facilities* or reclose blocking must be provided if a *generating unit* is *connected* through the *substation*;
- (f) secure electricity supplies of adequate capacity must be provided for *plant* performing communication, monitoring, control and protection functions;

- (g) *plant* must be tested to ensure that the *substation* complies with the approved design and specifications as included in a *connection agreement*;
- (h) the protection equipment required would normally include protection schemes for individual items of *plant*, back-up arrangements, auxiliary DC supplies and instrumentation *transformers*; and
- (i) insulation levels of *plant* in the *substation* must co-ordinate with the insulation levels of the *network* to which the *substation* is *connected* as nominated in the *connection agreement*.

S5.3.10 Load shedding facilities

Network Users who are *Market Customers* and who have expected peak demands in excess of 10MW must provide automatic *interruptible load* in accordance with clause 4.3.5 of the *Rules*.

Load shedding procedures may be applied by *NEMMCO* in accordance with the provisions of clause 4.3.2 of the *Rules* for the shedding of all *loads* including *sensitive loads*.

Schedule 5.3a - Conditions for connection of Market Network Services

S5.3a.1a Introduction to the schedule

This schedule sets out obligations of *Market Network Service Providers* who *connect* to either a *transmission network* or a *distribution network*. It represents the requirements to be met for access to a *network*. Particular provisions may be varied by the *Network Service Provider* under the provisions of the *Rules* for the application of *minimum access standards* and *automatic access standards*.

This schedule includes specific provisions for the determination of *automatic access standards* and *negotiated access standards* derived from *minimum access standards* which, once determined, must be recorded together with the *automatic access standards* in a *connection agreement* and registered with NEMMCO as *performance standards*.

In this schedule, the term "*Network Service Provider*" applies only to the *Network Service Provider* with whom the *Market Network Service Provider* has lodged, or is considering lodging, an *application to connect*.

- (a) The schedule includes, in respect of each *market network service*, provisions regarding the capability to:
 - (1) automatically control the transfer of real power at the *connection point* for any given set of *system* conditions within the limits permitted under the *Rules*;
 - (2) respond to control requirements under expected normal and abnormal conditions;
 - (3) comply with general requirements to meet quality of *supply* obligations in accordance with clauses S5.3a.9, S5.3a.10 and S5.3a.11 and to maintain security of *supply* to other *Registered Participants*; and
 - (4) automatically *disconnect* itself when necessary to prevent any damage to the *market network service facilities* or threat to *power system security*.
- (b) This schedule also sets out the requirements and conditions, which (subject to clause 5.2.3 of the *Rules*) are obligations of *Market Network Service Providers* to:
 - (1) co-operate with the relevant *Network Service Provider* on technical matters when making a new *connection*;
 - (2) provide information to the *Network Service Provider* or NEMMCO; and

- (3) observe and apply the relevant provisions of the *system standards* contained in schedule 5.1a in relation to the planning, design and operation of its *market network service facilities*.
- (c) This schedule does not set out arrangements by which a *Market Network Service Provider* may enter into an agreement or contract with *NEMMCO* to:
 - (1) provide additional services that are necessary to maintain *power system security*; or
 - (2) provide additional service to facilitate management of the *market*.

S5.3a.1 Provision of Information

- (a) Before a *Market Network Service Provider* connects any new or additional equipment to a *network*, the *Market Network Service Provider* must submit the following kinds of information to the *Network Service Provider*:
 - (1) a single line diagram with the protection details;
 - (2) *metering system* design details for any metering equipment being provided by the *Market Network Service Provider*;
 - (3) a general arrangement locating all relevant equipment on the site;
 - (4) a general arrangement for each new or altered *substation* showing all exits and the position of all electrical equipment;
 - (5) type test certificates for all new switchgear and *transformers*, including measurement *transformers* to be used for *metering* purposes in accordance with Chapter 7 of the *Rules*;
 - (6) earthing details;
 - (7) the proposed methods of earthing cables and other equipment to comply with the regulations of the relevant *participating jurisdiction*;
 - (8) *plant* and earth grid test certificates from approved test authorities;
 - (9) a secondary injection and trip test certificate on all circuit breakers;
 - (10) certification that all new equipment has been inspected before being *connected* to the *supply*; and
 - (11) operational arrangements.
- (b) For the purposes of clause 5.3.2(f) of the *Rules*, the technical information that a *Network Service Provider* must, if requested, provide to a *Connection*

Applicant in respect of the proposed *connection* of a *market network service facility* includes:

- (1) the highest expected single phase and three phase fault levels at the *connection point* without the proposed *connection*;
- (2) the clearing times of the existing *protection systems* that would clear a fault at the location at which the new *connection* would be connected into the existing *transmission system* or *distribution system*;
- (3) the expected limits of *voltage* fluctuation, harmonic *voltage* distortion and *voltage* unbalance at the *connection point* without the proposed *connection*;
- (4) technical information relevant to the *connection point* without the proposed *connection* including equivalent source impedance information, sufficient to estimate fault levels, *voltage* fluctuations, harmonic *voltage* distortion and *voltage* unbalance; and
- (5) any other information or data not being *confidential information* relating to the performance of the *Network Service Provider's facilities* that is reasonably necessary for the *Connection Applicant* to prepare an *application to connect*;

except where the *Connection Applicant* agrees the *Network Service Provider* may provide alternative or less detailed technical information in satisfaction of this clause S5.3a.1(b).

S5.3a.2 Application of settings

A *Market Network Service Provider* must only apply settings to a *control system* or a *protection system* that are necessary to comply with performance requirements of this schedule 5.3a if the settings have been approved in writing by the *Network Service Provider* and, if the requirement is one that would involve NEMMCO under clause 5.3.4A(c) of the *Rules*, also by NEMMCO. A *Market Network Service Provider* must not allow its *market network service facilities* to take electricity from the *power system* without such prior approval.

If a *Market Network Service Provider* seeks approval from the *Network Service Provider* to apply or change a setting, approval must not be withheld unless the *Network Service Provider* or, if the requirement is one that would involve NEMMCO under clause 5.3.4A(c) of the *Rules*, NEMMCO, reasonably determines that the changed setting would cause the *market network service facilities* to not comply with the relevant *performance standard* or cause an *inter-regional* or *intra-regional power transfer capability* to be reduced.

If the *Network Service Provider* or, if the requirement is one that would involve NEMMCO under clause 5.3.4A(c) of the *Rules*, NEMMCO, reasonably determines

that a setting of a *market network service facility's control system* or *protection system* needs to change to comply with the relevant *performance standard* or to maintain or restore an *inter-regional* or *intra-regional power transfer capability*, the *Network Service Provider* or *NEMMCO* (as applicable) must consult with the *Market Network Service Provider*, and may request in writing that a setting be applied in accordance with the determination.

The *Network Service Provider* may also request a test to verify the performance of the relevant *plant* with the new setting. The *Network Service Provider* must provide *NEMMCO* with a copy of its request to a *Market Network Service Provider* to apply a setting or to conduct a test.

A *Market Network Service Provider* who receives such a request must arrange for the notified setting to be applied as requested and for a test to be conducted as requested. After the test, the *Market Network Service Provider* must, on request, provide both *NEMMCO* and the *Network Service Provider* with a report of a requested test, including evidence of its success or failure. Such a report of a test is *confidential information*.

A *Market Network Service Provider* must not change a setting requested by the *Network Service Provider* without its prior written agreement. If the *Network Service Provider* requires a *Market Network Service Provider* to change a setting within 18 months of a previous request, the *Network Service Provider* must pay the *Market Network Service Provider* its reasonable costs of changing the setting and conducting the tests as requested.

S5.3a.3 Technical matters to be co-ordinated

A *Market Network Service Provider* and the relevant *Network Service Provider* must use all reasonable endeavours to agree upon the following matters in respect of each new or altered *connection* of a *market network service facility* to a *network*:

- (a) design at the *connection point*;
- (b) physical layout adjacent to the *connection point*;
- (c) primary protection and backup protection (clause S5.3a.6);
- (d) control characteristics (clause S5.3a.4);
- (e) communications and alarms (clause S5.3a.4);
- (f) insulation co-ordination and lightning protection;
- (g) fault levels and *fault clearance times*;
- (h) switching and *isolation facilities*;

- (i) interlocking arrangements; and
- (i) *metering installations* as described in Chapter 7 of the *Rules*.

S5.3a.4 Monitoring and control requirements

S5.3a.4.1 Remote Monitoring

- (a) *Automatic access standard:*
 - (1) Each *market network service facility* must have *remote monitoring equipment* to transmit to *NEMMCO's control centres* in real time, the quantities that *NEMMCO* reasonably requires to discharge its *market* and *power system security* functions as set out in Chapters 3 and 4 of the *Rules* respectively.
 - (2) The quantities may include such data as current, *voltage*, *active power*, *reactive power*, operational limits and critical temperatures in respect of *connection points* and power conversion systems.
- (b) *Minimum access standard:*
 - (1) Each *market network service facility* must have *remote monitoring equipment* to transmit to *NEMMCO's control centres* in real time:
 - (A) *connection point active power* flow, *reactive power* flow and *voltage*;
 - (B) *active power*, *reactive power* and *voltage* for AC power lines, *transformers* and *busbars*, and power and *voltage* (or alternatively current) for DC power lines; and
 - (C) the status of circuit breakers.
- (c) The negotiation of access standards in relation to this clause S5.3a.4.1 must involve *NEMMCO* under clause 5.3.4A(c) of the *Rules*.

S5.3a.4.2 [Deleted]

S5.3a.4.3 Communications equipment

A *Market Network Service Provider* must provide electricity *supplies* for *remote monitoring equipment* and *remote control equipment* installed in relation to its *market network service facilities* capable of keeping such equipment available for at least three hours following total loss of *supply* at the *connection point* for the relevant *market network service facility*.

A *Market Network Service Provider* must provide communications paths (with appropriate redundancy) from the *remote monitoring equipment* or *remote control equipment* installed at any of its *market network service facilities* to a communications interface in a location reasonably acceptable to the *Network Service Provider* at the relevant *connection point*. Communications systems between this communications interface and the *control centre* are the responsibility of the *Network Service Provider* unless otherwise agreed by the *Market Network Service Provider* and the *Network Service Provider*.

Telecommunications between *Network Service Providers* and *Market Network Service Providers* for *operational communications* must be established in accordance with the requirements set down below.

(a) Primary Speech Facility

The relevant *Network Service Provider* must provide and maintain equipment by means of which routine and emergency control telephone calls may be established between the *Market Network Service Provider's* responsible Engineer/Operator and NEMMCO.

The *facilities* to be provided, including the interface requirement between the *Network Service Provider's* equipment and the *Market Network Service Provider's* equipment, must be specified by the *Network Service Provider*.

The costs of the equipment must be recovered by the *Network Service Provider* only through the charge for *connection*.

(b) Back-up Speech Facility

Where the *Network Service Provider* or NEMMCO reasonably determines that a back-up speech *facility* to the primary *facility* is required, the *Network Service Provider* must provide and maintain a separate telephone link or radio installation on a cost-recovery basis only through the charge for *connection*.

The *Network Service Provider* is responsible for radio system planning and for obtaining all necessary radio licences.

S5.3a.5 Design standards

A *Market Network Service Provider* must ensure that:

- (a) the electrical *plant* in its *facility* complies with the relevant *Australian Standards* as applicable at the time of first installation of that electrical *plant* in the *facility*;

- (b) circuit breakers provided to isolate the *Market Network Service Provider's facilities* from the *Network Service Provider's facilities* are capable of breaking, without damage or restrike, fault currents nominated by the *Network Service Provider* in the relevant *connection agreement*; and
- (c) all new equipment including circuit breakers provided to isolate the *Market Network Service Provider's facilities* from the *Network Service Provider's facilities* is capable of withstanding, without damage, power frequency voltages and impulse levels nominated by the *Network Service Provider* in accordance with the relevant provisions of the *system standards* and recorded in the relevant *connection agreement*.

S5.3a.6 Protection systems and settings

A *Market Network Service Provider* must ensure that all *connections* to the *network* are protected by protection devices which effectively and safely *disconnect* any faulty circuit automatically within a time period specified by the *Network Service Provider* in accordance with the following provisions:

- (a) The *automatic access standard* is:
 - (1) Primary *protection systems* must be provided to *disconnect* any faulted element from the *power system* within the applicable *fault clearance time* determined under clause S5.1.9(a)(1), but subject to clauses S5.1.9(k) and S5.1.9(l).
 - (2) Each primary *protection system* must have sufficient redundancy to ensure that a faulted element within its protection zone is *disconnected* from the *power system* within the applicable *fault clearance time* with any single protection element (including any communications facility upon which that *protection system* depends) out of service.
 - (3) *Breaker fail protection systems* must be provided to clear faults that are not cleared by the circuit breakers controlled by the primary *protection system*, within the applicable *fault clearance time* determined under clause S5.1.9(a)(1).
- (b) The *minimum access standard* is:
 - (1) Primary *protection systems* must be provided to *disconnect* from the *power system* any faulted element within their respective protection zones within the applicable *fault clearance time* determined under clause S5.1.9(a)(2), but subject to clauses S5.1.9(k) and S5.1.9(l).
 - (2) If a *fault clearance time* determined under clause S5.1.9(a)(2) for a protection zone is less than 10 seconds, a *breaker fail protection system* must be provided to clear from the *power system* any fault within that protection zone that is not cleared by the circuit breakers

controlled by the primary *protection system*, within the applicable *fault clearance time* determined under clause S5.1.9(a)(3).

- (c) The *Network Service Provider* and the *Market Network Service Provider* must cooperate in the design and implementation of *protection systems* to comply with this clause, including cooperation with regard to:
- (1) the use of *current transformer* and *voltage transformer* secondary circuits (or equivalent) of one party by the *protection system* of the other;
 - (2) tripping of one party's circuit breakers by a *protection system* of the other party; and
 - (3) co-ordination of *protection system* settings to ensure inter-operation.

The *Market Network Service Provider* must ensure that the protection settings of its protective equipment grade with the *Network Service Provider's transmission system* or *distribution system* protection settings. Similarly the grading requirements of fuses must be co-ordinated with the *Network Service Provider*. The *Market Network Service Provider* must provide details of the protection scheme implemented by the *Market Network Service Provider* to the *Network Service Provider* and must liaise with the *Network Service Provider* when determining gradings and settings.

The application of settings of the protection scheme must be undertaken in accordance with clause S5.3a.2.

Before the *Market Network Service Provider's* installation is *connected* to the *Network Service Provider's transmission or distribution system* the *Market Network Service Provider's protection system* must be tested and the *Market Network Service Provider* must submit the appropriate test certificate to the *Network Service Provider*.

S5.3a.7 [Deleted]

S5.3a.8 Reactive power capability

Subject to the access standards stated in this clause S5.3a.8, if additional *reactive support* is required as a result of the *connection* or operation of the *network elements* which provide a *market network service* then the requisite *reactive support* must be supplied or paid for by the *Market Network Service Provider*.

Additional reactive support is required if, at rated power output as measured at the *connection point* of the *market network service* the *market network service* has a lagging power factor of less than 0.9 or a leading power factor of less than 0.95.

Automatic access standard: For power export, at rated power output and target *network voltage* as determined in accordance with clause S5.1a.4 of the *system standards* when measured at the *connection point* of the *market network service*, the *market network service* must be capable of operation in the range from a lagging power factor of 0.9 to a leading power factor of 0.95. For power import, the power factor must satisfy the requirements of clause S5.3.5 of schedule 5.3.

Minimum access standard: With the agreement of NEMMCO and the *Network Service Provider*, a power factor capability less than that defined by the *automatic access standard* may be provided if the requirements of the *system standards* are satisfied under all operating conditions of the *market network service*.

S5.3a.9 Balancing of load currents

A *Network Service Provider* may require a *Market Network Service Provider's* *power transfer* to be balanced at a *connection point* in order to maintain the negative sequence *voltage* at each connection point at less than or equal to the limits set out in Table S5.1a.1 of the *system standards* for the applicable nominal *supply voltage* level.

Automatic access standard: A *Market Network Service Provider* must ensure that for *connections* at 11kV or higher *voltage*, the current in any phase drawn by its equipment from the *Network Service Provider's network* is not greater than 102 percent or less than 98 percent of the average of the currents in the three phases.

Minimum access standard: Where agreed with the relevant *Network Service Provider* and subject to any specific conditions imposed, a *Market Network Service Provider* may cause current unbalance greater than that specified in the *automatic access standard* provided the *Market Network Service Provider* does not cause the limits specified in clause S5.1a.7 of the *system standards* to be exceeded at any point in the *network*.

Where these requirements cannot be met the *Market Network Service Provider* may enter into a commercial arrangement with the *Network Service Provider* for the installation of equipment to correct the phase unbalance. Such equipment must be considered as part of the *connection assets* for the *Market Network Service Provider*.

The limit to *power transfer* current unbalance must be included in the *connection agreement* and is subject to verification of compliance by the *Network Service Provider*.

S5.3a.10 Voltage fluctuations

- (a) *Automatic access standard:* The *voltage* fluctuations caused by variations in *loading level* at the *connection point*, including those arising from

energisation, de-energisation or other operation of plant, must not exceed the limits determined under clause S5.1.5(a).

- (b) *Minimum access standard*: The *voltage* fluctuations caused by variations in *loading level* at the *connection point*, including those arising from *energisation, de-energisation or other operation of plant*, must not exceed the limits determined under clause S5.1.5(b).

The *voltage* fluctuation emission limits and any specified conditions must be included in the *connection agreement*, and are subject to verification of compliance by the *Network Service Provider*.

S5.3a.11 Harmonics and voltage notching

- (a) *Automatic access standard*: The harmonic *voltage* distortion caused by non-linearity, commutation of power electronic equipment, harmonic resonance and other effects within the *plant*, must not exceed the limits determined under clause S5.1.6(a).
- (b) *Minimum access standard*: The harmonic *voltage* distortion caused by non-linearity, commutation of power electronic equipment, harmonic resonance and other effects within the *plant*, must not exceed the limits determined under clause S5.1.6(b).

A *Market Network Service Provider* must ensure that all of its *plant connected* to a *transmission network* or *distribution network* is capable of withstanding the effects of harmonic levels produced by that *plant* plus those imposed from the *network*.

The harmonic *voltage* distortion emission limits and any special conditions must be included in the *connection agreement*, and are subject to verification of compliance by the *Network Service Provider*.

S5.3a.12 Design requirements for Market Network Service Providers' substations

A *Market Network Service Provider* must comply with the following requirements applicable to the design, station layout and choice of equipment for a *substation*:

- (a) safety provisions must comply with requirements applicable to the *participating jurisdiction* notified by the *Network Service Provider*;
- (b) where required by the *Network Service Provider*, appropriate interfaces and accommodation must be incorporated for communication *facilities*, remote monitoring and control and protection of *plant* which is to be installed in the *substation*;

- (c) a *substation* must be capable of continuous uninterrupted operation with the levels of *voltage*, harmonics, unbalance and *voltage* fluctuation specified in the *system standards* as modified in accordance with the relevant provisions of schedule 5.1;
- (d) earthing of primary *plant* in the *substation* must be in accordance with the Electricity Supply Association of Australia Safe Earthing Guide and must reduce step and touch potentials to safe levels;
- (e) *synchronisation facilities* or reclose blocking must be provided if necessary;
- (f) secure electricity supplies of adequate capacity must be provided for *plant* performing communication, monitoring, control and protection functions;
- (g) *plant* must be tested to ensure that the *substation* complies with the approved design and specifications as included in a *connection agreement*;
- (h) the protection equipment required would normally include protection schemes for individual items of *plant*, back-up arrangements, auxiliary DC supplies and instrumentation *transformers*; and
- (i) insulation levels of *plant* in the *substation* must co-ordinate with the insulation levels of the *network* to which the *substation* is *connected* as nominated in the *connection agreement*.

S5.3a.13 Market network service response to disturbances in the power system

- (a) Each *market network service* must be capable of continuous uninterrupted operation during the occurrence of:
 - (1) *power system frequency* within the *frequency operating standards*; or
 - (2) the range of *voltage* variation conditions permitted by the *system standards*.
- (b) The equipment associated with each *market network service* must be designed to withstand without damage or reduction in life expectancy the harmonic distortion and *voltage* unbalance conditions determined to apply in accordance with the provisions of schedule 5.1, clauses S5.1.6 and S5.1.7, respectively, at the *connection point*.

S5.3a.14 Protection of market network services from power system disturbances

- (a) *Minimum access standard*: If a *Connection Applicant* requires that its *market network service facility* be automatically *disconnected* from the *power system* in response to abnormal conditions arising from the *power*

system, the relevant *protection system* or *control system* must not *disconnect* the *facility* for conditions under which it must continuously operate or must withstand under a provision of the *Rules*.

- (b) There is no *automatic access standard* for this technical requirement.
- (c) For the purposes of this clause S5.3a.14, the abnormal conditions include:
 - (1) *frequency* outside the *extreme frequency excursion tolerance limits*;
 - (2) sustained and uncontrollable DC current beyond a short term current rating for the period assigned to that rating;
 - (3) DC *voltage* above the *voltage* maximum rating or sustained below any lower limit for stable operation;
 - (4) *voltage* to *frequency* ratio beyond a *transformer* magnetic flux based *voltage* to *frequency* rating;
 - (5) sustained *voltage* fluctuations at the *connection point* beyond the level determined under clause S5.1.5(a);
 - (6) sustained harmonic *voltage* distortion at the *connection point* beyond the level determined under clause S5.1.6(a);
 - (7) sustained negative phase sequence *voltage* at the *connection point* beyond the level determined under clause S5.1.7(a); and
 - (8) any similar condition agreed between the *Market Network Service Provider* and *NEMMCO* after consultation with each relevant *Network Service Provider*.
- (d) The negotiation of access standards in relation to this clause S5.3a.14 must involve *NEMMCO* under clause 5.3.4A(c) of the *Rules*.
- (e) The *Network Service Provider* is not liable for any loss or damage incurred by the *Market Network Service Provider* or any other person as a consequence of a fault on either the *power system*, or within the *Market Network Service Provider's facility*.

Schedule 5.4 - Information to be Provided with Preliminary Enquiry

The following items of information are required to be submitted with a preliminary enquiry for *connection* or modification of an existing *connection*:

- (a) Type of *plant* - (eg. gas turbine *generating unit*; rolling mill, etc.).
- (b) Preferred site location - (listing any alternatives in order of preference as well).
- (c) Maximum power *generation* or demand of whole *plant* - (maximum MW and/or MVA, or average over 15 minutes or similar).
- (d) Expected *energy* production or consumption (MWh per month).
- (e) *Plant* type and configuration - (eg. number and type of *generating units* or number of separate production lines).
- (f) Nature of any disturbing *load* (size of disturbing component MW/MVAr, duty cycle, nature of power electronic *plant* which may produce harmonic distortion).
- (g) Technology of proposed *generating unit* (e.g. *synchronous generating unit*, induction generator, photovoltaic array, etc).
- (h) When *plant* is to be in service - (eg. estimated date for each *generating unit*).
- (i) Name and address of enquirer, and, if relevant, of the party for whom the enquirer is acting.
- (j) Other information may be requested by the *Network Service Provider*, such as amount and timing of power required during construction or any auxiliary power requirements.

Schedule 5.5 - Technical Details to Support Application for Connection and Connection Agreement

S5.5.1 Introduction to the Schedule

Various sections of the *Rules* require that *Registered Participants* submit technical data to the *Network Service Provider*. This schedule lists the range of data which may be required. The actual data required will be advised by the *Network Service Provider*, and will form part of the technical specification in the *connection agreement*. These data will also be made available to *NEMMCO* and to other *Network Service Providers* by the *Network Service Provider* at the appropriate time.

S5.5.2 Categories of Data

Data is coded in categories, according to the stage at which it is available in the build-up of data during the process of forming a *connection* or obtaining access to a *network*, with data acquired at each stage being carried forward, or enhanced in subsequent stages, eg. by testing.

Preliminary system planning data

Preliminary system planning data is required for submission ~~This data is required for submission~~ with the *application to connect*, to allow the *Network Service Provider* to prepare an offer of terms and conditions for a *connection agreement* and to assess the requirement for, and effect of, *network augmentation* or *extension* options. Such data is normally limited to the items denoted as Standard Planning Data (S) in the *Generating System Model Guidelines*, *Generating System Design Data Sheet*, *Generating System Setting Data Sheet* and in schedules 5.5.3 to 5.5.5.

The *Network Service Provider* may, in cases where there is reasonable doubt as to the viability of a proposal, require the submission of other data before making an offer to *connect* or to amend a *connection agreement*.

Registered system planning data

Registered system planning data is the class of data ~~This is the class of data~~ which will be included in the *connection agreement* signed by both parties. It consists of the preliminary system planning data plus those items denoted in the attached schedules as Detailed Planning Data (D). The latter must be submitted by the *Registered Participant* in time for inclusion in the *connection agreement*.

Registered data

Registered Data consists of data validated and agreed between the *Network Service Provider* and the *Registered Participant*, such data being:

- (a) prior to actual *connection* and provision of access, data derived from manufacturers' data, detailed design calculations, works or site tests etc. (R1); and
- (b) after connection, data derived from on-system testing (R2).

All of the data will, from this stage, be categorised and referred to as Registered Data; but for convenience the schedules omit placing a higher ranked code next to items which are expected to already be valid at an earlier stage.

S5.5.3 Review, change and supply of data

Data will be subject to review at reasonable intervals to ensure its continued accuracy and relevance. The *Network Service Provider* must initiate this review. A *Registered Participant* may *change* any data item at a time other than when that item would normally be reviewed or updated by submission to the *Network Service Provider* of the revised data, together with authentication documents, eg. test reports.

The *Network Service Provider* must supply data relating to its system to other *Network Service Providers* for planning purposes and to other *Registered Participants* and NEMMCO as specified in the various sections of the *Rules*, including through the *statement of opportunities*.

S5.5.4 Data Requirements

Schedules 5.5.3 to 5.5.5 cover the following data areas:

- (a) schedule 5.5.3 - Network Plant Technical Data. This comprises fixed electrical parameters.
- (b) schedule 5.5.4 - Plant and Apparatus Setting Data. This comprises settings which can be varied by agreement or by direction of the *Network Service Provider* or NEMMCO.
- (c) schedule 5.5.5 - *Load Characteristics*. This comprises the estimated design parameters of *loads*.

The documents and schedules applicable to each class of *Registered Participant* are as follows:

- (a) *Generators*: the *Generating System Model Guidelines*, *Generating System Design Data Sheet* and *Generating System Setting Data Sheet*;
- (b) *Customers* and *Network Service Providers*: schedules 5.5.3 and 5.5.4; and

- (c) *Customers:* schedule 5.5.5.

S5.5.5 Asynchronous generating unit data

A *Generator* that connects a generating system, that is an *asynchronous generating unit*, must be given exemption from complying with those parts of the *Generating System Model Guidelines*, *Generating System Design Data Sheet* and *Generating System Setting Data Sheet* that are determined by the *Network Service Provider* to be not relevant to such *generating systems*, but must comply with those parts of schedules 5.5.3, 5.5.4, and 5.5.5 that are relevant to such *generating systems*, as determined by the *Network Service Provider*.

S5.5.6 Generating units equal to or smaller than 30MW data

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

Codes:

S = Standard Planning Data

D = Detailed Planning Data

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

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

- (a) NEMMCO must, subject to paragraph (b), develop and *publish* by 1 March 2008, in accordance with the *Rules consultation procedures*:
- (1) a *Generating System Design Data Sheet* describing, for relevant technologies, the *generating system* design parameters of *generating units* and *generating systems* including *plant* configurations, impedances, time constants, non-linearities, ratings and capabilities, to be provided under clauses S5.2.4 and this schedule 5.5;
 - (2) a *Generating System Setting Data Sheet* describing, for relevant *generation* and *control system* technologies, the *protection system* and *control system* settings of *generating units* and *generating systems* including configurations, gains, time constants, delays, deadbands,

non-linearities and limits, to be provided under clauses S5.2.4 and this schedule 5.5; and

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

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

- (b) When developing and *publishing* the *Generating System Design Data Sheet*, *Generating System Setting Data Sheet* and *Generating System Model Guidelines* under paragraph (a), NEMMCO must have regard to the purpose of developing and *publishing* the sheets and guidelines which is to:
 - (1) allow *generating units* and *generating systems* to be mathematically modelled by NEMMCO in load flow and dynamic stability assessments with sufficient accuracy to permit:
 - (i) the *power system* operating limits for ensuring *power system security* to be quantified with the lowest practical safety margins;
 - (ii) proposed *access standards* and *performance standards* of *generating units* and *generating systems* to be assessed; and
 - (iii) settings of *control systems* and *protection systems* of *generating units*, *generating systems* and *networks* to be assessed and quantified for maximum practical performance of the *power system*; and
 - (2) identify for each type of data its category in terms of clause S5.5.2.
- (c) Any person may submit a request (with written reasons) to NEMMCO to amend the *Generating System Design Data Sheet*, *Generating System Setting Data Sheet* or the *Generating System Model Guidelines* and NEMMCO must conduct the *Rules consultation procedures* in relation to the request.
- (d) NEMMCO can make amendments requested under paragraph (c) or otherwise to the *Generating System Design Data Sheet*, *Generating System Setting Data Sheet* or the *Generating System Model Guidelines* without conducting the *Rules consultation procedures* if the amendment is minor or administrative in nature.

- (e) *NEMMCO* may at the conclusion of the *Rules consultation procedures* under paragraph (c) or otherwise under paragraph (d), amend the relevant data sheet or guidelines (if necessary).

Schedule 5.5.1 - [Deleted]

Schedule 5.5.2 - [Deleted]

Schedule 5.5.3 - Network and plant technical data of equipment at or near connection point

Data Description	Units	Data Category
Voltage Rating		
Nominal <i>voltage</i>	kV	S, D
Highest <i>voltage</i>	kV	D
Insulation Co-ordination		
Rated lightning impulse withstand <i>voltage</i>	kVp	D
Rated short duration power <i>frequency</i> withstand <i>voltage</i>	kV	D
Rated Currents		
Circuit maximum current	kA	S, D
Rated Short Time Withstand Current	kA for seconds	D
Ambient conditions under which above current applies	Text	S,D
Earthing		
System Earthing Method	Text	S, D
Earth grid rated current	kA for seconds	D
Insulation Pollution Performance		
Minimum total creepage	mm	D
Pollution level	Level of IEC 815	D

Data Description	Units	Data Category
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Controls

Remote control and data transmission arrangements	Text	D
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Metering Provided by Customer

Measurement <i>transformer</i> ratios:		D
<i>Current transformers</i>	A/A	D
<i>Voltage transformers</i>	V/kV	D
Measurement <i>Transformer</i> Test Certification details	Text	R1

Network Configuration

Operation Diagrams showing the electrical circuits of the existing and proposed main <i>facilities</i> within the <i>Registered Participant's</i> ownership including <i>busbar</i> arrangements, phasing arrangements, earthing arrangements, switching <i>facilities</i> and operating <i>voltages</i> .	Single line Diagrams	S, D, R1
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Network Impedance

For each item of <i>plant</i> : details of the positive, negative and zero sequence series and shunt impedance, including mutual coupling between physically adjacent elements.	% on 100 MVA base	S, D, R1
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Short Circuit Infeed to the Network

Maximum generator 3-phase short circuit infeed including infeeds from <i>generating units connected</i> to the <i>Registered Participant's system</i> , calculated by method of AS 3851 (1991).	kA symmetric al	S, D, R1
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The total infeed at the instant of fault (including contribution of induction motors).	kA	D, R1
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Minimum zero sequence impedance of <i>Registered Participant's network</i> at <i>connection point</i> .	% on 100 MVA base	D, R1
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Data Description	Units	Data Category
Minimum negative sequence impedance of <i>Registered Participant's network at connection point.</i>	% on 100 MVA base	D, R1

Load Transfer Capability:

Where a *load*, or group of *loads*, may be fed from alternative *connection points*:

<i>Load</i> normally taken from <i>connection point X</i>	MW	D, R1
<i>Load</i> normally taken from <i>connection point Y</i>	MW	D, R1
Arrangements for transfer under planned or fault <i>outage</i> conditions	Text	D

Circuits Connecting Embedded Generating Units to the Network:

For all *generating units*, all connecting lines/cables, *transformers* etc.

Series Resistance	% on 100 MVA base	D, R
Series Reactance	% on 100 MVA base	D, R
Shunt Susceptance	% on 100 MVA base	D, R
Normal and short-time emergency ratings	MVA	D,R
Technical Details of <i>generating units</i> and <i>generating systems</i> as per the <i>Generating System Design Data Sheet</i> , <i>Generating System Setting Data Sheet</i> and the <i>Generating System Model Guidelines</i> where such details are not <i>confidential information</i>		

Transformers at connection points:

Saturation curve	Diagram	R
Equipment associated with DC Links		
Number of poles	MVA	D,R
Converters per station	Quantity	D,R
Reactive Power consumption of converters	MCAr	D,R

Data Description	Units	Data Category
Location and Rating of A.C. Filters	MVAr	D,R
Location and Rating of Shunt Capacitors	MVAr	D,R
Location and Rating of Smoothing <i>Reactor</i>	MVAr	D,R
Location and Rating of DC Filter	MVAr	D,R

Schedule 5.5.4 - Network Plant and Apparatus Setting Data

Data Description	Units	Data Category
Protection Data for Protection relevant to Connection Point:		
Reach of all protections on <i>transmission lines</i> , or cables	ohms or % on 100 MVA base	S, D
Number of protections on each item	Text	S, D
Total fault clearing times for near and remote faults	ms	S, D, R1
Line reclosure sequence details	Text	S, D, R1
Tap Change Control Data:		
Time delay settings of all <i>transformer</i> tap changers.	Seconds	D, R1
Reactive Compensation:		
Location and Rating of individual <i>shunt reactors</i>	MVAr	D, R1
Location and Rating of individual <i>shunt capacitor banks</i>	MVAr	D, R1
<i>Capacitor bank</i> capacitance	microfarads	D
Inductance of switching <i>reactor</i> (if fitted)	millihenries	D
Resistance of capacitor plus <i>reactor</i>	Ohms	D
Details of special controls (e.g. Point-on-wave switching)	Text	D

For each shunt reactor or capacitor bank:

Data Description	Units	Data Category
Method of switching	Text	S
Details of automatic control logic such that operating characteristics can be determined	Text	D, R1

FACTS Installation:

Data sufficient to enable static and dynamic performance of the installation to be modelled	Text, diagrams control settings	S, D, R1
Transmission line flow control device	Text, diagrams	D
Details of the operation of the control device under normal operation conditions (including startup and shutdown of the line) and during a fault (close up and remote)		
Models for the control device and transmission line appropriate for load flow, small signal stability and transient stability analysis	Text, diagrams	D
Capability of the line flow control device	KA, MVA, MW	D
Details of the rate of change of flow capability of the control device	Text	D
Details of the capability of the control device to provide frequency and voltage control	Text	D
Description of possible failure modes of control device	Text	D
Details of performance of the control device under disturbance conditions including changes in AC frequency, variations in AC system voltages and AC system waveform distortion.	Text	D
For DC control devices, contribution to the AC system short circuit level	KA, MVA	D

Schedule 5.5.5 - Load Characteristics at Connection Point

Data Description	Units	Data Category
For all Types of Load		

Data Description	Units	Data Category
Type of <i>Load</i> eg controlled rectifiers or large motor drives	Text	S
For Fluctuating Loads		
Cyclic variation of <i>active power</i> over period	Graph MW/time	S
Cyclic variation of <i>reactive power</i> over period	Graph MVar/time	S
Maximum rate of change of <i>active power</i>	MW/s	S
Maximum rate of change of <i>reactive power</i>	MVar/s	S
Shortest Repetitive time interval between fluctuations in active and <i>reactive power</i> reviewed annually	s	S
Largest Step Change:		
In <i>active power</i>	MW	S
In <i>reactive power</i>	MVar	S

Schedule 5.6 - Terms and Conditions of Connection agreements

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

- (a) details of the *connection point* including the *distribution network coupling points* where appropriate;
- (b) *metering* arrangements and adjustments for losses where the point of *metering* is significantly different to the *connection point*;
- (c) authorised demand which may be taken or supplied at the *connection point* (under specified conditions);
- (c1) details of each *access standard* agreed between the *Network Service Provider* and the *Registered Participant* and all related conditions of agreement resulting from the application of any access provisions contained in schedule 5.1 for *Network Service Providers*, or schedule 5.2 for *Generators*, or schedule 5.3 for *Customers*, or schedule 5.3a for *Market Network Service Providers*;
- (d) *connection service charges*;
- (e) payment conditions;
- (f) duration and termination conditions of the *connection agreement*;
- (g) terms, conditions and *constraints* that have been agreed to for *connection* to the *network* to protect the legitimate interest of the *Network Service Providers* including rights to *disconnect* the *Registered Participant* for breach of commercial undertakings;
- (h) details of any agreed standards of *reliability* of *transmission service* or *distribution service* at the *connection points* or within the *network*;
- (i) testing intervals for *protection systems* associated with the *connection point*;
- (j) agreed protocols for maintenance co-ordination;
- (k) where an expected *load*, to be connected to a *network*, has a *peak load* requirement in excess 10 MW, the provision, installation, operation and maintenance of automatic *load* shedding facilities for 60 percent of the *load* at anytime; and
- (l) terms and conditions of access to the *metering installation* for the *Metering Provider*.

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

Schedule 5.7 - Annual Forecast Information for Planning Purposes

This schedule sets out the information in respect of each *connection point* that must be provided to the relevant *Network Service Provider* by each *Registered Participant* that has a *connection point* to a *transmission network* of that *Network Service Provider*.

Data Description	Units	Time Scale	Data Category
At each <i>connection point</i> to a <i>transmission network</i> , a forecast of:			
Annual Maximum <i>Active power</i> - Winter	MW	years 1-10	Annual
Coincident <i>Reactive Power</i> - Winter	MVAr	years 1-10	Annual
Annual Maximum <i>Active power</i> - Summer	MW	years 1-10	Annual
Coincident <i>Reactive Power</i> - Summer	MVAr	years 1-10	Annual
Forecast <i>load diversity</i> between each <i>connection point</i> to the <i>network</i> (winter and summer)	%	years 1-5	Annual

Load Profiles:

The following forecast daily *profiles* of *connection point* half-hourly average active and reactive *loads* are required, net of all *generating plant*:

Day of the peak summer and winter MW peak load at <i>connection point</i>	MW and MVAr	years 1-5	Annual
Day of <i>network</i> peak summer and winter MW load (as specified)	MW and MVAr	years 1-5	Annual

Data Description	Units	Time Scale	Data Category
Each July, October, January, April under average conditions representing:			
(a) weekdays	MW and MVA _r	years 1-5	Annual
(b) Saturdays	MW and MVA _r	years 1-5	Annual
(c) Sundays/holidays	MW and MVA _r	years 1-5	Annual
Day of the <i>network</i> minimum demand (as specified)	MW and MVA _r	years 1-5	Annual
Undispatched <i>generation</i> :			
For each <i>connection point</i> to the <i>network</i> the following information is required:			
No. of <i>generating units</i>	No.	years 1-5	Annual
Capacity of each <i>generating unit</i>	MW (<i>sent out</i>)	years 1-5	Annual
Daily/Seasonal Operating characteristics	Text	years 1-5	Annual
Expected output at time of peak <i>network</i> Winter <i>load</i> (as specified)	MW	years 1-5	Annual
Expected output at time of peak <i>network</i> Summer <i>load</i> (as specified)	MW	years 1-5	Annual

CHAPTER 6

Chapter 6 Economic Regulation of Distribution Services

Part A Introduction

6.1 Introduction to Chapter 6

6.1.1 AER's regulatory responsibility

The *AER* is responsible, in accordance with this Chapter, for the economic regulation of *distribution services* provided by means of, or in connection with, *distribution systems* that form part of the *national grid*.

6.1.2 Structure of this Chapter

- (a) This Chapter deals with the classification and economic regulation of *distribution services*.
- (b) It is divided into parts as follows:
 - (1) this Part is introductory;
 - (2) Part B confers power on the *AER* to classify *distribution services*, to determine the forms of control for *distribution services*, and to make distribution determinations;
 - (3) Part C sets out the building block approach to the regulation of services classified as *standard control services*;
 - (4) Part D regulates the prices that may be charged by *Distribution Network Service Providers* for the provision of services classified as *negotiated distribution services*;
 - (5) Part E sets out the procedures for making a distribution determination;
 - (6) Part F regulates cost allocation;
 - (7) Part G contains the distribution consultation procedures;
 - (8) Part H deals with ring-fencing;
 - (9) Part I deals with *tariff classes* and tariffs;
 - (10) Part J deals with billing and settlements;
 - (11) Part K deals with prudential requirements, prepayments and capital contributions;

- (12) Part L deals with dispute resolution;
- (13) Part M deals with the disclosure of transmission and distribution charges; and
- (14) Part N provides for services provided by, or in connection with, *dual function assets* to be the subject of distribution determinations.

6.1.3 Access to direct control services and negotiated distribution services

- (a) Subject to and in accordance with the *Rules*:
 - (1) a person (a *Service Applicant*) may apply to a *Distribution Network Service Provider* for provision of *direct control services* or *negotiated distribution services*;
 - (2) a *Distribution Network Service Provider* must provide *direct control services* or *negotiated distribution services* (as the case may be) on *terms and conditions of access* as determined under Chapters 4, 5, this Chapter 6 and Chapter 7 of the Rules.
- (b) The *terms and conditions of access* are:
 - (1) in relation to *negotiated distribution services*:
 - (i) the price of those services (including, if relevant, *access charges*); and
 - (ii) other terms and conditions for the provision of those services;
 - (2) in relation to *direct control services*:
 - (i) the price of those services under the *approved pricing proposal*; and
 - (ii) other terms and conditions for the provision of those services.

6.1.4 Prohibition of DUOS charges for the export of energy

- (a) A *Distribution Network Service Provider* must not charge a *Distribution Network User* *distribution use of system* charges for the export of electricity generated by the user into the *distribution network*.
- (b) This does not, however, preclude charges for the provision of *connection services*.

Part B Classification of Distribution Services and Distribution Determinations

~~Division 1 Classification of distribution services~~

6.2 Classification

6.2.1 Classification of distribution services

- (a) The AER may classify a *distribution service* to be provided by a *Distribution Network Service Provider* as:

- (1) a *direct control service*; or
- (2) a *negotiated distribution service*.

Note:

If the AER decides against classifying a distribution service, the service is not regulated under the Rules.

- (b) The AER may group *distribution services* together for the purpose of classification and, if it does so, a single classification made for the group applies to each service comprised in the group as if it had been separately classified.
- (c) The AER must, in classifying a *distribution service* or *distribution services*, have regard to:
- (1) the form of regulation factors; and
 - (2) the form of regulation (if any) previously applicable to the relevant service or services and, in particular, any previous classification under the present system of classification or under the previous regulatory system (as the case requires); and
 - (3) the desirability of consistency in the form of regulation for similar services (both within and beyond the relevant jurisdiction); and
 - (4) any other relevant factor.
- (d) In classifying *distribution services* that have previously been subject to regulation under the present or earlier legislation, the AER must act on the basis that, unless a different classification is clearly more appropriate:
- (1) there should be no departure from a previous classification (if the services have been previously classified); and

- (2) if there has been no previous classification – the classification should be consistent with the previously applicable regulatory approach.
- (e) If the *Rules*, however, require that a particular classification be assigned to a *distribution service* of a specified kind, a *distribution service* of the relevant kind is to be classified in accordance with that requirement.

6.2.2 Classification of direct control services as standard control services or alternative control services

- (a) *Direct control services* are to be further divided into 2 subclasses:
 - (1) *standard control services*; and
 - (2) *alternative control services*.
- (b) The *AER* may group *direct control services* together for the purpose of classification and, if it does so, a single classification made for the group applies to each service comprised in the group as if it had been separately classified.
- (c) The *AER* must, in classifying a *direct control service* as a *standard control service* or an *alternative control service*, have regard to:
 - (1) the potential for development of competition in the relevant market and how the classification might influence that potential; and
 - (2) the possible effects of the classification on administrative costs of the *AER*, the *Distribution Network Service Provider* and users or potential users; and
 - (3) the regulatory approach (if any) applicable to the relevant service immediately before the commencement of the distribution determination for which the classification is made; and
 - (4) the desirability of a consistent regulatory approach to similar services (both within and beyond the relevant jurisdiction); and
 - (5) the extent the costs of providing the relevant service are directly attributable to the customer to whom the service is provided; and

Example:

In circumstances where a service is provided to a small number of identifiable customers on a discretionary or infrequent basis, and costs can be directly attributed to those customers, it may be more appropriate to classify the service as an alternative control service than as a standard control service.

- (6) any other relevant factor.
- (d) In classifying *direct control services* that have previously been subject to regulation under the present or earlier legislation, the *AER* must act on the basis that, unless a different classification is clearly more appropriate:
 - (1) there should be no departure from a previous classification (if the services have been previously classified); and
 - (2) if there has been no previous classification – the classification should be consistent with the previously applicable regulatory approach.
- (e) If the *Rules*, however, require that a *direct control service* of a specified kind be classified either as a *standard control service* or as an *alternative control service*, a *direct control service* of the relevant kind is to be classified in accordance with that requirement.

6.2.3 Term for which classification operates

A classification forms part of a distribution determination and operates for the *regulatory control period* for which the distribution determination is made.

Note:

The classification is to be reviewed in the course of the making of the next distribution determination, and (subject to these Rules) a reclassification may be made for the purposes of that determination.

Division 2 ~~Distribution determinations~~

6.2.4 Duty of AER to make distribution determinations

- (a) The *AER* must make a distribution determination for each *Distribution Network Service Provider*.
- (b) When the *AER* makes a distribution determination it must follow the process set out in Part E.
- (c) If more than one *distribution system* is owned, controlled or operated by a *Distribution Network Service Provider*, then, unless the *AER* otherwise determines, a separate distribution determination is to be made for each *distribution system*.
- (d) If 2 or more parts of the same *distribution system* were separately regulated at the commencement of this Chapter, then, unless the *AER* otherwise determines, a separate distribution determination is to be made for each of those parts of the *distribution system*.

6.2.5 Control mechanisms for direct control services

- (a) A distribution determination is to impose controls over the prices of *direct control services*, the revenue to be derived from *direct control services* or both.
- (b) The control mechanism may consist of:
 - (1) a schedule of fixed prices; or
 - (2) caps on the prices of individual services; or
 - (3) caps on the revenue to be derived from a particular combination of services; or
 - (4) tariff basket price control; or
 - (5) revenue yield control; or
 - (6) a combination of any of the above.
- (c) In deciding on a control mechanism for *standard control services*, the *AER* must have regard to:
 - (1) the need for efficient tariff structures; and
 - (2) the possible effects of the control mechanism on administrative costs of the *AER*, the *Distribution Network Service Provider* and users or potential users; and
 - (3) the regulatory arrangements (if any) applicable to the relevant service immediately before the commencement of the distribution determination; and
 - (4) the desirability of consistency between regulatory arrangements for similar services (both within and beyond the relevant jurisdiction); and
 - (5) any other relevant factor.
- (d) In deciding on a control mechanism for *alternative control services*, the *AER* must have regard to:
 - (1) the potential for development of competition in the relevant market and how the control mechanism might influence that potential; and
 - (2) the possible effects of the control mechanism on administrative costs of the *AER*, the *Distribution Network Service Provider* and users or potential users; and

- (3) the regulatory arrangements (if any) applicable to the relevant service immediately before the commencement of the distribution determination; and
- (4) the desirability of consistency between regulatory arrangements for similar services (both within and beyond the relevant jurisdiction); and
- (5) any other relevant factor.

6.2.6 Basis of control mechanisms for direct control services

- (a) For *standard control services*, the control mechanism must be of the prospective CPI minus X form, or some incentive-based variant of the prospective CPI minus X form, in accordance with Part C.
- (b) For *alternative control services*, the control mechanism must have a basis stated in the distribution determination.
- (c) The control mechanism for *alternative control services* may (but need not) utilise elements of Part C (with or without modification).

Examples:

The control mechanism might be based on the building block approach.

The distribution determination might provide for the application of clause 6.6.1 to pass through events with necessary adaptations and specified modifications.

6.2.7 Negotiated distribution services

Negotiated distribution services are regulated in accordance with Part D.

Division 3 Guidelines

6.2.8 Guidelines

- (a) The *AER* may *publish* guidelines as to:
 - (1) the classification of *distribution services*; and
 - (2) the control mechanisms for *direct control services*; and
 - (3) the calculation of stand-alone, avoidable and long-run marginal costs; and
 - (4) the *AER's* likely approach to determining materiality in the context of possible *pass through events*; and

- (5) other matters relevant to this Chapter.
- (b) The guidelines may relate to a specified *Distribution Network Service Provider* or *Distribution Network Service Providers* of a specified class.
- (c) The guidelines are not mandatory (and hence do not bind the *AER* or anyone else) but, if the *AER* makes a distribution determination that is not in accordance with a relevant guideline, the *AER* must state, in its reasons for the distribution determination, the reasons for departing from the guideline.
- (d) If the guidelines indicate that there may be a change of regulatory approach in future distribution determinations, the guidelines should also (if practicable) indicate how transitional issues are to be dealt with.
- (e) In making or amending a guideline, the *AER* must follow the *distribution consultation procedures* in Part G.

Part C Building Block Determinations for standard control services

6.3 Building block determinations

6.3.1 Introduction

- (a) A *building block determination* is a component of a distribution determination.
- (b) The procedure for making a *building block determination* is contained in Part E of this Chapter and involves the submission of a *building block proposal* to the *AER* by the *Distribution Network Service Provider*.
- (c) The *building block proposal*:
 - (1) must be prepared in accordance with the *post-tax revenue model*, other relevant requirements of this Part, and Schedule 6.1; and
 - (2) must comply with the requirements of, and must contain or be accompanied by the information required by, any relevant *regulatory information instrument*.

6.3.2 Contents of building block determination

- (a) A *building block determination* for a *Distribution Network Service Provider* is to specify, for a *regulatory control period*, the following matters:
 - (1) the *Distribution Network Service Provider's annual revenue requirement* for each *regulatory year* of the *regulatory control period*;
 - (2) appropriate methods for the indexation of the regulatory asset base;

- (3) how any applicable *efficiency benefit sharing scheme*, *service target performance incentive scheme*, or *demand management incentive scheme* are to apply to the *Distribution Network Service Provider*;
 - (4) the commencement and length of the *regulatory control period*;
 - (5) any other amounts, values or inputs on which the *building block determination* is based (differentiating between those contained in, or inferred from, the service provider's *building block proposal* and those based on the *AER*'s own estimates or assumptions).
- (b) A *regulatory control period* must be not less than 5 *regulatory years*.

6.4 Post-tax revenue model

6.4.1 Preparation, publication and amendment of post-tax revenue model

- (a) The *AER* must, in accordance with the *distribution consultation procedures*, prepare and *publish* a *post-tax revenue model*.
- (b) The *AER* may, from time to time and in accordance with the *distribution consultation procedures*, amend or replace the *post-tax revenue model*.
- (c) The *AER* must develop and *publish* the first *post-tax revenue model* within 6 months after the commencement of this clause and there must be such a model in force at all times after that date.

6.4.2 Contents of post-tax revenue model

- (a) The *post-tax revenue model* must set out the manner in which the *Distribution Network Service Provider's annual revenue requirement* for each *regulatory year* of a *regulatory control period* is to be calculated.
- (b) The contents of the *post-tax revenue model* must include (but are not limited to):
 - (1) a method that the *AER* determines is likely to result in the best estimates of expected inflation; and
 - (2) the timing assumptions and associated discount rates that are to apply in relation to the calculation of the building blocks referred to in clause 6.4.3; and
 - (3) the manner in which working capital is to be treated; and
 - (4) the manner in which the estimated cost of corporate income tax is to be calculated.

6.4.3 Building block approach

(a) Building blocks generally

The *annual revenue requirement* for a *Distribution Network Service Provider* for each *regulatory year* of a *regulatory control period* must be determined using a building block approach, under which the building blocks are:

- (1) indexation of the regulatory asset base – see paragraph (b)(1); and
- (2) a return on capital for that year – see paragraph (b)(2); and
- (3) the depreciation for that year – see paragraph (b)(3); and
- (4) the estimated cost of corporate income tax of the provider for that year – see paragraph (b)(4); and
- (5) the revenue increments or decrements (if any) for that year arising from the application of the *efficiency benefit sharing scheme*, the *service target performance incentive scheme* and the *demand management incentive scheme* – see paragraph (b)(5); and
- (6) the other revenue increments or decrements (if any) for that year arising from the application of a control mechanism in the previous *regulatory control period* – see paragraph (b)(6); and
- (7) the forecast operating expenditure for that year – see paragraph (b)(7).

(b) Details of the building blocks

For the purposes of paragraph (a):

- (1) for indexation of the regulatory asset base:
 - (i) the regulatory asset base is calculated in accordance with clause 6.5.1 and schedule 6.2; and
 - (ii) the building block comprises a negative adjustment equal to the amount referred to in clause S6.2.3(c)(4) for that year; and
- (2) the return on capital is calculated in accordance with clause 6.5.2; and

Note:

A statement of regulatory intent may be relevant to the calculation (See clause 6.5.4).

- (3) the depreciation is calculated in accordance with clause 6.5.5; and

- (4) the estimated cost of corporate income tax is determined in accordance with clause 6.5.3; and

Note:

A statement of regulatory intent may be relevant to the calculation (See clause 6.5.4).

- (5) the revenue increments or decrements referred to in paragraph (a)(5) are those that arise as a result of the operation of an applicable *efficiency benefit sharing scheme, service target performance incentive scheme* or *demand management incentive scheme* as referred to in clauses 6.5.8, 6.6.2 and 6.6.3; and
- (6) the other revenue increments or decrements referred to in paragraph (a)(6) are those that are to be carried forward to the current *regulatory control period* as a result of the application of a control mechanism in the previous *regulatory control period* and are apportioned to the relevant year under the distribution determination for the current *regulatory control period*; and
- (7) the forecast operating expenditure for the year is the forecast operating expenditure as accepted or substituted by the *AER* in accordance with clause 6.5.6.

6.5 Matters relevant to the making of building block determinations

6.5.1 Regulatory asset base

Nature of regulatory asset base

- (a) The regulatory asset base for a *distribution system* owned, controlled or operated by a *Distribution Network Service Provider* is the value of those assets that are used by the provider to provide *standard control services*, but only to the extent that they are used to provide such services.

Preparation, publication and amendment of model for rolling forward regulatory asset base

- (b) The *AER* must, in accordance with the *distribution consultation procedures*, develop and *publish* a model for the roll forward of the regulatory asset base for *distribution systems*, referred to as the *roll forward model*.
- (c) The *AER* may, from time to time and in accordance with the *distribution consultation procedures*, amend or replace the *roll forward model*.
- (d) The *AER* must develop and *publish* the first *roll forward model* within 6 months after the commencement of this clause, and there must be such a model available at all times after that date.

Contents of roll forward model

- (e) The *roll forward model* must set out the method for determining the roll forward of the regulatory asset base for *distribution systems*:
- (1) from the immediately preceding *regulatory control period* to the beginning of the first year of the subsequent *regulatory control period*, so as to establish the value of the regulatory asset base as at the beginning of the first *regulatory year* of that subsequent *regulatory control period*; and
 - (2) from one *regulatory year* in a *regulatory control period* to a subsequent *regulatory year* in that same *regulatory control period*, so as to establish the value of the regulatory asset base as at the beginning of that subsequent *regulatory year*;

under which:

- (3) the roll forward of the regulatory asset base from the immediately preceding *regulatory control period* to the beginning of the first *regulatory year* of a subsequent *regulatory control period* entails the value of the first mentioned regulatory asset base being adjusted for actual inflation, consistently with the method used for the indexation of the control mechanism (or control mechanisms) for *standard control services* during the preceding *regulatory control period*.

Other provisions relating to regulatory asset base

- (f) Other provisions relating to regulatory asset bases are set out in schedule 6.2.

6.5.2 Return on capital

Calculation of return on capital

- (a) The return on capital for each *regulatory year* must be calculated by applying a rate of return for the relevant *Distribution Network Service Provider* for that *regulatory control period* (calculated in accordance with this clause 6.5.2) to the value of the regulatory asset base for the relevant *distribution system* as at the beginning of that *regulatory year* (as established in accordance with clause 6.5.1 and schedule 6.2).

Weighted average cost of capital

- (b) The rate of return for a *Distribution Network Service Provider* for a *regulatory control period* is the cost of capital as measured by the return required by investors in a commercial enterprise with a similar nature and degree of non-diversifiable risk as that faced by the *distribution* business of

the provider and must be calculated as a nominal post-tax *weighted average cost of capital* (“WACC”) in accordance with the following formula:

$$WACC = k_e \frac{E}{V} + k_d \frac{D}{V}$$

where:

k_e is the return on equity (determined using the Capital Asset Pricing Model) and is calculated as:

$$r_f + \beta_e \times MRP$$

where:

r_f is the nominal risk free rate for the *regulatory control period* determined in accordance with paragraph (c);

β_e is the equity beta; and

MRP is the market risk premium;

k_d is the return on debt and is calculated as:

$$r_f + DRP$$

where:

DRP is the debt risk premium for the *regulatory control period* determined in accordance with paragraph (e);

E/V is the value of equity as a proportion of the value of equity and debt, which is $1 - D/V$; and

D/V is the value of debt as a proportion of the value of equity and debt.

Meaning of nominal risk free rate

- (c) The nominal risk free rate for a *regulatory control period* is (unless some different provision is made by a relevant *statement of regulatory intent*) the rate determined for that *regulatory control period* by the AER on a moving average basis from the annualised yield on Commonwealth Government bonds with a maturity of 10 years using:
 - (1) the indicative mid rates published by the Reserve Bank of Australia; and
 - (2) a period of time which is either:

- (i) a period ('the **agreed period**') proposed by the relevant *Distribution Network Service Provider*, and agreed by the *AER* (such agreement is not to be unreasonably withheld); or
- (ii) a period specified by the *AER*, and notified to the provider within a reasonable time prior to the commencement of that period, if the period proposed by the provider is not agreed by the *AER* under subparagraph (i),

and, for the purposes of subparagraph (i):

- (iii) the start date and end date for the agreed period may be kept confidential, but only until the expiration of the agreed period; and
 - (iv) the *AER* must notify the *Distribution Network Service Provider* whether or not it agrees with the proposed period within 30 *business days* of the date of submission of the *building block proposal*.
- (d) If there are no Commonwealth Government bonds with a maturity of 10 years on any day in the period referred to in paragraph (c)(2), the *AER* must (unless some different provision is made by a relevant *statement of regulatory intent*) determine the nominal risk free rate for the *regulatory control period* by interpolating on a straight line basis from the two Commonwealth Government bonds closest to the 10 year term and which also straddle the 10 year expiry date.

Meaning of debt risk premium

- (e) The debt risk premium for a *regulatory control period* is the premium determined for that *regulatory control period* by the *AER* as the margin between the annualised nominal risk free rate and the observed annualised Australian benchmark corporate bond rate for corporate bonds which have a maturity equal to that used to derive the nominal risk free rate and a credit rating from a recognised credit rating agency.

6.5.3 Estimated cost of corporate income tax

The estimated cost of corporate income tax of a *Distribution Network Service Provider* for each *regulatory year* (ETC_t) must be calculated in accordance with the following formula:

$$ETC_t = (ETI_t \times r_t) (1 - \gamma)$$

where:

ETI_t is an estimate of the taxable income for that *regulatory year* that would be earned by a benchmark efficient entity as a result of the provision of *standard*

control services if such an entity, rather than the *Distribution Network Service Provider*, operated the business of the *Distribution Network Service Provider*, such estimate being determined in accordance with the *post-tax revenue model*;

r_t is the expected statutory income tax rate for that *regulatory year* as determined by the *AER*; and

γ is the assumed utilisation of imputation credits.

For these purposes:

- (1) the cost of debt must be based on that of a benchmark efficient *Distribution Network Service Provider*; and
- (2) the estimate must take into account the estimated depreciation for that *regulatory year* for *tax* purposes, for a benchmark efficient *Distribution Network Service Provider*, of assets where the value of those assets is included in the regulatory asset base for the relevant *distribution system* for that *regulatory year*.

6.5.4 Review of rate of return

- (a) The *AER* must, in accordance with the *distribution consultation procedures* and this clause, carry out reviews of the matters referred to in paragraph (d).
- (b) The first review is to be concluded by 31 March 2009 and further reviews are to follow at intervals not exceeding, in any case, 5 years.
- (c) The *AER* must, in consequence of a review, issue a statement (a *statement of regulatory intent*) adopting values, methods and credit rating levels for *Distribution Network Service Providers* or for specified classes of *Distribution Network Service Providers*.
- (d) The following matters (and the method of their calculation) may form the subject of a review:
 - (1) the nominal risk free rate referred to in clause 6.5.2(c);
 - (2) the equity beta referred to in clause 6.5.2(b);
 - (3) the market risk premium referred to in clause 6.5.2(b);
 - (4) the maturity period and bond rates referred to in clause 6.5.2(d);
 - (5) the ratio of the value of debt to the value of equity and debt referred to in clause 6.5.2(b);
 - (6) credit rating levels referred to in clause 6.5.2(e);

- (7) the assumed utilisation of imputation credits referred to in clause 6.5.3.
- (e) In undertaking a review, the *AER* must have regard to:
 - (1) the need for the rate of return calculated for the purposes of clause 6.5.2(b) to be a forward looking rate of return that is commensurate with prevailing conditions in the market for funds and the risk involved in providing *standard control services*; and
 - (2) the need for the return on debt to reflect the current cost of borrowings for comparable debt; and
 - (3) the need for the credit rating levels or the values attributable to, or the methods of calculating, the parameters referred to in paragraph (d) that vary according to the efficiency of the *Distribution Network Service Provider* to be based on a benchmark efficient *Distribution Network Service Provider*; and
 - (4) where the credit rating levels or the values attributable to, or the method of calculating, parameters referred to in paragraph (d) cannot be determined with certainty:
 - (i) the need to achieve an outcome that is consistent with the *national electricity objective*; and
 - (ii) the need for persuasive evidence before adopting a credit rating level or a value for, or a method of calculating, that parameter that differs from the credit rating level, value or the method of calculation that has previously been adopted for it.
- (f) A *statement of regulatory intent* adopting a revised value, method, or credit rating level applies only for the purposes of a *building block proposal* submitted to the *AER* after publication of the *statement of regulatory intent*.
- (g) A distribution determination to which a *statement of regulatory intent* is applicable must be consistent with the statement unless there is persuasive evidence justifying a departure, in the particular case, from a value, method or credit rating level set in the statement.
- (h) In deciding whether a departure from a value, method or credit rating level set in a *statement of regulatory intent* is justified in a distribution determination, the *AER* must consider:
 - (1) the criteria on which the value, method or credit rating level was set in the *statement of regulatory intent* (the ***underlying criteria***); and
 - (2) whether, in the light of the underlying criteria, a material change in circumstances since the date of the statement, or any other relevant

factor, now makes a value, method or credit rating level set in the statement inappropriate.

- (i) If the *AER*, in making a distribution determination, in fact departs from a value, method or credit rating level set in a *statement of regulatory intent*, it must:
 - (1) state the substitute value, method or credit rating level in the determination; and
 - (2) demonstrate, in its reasons for the departure, that the departure is justified on the basis of the underlying criteria.

6.5.5 Depreciation

- (a) The depreciation for each *regulatory year*:
 - (1) must be calculated on the value of the assets as included in the regulatory asset base, as at the beginning of that *regulatory year*, for the relevant *distribution system*; and
 - (2) must be calculated:
 - (i) providing such depreciation schedules conform with the requirements set out in paragraph (b), using the depreciation schedules for each asset or category of assets that are nominated in the relevant *Distribution Network Service Provider's building block proposal*; or
 - (ii) to the extent the depreciation schedules nominated in the provider's *building block proposal* do not so conform, using the depreciation schedules determined for that purpose by the *AER*.
- (b) The depreciation schedules referred to in paragraph (a) must conform to the following requirements:
 - (1) the schedules must depreciate using a profile that reflects the nature of the assets or category of assets over the economic life of that asset or category of assets;
 - (2) the sum of the real value of the depreciation that is attributable to any asset or category of assets over the economic life of that asset or category of assets (such real value being calculated as at the time the value of that asset or category of assets was first included in the regulatory asset base for the relevant *distribution system*) must be equivalent to the value at which that asset or category of assets was first included in the regulatory asset base for the relevant *distribution system*;

- (3) the economic life of the relevant assets and the depreciation methods and rates underpinning the calculation of depreciation for a given *regulatory control period* must be consistent with those determined for the same assets on a prospective basis in the distribution determination for that period.

6.5.6 Forecast operating expenditure

- (a) A *building block proposal* must include the total forecast operating expenditure for the relevant *regulatory control period* which the *Distribution Network Service Provider* considers is required in order to achieve each of the following (the *operating expenditure objectives*):
 - (1) meet or manage the expected demand for *standard control services* over that period;
 - (2) comply with all applicable *regulatory obligations or requirements* associated with the provision of *standard control services*;
 - (3) maintain the quality, reliability and security of supply of *standard control services*;
 - (4) maintain the reliability, safety and security of the *distribution system* through the supply of *standard control services*.
- (b) The forecast of required operating expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal* must:
 - (1) comply with the requirements of any relevant *regulatory information instrument*; and
 - (2) be for expenditure that is properly allocated to *standard control services* in accordance with the principles and policies set out in the *Cost Allocation Method* for the *Distribution Network Service Provider*; and
 - (3) include both:
 - (i) the total of the forecast operating expenditure for the relevant *regulatory control period*; and
 - (ii) the forecast of the operating expenditure for each *regulatory year* of the relevant *regulatory control period*.
- (c) The *AER* must accept the forecast of required operating expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal* if the *AER* is satisfied that the total of the forecast operating expenditure for the *regulatory control period* reasonably reflects:

- (1) the efficient costs of achieving the *operating expenditure objectives*; and
- (2) the costs that a prudent operator in the circumstances of the relevant *Distribution Network Service Provider* would require to achieve the *operating expenditure objectives*; and
- (3) a realistic expectation of the demand forecast and cost inputs required to achieve the *operating expenditure objectives*.

(the *operating expenditure criteria*).

- (d) If the *AER* is not satisfied as referred to in paragraph (c), it must not accept the forecast of required operating expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal*.
- (e) In deciding whether or not the *AER* is satisfied as referred to in paragraph (c), the *AER* must have regard to the following (the *operating expenditure factors*):
 - (1) the information included in or accompanying the *building block proposal*;
 - (2) submissions received in the course of consulting on the *building block proposal*;
 - (3) analysis undertaken by or for the *AER* and *published* before the distribution determination is made in its final form;
 - (4) benchmark operating expenditure that would be incurred by an efficient *Distribution Network Service Provider* over the *regulatory control period*;
 - (5) the actual and expected operating expenditure of the *Distribution Network Service Provider* during any preceding *regulatory control periods*;
 - (6) the relative prices of operating and capital inputs;
 - (7) the substitution possibilities between operating and capital expenditure;
 - (8) whether the total labour costs included in the capital and operating expenditure forecasts for the *regulatory control period* are consistent with the incentives provided by the applicable *service target performance incentive scheme* in respect of the *regulatory control period*;

- (9) the extent the forecast of required operating expenditure of the *Distribution Network Service Provider* is referable to arrangements with a person other than the provider that, in the opinion of the *AER*, do not reflect arm's length terms;
- (10) the extent the *Distribution Network Service Provider* has considered, and made provision for, efficient non-network alternatives.

6.5.7 Forecast capital expenditure

- (a) A *building block proposal* must include the total forecast capital expenditure for the relevant *regulatory control period* which the *Distribution Network Service Provider* considers is required in order to achieve each of the following (the *capital expenditure objectives*):
 - (1) meet or manage the expected demand for *standard control services* over that period;
 - (2) comply with all applicable *regulatory obligations or requirements* associated with the provision of *standard control services*;
 - (3) maintain the quality, reliability and security of supply of *standard control services*;
 - (4) maintain the reliability, safety and security of the *distribution system* through the supply of *standard control services*.
- (b) The forecast of required capital expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal* must:
 - (1) comply with the requirements of any relevant *regulatory information instrument*; and
 - (2) be for expenditure that is properly allocated to *standard control services* in accordance with the principles and policies set out in the *Cost Allocation Method* for the *Distribution Network Service Provider*; and
 - (3) include both:
 - (i) the total of the forecast capital expenditure for the relevant *regulatory control period*; and
 - (ii) the forecast of the capital expenditure for each *regulatory year* of the relevant *regulatory control period*; and
 - (4) identify any forecast capital expenditure that is for an option that has satisfied the *regulatory test*.

- (c) The *AER* must accept the forecast of required capital expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal* if the *AER* is satisfied that the total of the forecast capital expenditure for the *regulatory control period* reasonably reflects:
 - (1) the efficient costs of achieving the *capital expenditure objectives*; and
 - (2) the costs that a prudent operator in the circumstances of the relevant *Distribution Network Service Provider* would require to achieve the *capital expenditure objectives*; and
 - (3) a realistic expectation of the demand forecast and cost inputs required to achieve the *capital expenditure objectives*.

(the *capital expenditure criteria*)
- (d) If the *AER* is not satisfied as referred to in paragraph (c), it must not accept the forecast of required capital expenditure of a *Distribution Network Service Provider*.
- (e) In deciding whether or not the *AER* is satisfied as referred to in paragraph (c), the *AER* must have regard to the following ('the *capital expenditure factors*'):
 - (1) the information included in or accompanying the *building block proposal*;
 - (2) submissions received in the course of consulting on the *building block proposal*;
 - (3) analysis undertaken by or for the *AER* and *published* before the distribution determination is made in its final form;
 - (4) benchmark capital expenditure that would be incurred by an efficient *Distribution Network Service Provider* over the *regulatory control period*;
 - (5) the actual and expected capital expenditure of the *Distribution Network Service Provider* during any preceding *regulatory control periods*;
 - (6) the relative prices of operating and capital inputs;
 - (7) the substitution possibilities between operating and capital expenditure;
 - (8) whether the total labour costs included in the capital and operating expenditure forecasts for the *regulatory control period* are consistent with the incentives provided by the applicable *service target*

performance incentive scheme in respect of the *regulatory control period*;

- (9) the extent the forecast of required capital expenditure of the *Distribution Network Service Provider* is referable to arrangements with a person other than the provider that, in the opinion of the *AER*, do not reflect arm's length terms;
- (10) the extent the *Distribution Network Service Provider* has considered, and made provision for, efficient non-network alternatives.

6.5.8 Efficiency benefit sharing scheme

- (a) The *AER* must, in accordance with the *distribution consultation procedures*, develop and *publish* a scheme or schemes (*efficiency benefit sharing scheme*) that provide for a fair sharing between *Distribution Network Service Providers* and *Distribution Network Users* of:
 - (1) the efficiency gains derived from the operating expenditure of *Distribution Network Service Providers* for a *regulatory control period* being less than; and
 - (2) the efficiency losses derived from the operating expenditure of *Distribution Network Service Providers* for a *regulatory control period* being more than,the forecast operating expenditure accepted or substituted by the *AER* for that *regulatory control period*.
- (b) An *efficiency benefit sharing scheme* may (but is not required to) be developed to cover efficiency gains and losses related to capital expenditure or *distribution losses*.
- (c) In developing and implementing an *efficiency benefit sharing scheme*, the *AER* must have regard to:
 - (1) the need to ensure that benefits to consumers likely to result from the scheme are sufficient to warrant any reward or penalty under the scheme for *Distribution Network Service Providers*; and
 - (2) the need to provide *Distribution Network Service Providers* with a continuous incentive, so far as is consistent with economic efficiency, to reduce operating expenditure and, if the scheme extends to capital expenditure, capital expenditure; and
 - (3) the desirability of both rewarding *Distribution Network Service Providers* for efficiency gains and penalising *Distribution Network Service Providers* for efficiency losses; and

- (4) any incentives that *Distribution Network Service Providers* may have to capitalise expenditure; and
 - (5) the possible effects of the scheme on incentives for the implementation of non-network alternatives.
- (d) The *AER* may, from time to time and in accordance with the *distribution consultation procedures*, amend or replace an *efficiency benefit sharing scheme*.

6.5.9 The X factor

- (a) A *building block determination* is to include the X factor for each control mechanism for each *regulatory year* of the *regulatory control period*.
- (b) The X factor:
 - (1) must be set by the *AER* with regard to the *Distribution Network Service Provider's total revenue requirement* for the *regulatory control period*; and
 - (2) must be such as to minimise, as far as reasonably possible, variance between expected revenue for the last *regulatory year* of the *regulatory control period* and the *annual revenue requirement* for that last *regulatory year*; and
 - (3) must conform with whichever of the following requirements is applicable:
 - (i) if the control mechanism relates generally to *standard control services* – the X factor must be designed to equalise (in terms of net present value) the revenue to be earned by the *Distribution Network Service Provider* from the provision of *standard control services* over the *regulatory control period* with the provider's *total revenue requirement* for the *regulatory control period*;
 - (ii) if there are separate control mechanisms for different *standard control services* – the X factor for each control mechanism must be designed to equalise (in terms of net present value) the revenue to be earned by the *Distribution Network Service Provider* from the provision of *standard control services* to which the control mechanism relates over the *regulatory control period* with the portion of the provider's *total revenue requirement* for the *regulatory control period* attributable to those services.
- (c) There may be different X factors:

- (1) for different regulatory years of the regulatory control period; and
- (2) if there are 2 or more control mechanisms – for each control mechanism.

6.6 Adjustments after making of building block determination.

6.6.1 Cost pass through

- (a) If a *positive change event* occurs, a *Distribution Network Service Provider* may seek the approval of the *AER* to pass through to *Distribution Network Users* a *positive pass through amount*.
- (b) If a *negative change event* occurs, the *AER* may require the *Distribution Network Service Provider* to pass through to *Distribution Network Users* a *negative pass through amount* as determined by the *AER* under paragraph (g).

Positive pass through

- (c) To seek the approval of the *AER* to pass through a *positive pass through amount*, a *Distribution Network Service Provider* must submit to the *AER*, within 90 *business days* of the relevant *positive change event* occurring, a written statement which specifies:
 - (1) the details of the *positive change event*; and
 - (2) the date on which the *positive change event* occurred; and
 - (3) the *eligible pass through amount* in respect of that *positive change event*; and
 - (4) the *positive pass through amount* the provider proposes in relation to the *positive change event*; and
 - (5) the amount of the *positive pass through amount* that the provider proposes should be passed through to *Distribution Network Users* in each *regulatory year* during the *regulatory control period*; and
 - (6) evidence:
 - (i) of the actual and likely increase in costs referred to in subparagraph (3); and
 - (ii) that such costs occur solely as a consequence of the *positive change event*; and
 - (7) such other information as may be required under any relevant *regulatory information instrument*.

- (d) If the *AER* determines that a *positive change event* has occurred in respect of a statement under paragraph (c), the *AER* must determine:
 - (1) the *approved pass through amount*; and
 - (2) the amount of that *approved pass through amount* that should be passed through to *Distribution Network Users* in each *regulatory year* during the *regulatory control period*,taking into account the matters referred to in paragraph (j).
- (e) If the *AER* does not make the determinations referred to in paragraph (d) within 60 *business days* from the date it receives the *Distribution Network Service Provider's* statement and accompanying evidence under paragraph (c), then, on the expiry of that period, the *AER* is taken to have determined that:
 - (1) the *positive pass through amount* as proposed in the provider's statement under paragraph (c) is the *approved pass through amount* in respect of that *positive change event*; and
 - (2) the amount of that *positive pass through amount* that the provider proposes in its statement under paragraph (c) should be passed through to *Distribution Network Users* in each *regulatory year* during the *regulatory control period*, is the amount that should be so passed through in each such *regulatory year*.

Negative pass through

- (f) A *Distribution Network Service Provider* must submit to the *AER*, within 90 *business days* of becoming aware of the occurrence of a *negative change event* for the provider, a written statement which specifies:
 - (1) the details of the *negative change event* concerned; and
 - (2) the date the *negative change event* occurred; and
 - (3) the costs in the provision of *standard control services* that the provider has saved and is likely to save until the end of the *regulatory control period* as a result of the *negative change event*; and
 - (4) the aggregate amount of those saved costs that the provider proposes should be passed through to *Distribution Network Users*; and
 - (5) the amount of the costs referred to in subparagraph (4) the provider proposes should be passed through to *Distribution Network Users* in each *regulatory year* during the *regulatory control period*; and

- (6) such other information as may be required under any relevant *regulatory information instrument*.
- (g) If a *negative change event* occurs (whether or not the occurrence of that *negative change event* is notified by the provider to the AER under paragraph (f)) and the AER determines to impose a requirement on the provider in relation to that *negative change event* as described in paragraph (b), the AER must determine:
 - (1) the *required pass through amount*; and
 - (2) taking into account the matters referred to in paragraph (j):
 - (i) how much of that *required pass through amount* should be passed through to *Distribution Network Users* (the *negative pass through amount*); and
 - (ii) the amount of that *negative pass through amount* that should be passed through to *Distribution Network Users* in each *regulatory year* during the *regulatory control period*.
- (h) A *Distribution Network Service Provider* must provide the AER with such information as the AER requires for the purpose of making a determination under paragraph (g) within the time specified by the AER in a notice provided to the provider by the AER for that purpose.

Consultation

- (i) Before making a determination under paragraph (d) or (g), the AER may consult with the relevant *Distribution Network Service Provider* and such other persons as the AER considers appropriate, on any matters arising out of the relevant *pass through event* the AER considers appropriate.

Relevant factors

- (j) In making a determination under paragraph (d) or (g) in respect of a *Distribution Network Service Provider*, the AER must take into account:
 - (1) the matters and proposals set out in any statement given to the AER by the provider under paragraph (c) or (f); and
 - (2) in the case of a *positive change event*, the increase in costs in the provision of *standard control services* that the provider has incurred and is likely to incur until the end of the *regulatory control period* as a result of the *positive change event*; and
 - (3) in the case of a *positive change event*, the efficiency of the provider's decisions and actions in relation to the risk of the *positive change event*, including whether the provider has failed to take any action that

could reasonably be taken to reduce the magnitude of the *eligible pass through amount* in respect of that *positive change event* and whether the provider has taken or omitted to take any action where such action or omission has increased the magnitude of the amount in respect of that *positive change event*; and

- (4) the time cost of money based on the *weighted average cost of capital* for the provider for the relevant *regulatory control period*; and
- (5) the need to ensure that the provider only recovers any actual or likely increment in costs under this paragraph (j) to the extent that such increment is solely as a consequence of a *pass through event*; and
- (6) in the case of a *tax change event*, any change in the way another *tax* is calculated, or the removal or imposition of another *tax*, which, in the *AER's* opinion, is complementary to the *tax change event* concerned; and
- (7) whether the costs of the *pass through event* have already been factored into the calculation of the provider's *annual revenue requirement*; and
- (8) any other factors the *AER* considers relevant.

Extension of time limits

- (k) The *AER* must, by written notice to a *Distribution Network Service Provider*, extend a time limit fixed in clause 6.6.1(c) or clause 6.6.1(f) if the *AER* is satisfied that the difficulty of assessing or quantifying the effect of the relevant *pass through event* justifies the extension.

6.6.2 Service target performance incentive scheme

- (a) The *AER* must, in accordance with the *distribution consultation procedures*, develop and *publish* an incentive scheme or incentive schemes (*service target performance incentive scheme*) to provide incentives (which may include targets) for *Distribution Network Service Providers* to maintain and improve performance.
- (b) In developing and implementing a *service target performance incentive scheme*, the *AER*:
 - (1) must consult with the authorities responsible for the administration of relevant *jurisdictional electricity legislation*; and
 - (2) must ensure that service standards and service targets (including guaranteed service levels) set by the scheme do not put at risk the *Distribution Network Service Provider's* ability to comply with relevant service standards and service targets (including guaranteed service levels) as specified in *jurisdictional electricity legislation*; and

Note:

A service target performance incentive scheme operates concurrently with any average or minimum service standards and guaranteed service level schemes that apply to the Distribution Network Service Provider under jurisdictional electricity legislation.

- (3) must take into account:
- (i) the need to ensure that benefits to consumers likely to result from the scheme are sufficient to warrant any reward or penalty under the scheme for *Distribution Network Service Providers*; and
 - (ii) any *regulatory obligation or requirement* to which the *Distribution Network Service Provider* is subject; and
 - (iii) the past performance of the *distribution network*; and
 - (iv) any other incentives available to the *Distribution Network Service Provider* under the *Rules* or a relevant distribution determination; and
 - (v) the need to ensure that the incentives are sufficient to offset any financial incentives the service provider may have to reduce costs at the expense of service levels; and
 - (vi) the willingness of the customer or end user to pay for improved performance in the delivery of services; and
 - (vii) the possible effects of the scheme on incentives for the implementation of non-network alternatives.
- (c) The AER may, from time to time and in accordance with the *distribution consultation procedures*, amend or replace any scheme that is developed and *published* under this clause.

Note:

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

6.6.3 Demand management incentive scheme

- (a) The AER may, in accordance with the *distribution consultation procedures*, develop and *publish* an incentive scheme or schemes (*demand management incentive scheme*) to provide incentives for *Distribution Network Service Providers* to implement efficient non-network alternatives or to manage the expected demand for *standard control services* in some other way.
- (b) In developing and implementing a *demand management incentive scheme*, the AER must have regard to:
 - (1) the need to ensure that benefits to consumers likely to result from the scheme are sufficient to warrant any reward or penalty under the scheme for *Distribution Network Service Providers*; and
 - (2) the effect of a particular control mechanism (i.e. price – as distinct from revenue – regulation) on a *Distribution Network Service Provider's* incentives to adopt or implement efficient non-network alternatives; and
 - (3) the extent the *Distribution Network Service Provider* is able to offer efficient pricing structures; and
 - (4) the possible interaction between a *demand management incentive scheme* and other incentive schemes; and
 - (5) the willingness of the customer or end user to pay for increases in costs resulting from implementation of the scheme.
- (c) The AER may, from time to time and in accordance with the *distribution consultation procedures*, amend or replace any scheme that is developed and *published* under this clause.
- (d) Nothing in this clause limits the content of an *efficiency benefit sharing scheme*.

Part D Negotiated distribution services

6.7 Negotiated distribution services

6.7.1 Principles relating to access to negotiated distribution services

The following principles constitute the *Negotiated Distribution Service Principles*:

- (1) the price for a *negotiated distribution service* should be based on the costs incurred in providing that service, determined in accordance

with the principles and policies set out in the *Cost Allocation Method* for the relevant *Distribution Network Service Provider*;

- (2) subject to subparagraphs (3) and (4), the price for a *negotiated distribution service* should be at least equal to the cost that would be avoided by not providing the service but no more than the cost of providing it on a stand alone basis;
- (3) if the *negotiated distribution service* is the provision of a *shared distribution service* that:
 - (i) exceeds the *network* performance requirements (if any) which that *shared distribution service* is required to meet under any *jurisdictional electricity legislation*; or
 - (ii) exceeds the *network* performance requirements set out in schedules 5.1a and 5.1,

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

- (4) if the *negotiated distribution service* is the provision of a *shared distribution service* that does not meet (and does not exceed) the *network* performance requirements set out in schedules 5.1a and 5.1, the differential between the price for that service and the price for the *shared distribution service* which meets (but does not exceed) the *network* performance requirements set out in schedules 5.1a and 5.1 should reflect the cost the *Distribution Network Service Provider* would avoid by not providing that service;
- (5) the price for a *negotiated distribution service* must be the same for all *Distribution Network Users* unless there is a material difference in the costs of providing the *negotiated distribution service* to different *Distribution Network Users* or classes of *Distribution Network Users*;
- (6) the price for a *negotiated distribution service* should be subject to adjustment over time to the extent that the assets used to provide that service are subsequently used to provide services to another person, in which case the adjustment should reflect the extent to which the costs of that asset are being recovered through charges to that other person;
- (7) the price for a *negotiated distribution service* should be such as to enable the *Distribution Network Service Provider* to recover the efficient costs of complying with all *regulatory obligations* or

requirements associated with the provision of the negotiated distribution service;

- (8) any access charges:
 - (A) in respect of providing *distribution network user access* to *negotiated distribution services* which would have been *negotiated distribution services* regardless of the operation of clause 6.24.2(c) should be based on the costs reasonably incurred by the *Distribution Network Service Provider* in providing that access and, in the case of compensation referred to in clauses 5.5(f)(4)(ii) and (iii), on the revenue that is likely to be foregone and the costs that are likely to be incurred by a person referred to in those provisions where an event referred to in those provisions occurs; and
 - (B) in respect of providing *transmission network user access* to *negotiated distribution services* which would have been treated as *negotiated transmission services* were it not for the operation of clause 6.24.2(c) should be based on the costs reasonably incurred by the *Distribution Network Service Provider* in providing that access and, in the case of compensation referred to in clauses 5.4A(h) - (j), on the revenue that is likely to be foregone and the costs that are likely to be incurred by a person referred to in those provisions where an event referred to in those provisions occurs;
- (9) the *terms and conditions of access* for a *negotiated distribution service* should be fair and reasonable and consistent with the safe and reliable operation of the *power system* in accordance with the *Rules* (for these purposes, the price for a *negotiated distribution service* is to be treated as being fair and reasonable if it complies with principles (1) to (7) of this clause;
- (10) the *terms and conditions of access* for a *negotiated distribution service* (including, in particular, any exclusions and limitations of liability and indemnities) must not be unreasonably onerous taking into account the allocation of risk between the *Distribution Network Service Provider* and the other party, the price for the *negotiated distribution service* and the costs to the *Distribution Network Service Provider* of providing the *negotiated distribution service*;
- (11) the *terms and conditions of access* for a *negotiated distribution service* should take into account the need for the service to be provided in a manner that does not adversely affect the safe and reliable operation of the *power system* in accordance with the *Rules*.

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

- (a) A *Distribution Network Service Provider* must comply with:
 - (1) the provider's *negotiating framework*; and
 - (2) the provider's *Negotiated Distribution Service Criteria*,when the provider is negotiating the *terms and conditions of access to negotiated distribution services*.
- (b) The *Distribution Network Service Provider* must also comply with any other applicable requirements of the *Rules*, including the requirements of:
 - (1) rules 5.3 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 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).

6.7.3 Negotiating framework determination

The determination specifying requirements relating to the *negotiating framework* forming part of a distribution determination for a *Distribution Network Service Provider* is to set out requirements that are to be complied with in respect of the preparation, replacement, application or operation of its *negotiating framework*.

6.7.4 Negotiated Distribution Service Criteria determination

- (a) The determination by the *AER* specifying the *Negotiated Distribution Service Criteria* forming part of a distribution determination for a *Distribution Network Service Provider* is to set out the criteria that are to be applied:
 - (1) by the provider in negotiating *terms and conditions of access* including:
 - (i) the prices that are to be charged for the provision of *negotiated distribution services* by the provider for the relevant *regulatory control period*; or
 - (ii) any *access charges* which are negotiated by the provider during that *regulatory control period*; and
 - (2) by the *AER* in resolving an access dispute about *terms and conditions of access* including:
 - (i) the price that is to be charged for the provision of a *negotiated distribution service* by the provider; or
 - (ii) any *access charges* that are to be paid to or by the provider.
- (b) The *Negotiated Distribution Service Criteria* must give effect to and be consistent with the *Negotiated Distribution Service Principles* set out in clause 6.7.1.

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

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

Note:

See clause 6.7.3.

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

Note:

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

- (4) a requirement for a *Service Applicant* to provide all commercial information the provider may reasonably require to enable the provider to engage in effective negotiation with that applicant for the provision of the *negotiated distribution service*; and
- (5) a requirement that negotiations with a *Service Applicant* for the provision of the *negotiated distribution service* be commenced and finalised within specified periods and a requirement that each party to the negotiations must make reasonable endeavours to adhere to the specified time limits; and

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

6.7.6 Confidential information

- (a) Commercial information to be provided to a *Service Applicant* in accordance with clause 6.7.5(c)(2):

- (1) does not include *confidential information* provided to the *Distribution Network Service Provider* by another person; and
 - (2) may be provided subject to a condition that the *Service Applicant* must not provide any part of that commercial information to any other person without the consent of the *Distribution Network Service Provider*.
- (b) Commercial information to be provided to a *Distribution Network Service Provider* in accordance with clause 6.7.5(c)(4):
 - (1) does not include *confidential information* provided to a *Service Applicant* by another person; and
 - (2) may be provided subject to a condition that the provider must not provide any part of that commercial information to any other person without the consent of the *Service Applicant*.

Part E Regulatory proposal

6.8 Regulatory proposal

6.8.1 AER's framework and approach paper

- (a) The *AER* must prepare and *publish* a document (a *framework and approach paper*) in anticipation of every distribution determination.
- (b) The *framework and approach paper* should set out the *AER*'s likely approach (together with its reasons for the likely approach), in the forthcoming distribution determination, to:
 - (1) the classification of *distribution services* in accordance with Part B; and
 - (2) the application to the *Distribution Network Service Provider* of a *service target performance incentive scheme* or *schemes*; and
 - (3) the application to the *Distribution Network Service Provider* of an *efficiency benefit sharing scheme* or *schemes*; and
 - (4) the application to the *Distribution Network Service Provider* (if applicable) of a *demand management incentive scheme* or *schemes*; and
 - (5) any other matters on which the *AER* thinks fit to give an indication of its likely approach.

- (c) The *framework and approach paper* must state the form (or forms) of the control mechanisms to be applied by the distribution determination and the AER's reasons for deciding on control mechanisms of the relevant form (or forms).
- (ca) The *framework and approach paper* must include the AER's determination under clause 6.25(b) as to whether or not Part J of Chapter 6A is to be applied to determine the pricing of *transmission standard control services* provided by any *dual function assets* owned, controlled or operated by the *Distribution Network Service Provider*.
- (d) A *framework and approach paper* is to be prepared in consultation with the relevant *Distribution Network Service Provider* and with other interested stakeholders.
- (e) The AER should complete its *framework and approach paper* for a particular *distribution network* sufficiently in advance of the making of the relevant distribution determination to enable it to be of use to the *Distribution Network Service Provider* in preparing its *regulatory proposal*.
- (f) If a distribution determination is currently in force, the AER must commence preparation of, and consultation on, the *framework and approach paper* for the distribution determination that is to supersede it at least 24 months before the end of the current *regulatory control period* and must complete preparation at least 19 months before the end of that *regulatory control period*.
- (g) On completing its *framework and approach paper*, the AER must:
 - (1) give a copy to the *Distribution Network Service Provider*; and
 - (2) publish it.
- (h) Subject to clause 6.12.3, a *framework and approach paper* is not binding on the AER or a *Distribution Network Service Provider*.

6.8.2 Submission of regulatory proposal

- (a) A *Distribution Network Service Provider* must, whenever required to do so under paragraph (b), submit a *regulatory proposal* to the AER for *distribution services* provided by means of, or in connection with, the provider's *distribution system*.
- (b) A *regulatory proposal* must be submitted:
 - (1) at least 13 months before the expiry of a distribution determination that applies to the service provider; or

- (2) if no distribution determination applies to the service provider, within 3 months after being required to do so by the *AER*.
- (c) A *regulatory proposal* must include (but need not be limited to) the following elements:
 - (1) a classification proposal:
 - (i) showing how the *distribution services* to be provided by the *Distribution Network Service Provider* should, in the provider's opinion, be classified under this Chapter; and
 - (ii) if the proposed classification differs from the classification suggested in the relevant *framework and approach paper* – including the reasons for the difference; and
 - (2) for *direct control services* classified under the proposal as *standard control services* – a *building block proposal*; and
 - (3) for *direct control services* classified under the proposal as *alternative control services* – a demonstration of the application of the control mechanism, as set out in the *framework and approach paper*, and the necessary supporting information; and
 - (4) for *direct control services* – indicative prices for each year of the *regulatory control period*; and
 - (5) for services classified under the proposal as *negotiated distribution services* – the proposed *negotiating framework*; and
 - (6) an indication of the parts of the proposal (if any) the *Distribution Network Service Provider* claims to be confidential and wants suppressed from publication on that ground.
- (d) The *regulatory proposal* must comply with the requirements of, and must contain or be accompanied by the information required by any relevant *regulatory information instrument*.
- (e) If more than one *distribution system* is owned, controlled or operated by a *Distribution Network Service Provider*, then, unless the *AER* otherwise determines, a separate *regulatory proposal* is to be submitted for each *distribution system*.
- (f) If, at the commencement of this Chapter, different parts of the same *distribution system* were separately regulated, then, unless the *AER* otherwise determines, a separate *regulatory proposal* is to be submitted for each part as if it were a separate *distribution system*.

6.9 Preliminary examination and consultation

6.9.1 Preliminary examination

- (a) If the *AER* considers that a *regulatory proposal* (or the accompanying information) does not comply, in any respect, with a requirement of the Law or the *Rules*, the *AER* may notify the provider that it requires resubmission of the proposal.
- (b) The notice must be given as soon as practicable and must state why, and in what respects, the *AER* considers the *regulatory proposal* to be non-compliant.

6.9.2 Resubmission of proposal

- (a) A *Distribution Network Service Provider* must, within 20 *business days* after receiving a notice under clause 6.9.1, resubmit its *regulatory proposal* in an amended form that complies with the relevant requirements set out in the notice.
- (b) A *Distribution Network Service Provider* may only make changes to its *regulatory proposal* to address the deficiencies identified in the notice.

6.9.3 Consultation

- (a) Subject to the provisions of the Law and the *Rules* about the disclosure of *confidential information*, the *AER* must *publish* a *regulatory proposal* submitted or resubmitted to it by the provider under this Part, together with:
 - (1) the *AER*'s proposed *Negotiated Distribution Service Criteria* for the provider; and
 - (2) an invitation for written submissions on the *regulatory proposal* and the proposed *Negotiated Distribution Service Criteria*,after the *AER* decides that the *regulatory proposal* complies (or that there is sufficient compliance) with the requirements of the Law and the *Rules*.
- (b) The *AER* may *publish* an issues paper examining issues related to the *regulatory proposal* and the proposed *Negotiated Distribution Service Criteria*, at the same time as, or subsequent to, *publication* of the invitation referred to in paragraph (a)(2).
- (c) Any person may make a written submission to the *AER* on the *regulatory proposal* or the proposed *Negotiated Distribution Service Criteria* within the time specified in the invitation referred to in paragraph (a)(2), which must be not earlier than 30 *business days* after the invitation for submissions is *published* under that paragraph.

6.10 Draft distribution determination and further consultation

6.10.1 Making of draft distribution determination

Subject to rule 6.14(a), the *AER* must consider any written submissions made under rule 6.9 and must make a draft distribution determination in relation to the *Distribution Network Service Provider*.

6.10.2 Publication of draft determination and consultation

- (a) The *AER* must *publish*:
 - (1) the draft distribution determination; and
 - (2) notice of the making of the draft distribution determination; and
 - (3) the *AER*'s reasons for suggesting that the distribution determination should be made as proposed including the draft constituent decisions i.e. the decisions made in accordance with rule 6.12 on which the draft distribution determination is predicated; and
 - (4) notice of a predetermination conference; and
 - (5) an invitation for written submissions on its draft distribution determination.
- (b) The *AER* must hold a predetermination conference at the time, date and place specified in the notice under paragraph (a)(4) for the purpose of explaining the draft distribution determination and receiving oral submissions from interested parties. Any person may attend such a predetermination conference but the procedure to be adopted at the conference will be at the discretion of the senior *AER* representative in attendance.
- (c) Any person may make a written submission to the *AER* on the draft distribution determination within the time specified in the invitation referred to in paragraph (a)(5), which must be not earlier than 30 *business days* after the making of the draft determination.

6.10.3 Submission of revised proposal

- (a) In addition to making written submissions, the *Distribution Network Service Provider* may, not more than 30 *business days* after the publication of the draft distribution determination, submit a revised *regulatory proposal* to the *AER*.
- (b) A *Distribution Network Service Provider* may only make the revisions referred to in paragraph (a) so as to incorporate the substance of any

changes required to address matters raised by the draft distribution determination or the *AER's* reasons for it.

- (c) A revised *regulatory proposal* must comply with the requirements of, and must contain or be accompanied by the information required by, any relevant *regulatory information instrument*.
- (d) Subject to the provisions of the Law and the *Rules* about the disclosure of *confidential information*, the *AER* must *publish* a revised *regulatory proposal* submitted by the *Distribution Network Service Provider* under paragraph (a), together with the accompanying information, as soon as practicable after receipt by the *AER*.
- (e) The *AER* may, but need not, invite written submissions on the revised *regulatory proposal*.

6.11 Distribution determination

6.11.1 Making of distribution determination

Subject to rule 6.14(a), the *AER* must consider any submissions made on the draft distribution determination, or on any revised *regulatory proposal* submitted to it under clause 6.10.3, and must make a distribution determination in relation to the *Distribution Network Service Provider*.

6.11.2 Notice of distribution determination

The *AER* must as soon as practicable, but not later than 2 months before the commencement of the relevant *regulatory control period*, *publish*:

- (1) notice of the making of the distribution determination; and
- (2) the distribution determination itself; and
- (3) the *AER's* reasons for making the distribution determination in its final form including the constituent decisions i.e. the decisions made in accordance with rule 6.12 on which the distribution determination is predicated.

6.11.3 Commencement of distribution determination

- (a) A distribution determination takes effect at the commencement of the *regulatory control period* to which it relates.
- (b) If a period intervenes between the end of one *regulatory control period* and the commencement of a new distribution determination providing for the next *regulatory control period*:

- (1) the previous distribution determination continues in force during the intervening period; and
- (2) the previous *approved pricing proposal* continues in force (despite any contrary provision of these *Rules*) during the intervening period and the first *regulatory year* of the later *regulatory control period*; and
- (3) the later distribution determination is to make provision for appropriate adjustments to the *approved pricing proposals* for subsequent *regulatory years* of the *regulatory control period*.

6.12 Requirements relating to draft and final distribution determinations

6.12.1 Constituent decisions

A distribution determination is predicated on the following decisions by the *AER* (*constituent decisions*):

- (1) a decision on the classification of the services to be provided by the *Distribution Network Service Provider* during the course of the *regulatory control period*;
- (2) a decision on the *Distribution Network Service Provider's* current *building block proposal* in which the *AER* either approves or refuses to approve:
 - (i) the *annual revenue requirement* for the provider, as set out in the *building block proposal*, for each *regulatory year* of the *regulatory control period*; and
 - (ii) the commencement and length of the *regulatory control period* as proposed in the *building block proposal*;
- (3) a decision in which the *AER* either:
 - (i) acting in accordance with clause 6.5.7(c), accepts the total of the forecast capital expenditure for the *regulatory control period* that is included in the current *building block proposal*; or
 - (ii) acting in accordance with clause 6.5.7(d), does not accept the total of the forecast capital expenditure for the *regulatory control period* that is included in the current *building block proposal*, in which case the *AER* must set out its reasons for that decision and an estimate of the total of the *Distribution Network Service Provider's* required capital expenditure for the *regulatory control period* that the *AER* is satisfied reasonably

reflects the *capital expenditure criteria*, taking into account the *capital expenditure factors*;

- (4) a decision in which the *AER* either:
 - (i) acting in accordance with clause 6.5.6(c), accepts the total of the forecast operating expenditure for the *regulatory control period* that is included in the current *building block proposal*; or
 - (ii) acting in accordance with clause 6.5.6(d), does not accept the total of the forecast operating expenditure for the *regulatory control period* that is included in the current *building block proposal*, in which case the *AER* must set out its reasons for that decision and an estimate of the total of the *Distribution Network Service Provider's* required operating expenditure for the *regulatory control period* that the *AER* is satisfied reasonably reflects the *operating expenditure criteria*, taking into account the *operating expenditure factors*;
- (5) a decision in relation to the rate of return on whether to apply or depart from a value, method or credit rating level set out in a *statement of regulatory intent* in accordance with clause 6.5.4;
- (6) a decision on the regulatory asset base as at the commencement of the *regulatory control period* in accordance with clause 6.5.1 and schedule 6.2;
- (7) a decision on the estimated cost of corporate income tax to the provider for each *regulatory year* of the *regulatory control period* in accordance with clause 6.5.3 and, where relevant, a *statement of regulatory intent* under clause 6.5.4;
- (8) a decision on whether or not to approve the depreciation schedules submitted by the *Distribution Network Service Provider* and, if the *AER* decides against approving them, a decision determining depreciation schedules in accordance with clause 6.5.5(b);
- (9) a decision on how any applicable *efficiency benefit sharing scheme*, *service target performance incentive scheme*, or *demand management incentive scheme* is to apply to the *Distribution Network Service Provider*;
- (10) a decision in which the *AER* decides other appropriate amounts, values or inputs;
- (11) a decision on the control mechanism (including the X factor) for *standard control services* (to be in accordance with the relevant *framework and approach paper*);

- (12) a decision on the control mechanism for *alternative control services* (to be in accordance with the relevant *framework and approach paper*);
- (13) a decision on how compliance with a relevant control mechanism is to be demonstrated;
- (14) a decision on the additional *pass through events* that are to apply for the *regulatory control period*;
- (15) a decision on the *negotiating framework* that is to apply to the *Distribution Network Service Provider* for the *regulatory control period* (which may be the *negotiating framework* as proposed by the provider, some variant of it, or a framework substituted by the *AER*);
- (16) a decision in which the *AER* decides the *Negotiated Distribution Service Criteria* for the *Distribution Network Service Provider*;
- (17) a decision on the procedures for assigning customers to *tariff classes*, or reassigning customers from one *tariff class* to another (including any applicable restrictions);
- (17A) a decision on the approval of the proposed *pricing methodology* for *transmission standard control services* (if rule 6.26 applies);
- (18) a decision on whether depreciation for establishing the regulatory asset base as at the commencement of the following *regulatory control period* is to be based on actual or forecast capital expenditure;
- (19) a decision on how the *Distribution Network Service Provider* is to report to the *AER* on its recovery of *Transmission Use of System* charges for each *regulatory year* of the *regulatory control period* and on the adjustments to be made to subsequent *pricing proposals* to account for over or under recovery of those charges.

6.12.2 Reasons for decisions

The reasons given by the *AER* for a draft distribution determination under rule 6.10 or a final distribution determination under rule 6.11 must set out the basis and rationale of the determination, including:

- (1) details of the qualitative and quantitative methods applied in any calculations and formulae made or used by the *AER*; and
- (2) the values adopted by the *AER* for each of the input variables in any calculations and formulae, including:
 - (i) whether those values have been taken or derived from the provider's current *building block proposal*; and

- (ii) if not, the rationale for the adoption of those values; and
- (3) details of any assumptions made by the *AER* in undertaking any material qualitative and quantitative analyses; and
- (4) reasons for the making of any decisions, the giving or withholding of any approvals, and the exercise of any discretions, as referred to in this Chapter 6, for the purposes of the determination.

6.12.3 Extent of AER's discretion in making distribution determinations

- (a) Subject to this clause and other provisions of this Chapter 6 explicitly negating or limiting the *AER*'s discretion, the *AER* has a discretion to accept or approve, or to refuse to accept or approve, any element of a *regulatory proposal*.
- (b) The classification of services must be as set out in the relevant *framework and approach paper* unless the *AER* considers that, in the light of the *Distribution Network Service Provider's regulatory proposal* and the submissions received, there are good reasons for departing from the classification proposed in that paper.
- (c) The control mechanisms must be as set out in the relevant *framework and approach paper*.
- (d) The *AER* must approve the *total revenue requirement* for a *Distribution Network Service Provider* for a *regulatory control period*, and the *annual revenue requirement* for each *regulatory year* of the *regulatory control period*, as set out in the provider's current *building block proposal*, if the *AER* is satisfied that those amounts have been properly calculated using the *post-tax revenue model* on the basis of amounts calculated, determined or forecast in accordance with the requirements of Part C of this Chapter 6.
- (e) The *AER* must approve a proposed *regulatory control period* if the proposed period consists of 5 *regulatory years*.
- (f) If the *AER* refuses to approve an amount or value referred to in clause 6.12.1, the substitute amount or value on which the distribution determination is based must be:
 - (1) determined on the basis of the current *regulatory proposal*; and
 - (2) amended from that basis only to the extent necessary to enable it to be approved in accordance with the *Rules*.
- (g) The *AER* must approve a proposed *negotiating framework* if the *AER* is satisfied that it adequately complies with the requirements of Part D.

- (h) If the *AER* refuses to approve the proposed *negotiating framework*, the approved amended *negotiating framework* must be:
 - (1) determined on the basis of the current proposed *negotiating framework*; and
 - (2) amended from that basis only to the extent necessary to enable it to be approved in accordance with the *Rules*.

6.13 Revocation and substitution of distribution determination for wrong information or error

- (a) The *AER* may (but is not required to) revoke a distribution determination during a *regulatory control period* if it appears to the *AER* that the determination is affected by a material error or deficiency of one or more of the following kinds:
 - (1) a clerical mistake or an accidental slip or omission;
 - (2) a miscalculation or misdescription;
 - (3) a defect in form;
 - (4) a deficiency resulting from the provision of false or materially misleading information to the *AER*.
- (b) If the *AER* revokes a distribution determination under paragraph (a), the *AER* must make a new distribution determination in substitution for the revoked determination to apply for the remainder of the *regulatory control period* for which the revoked determination was to apply.
- (c) If the *AER* revokes a distribution determination under paragraph (a), the substituted determination must only vary from the revoked determination to the extent necessary to correct the relevant error or deficiency.
- (d) The *AER* may only revoke and substitute a distribution determination under this rule 6.13, if it has first consulted with the relevant *Distribution Network Service Provider* and such other persons as it considers appropriate.

6.14 Miscellaneous

- (a) The *AER* may, but is not required to, consider any submission made pursuant to an invitation for submissions after the time for making the submission has expired.
- (b) Nothing in this Part E is to be construed as precluding the *AER* from *publishing* any issues, consultation and discussion papers, or holding any conferences and information sessions, that the *AER* considers appropriate.

- (c) Subject to paragraph (d), as soon as practicable after the *AER* receives a submission in response to an invitation referred to in clause 6.9.3(a)(2) or 6.10.2(a)(5) (whether or not the submission was made before the time for making it has expired), the *AER* must *publish* that submission.
- (d) The *AER* must not *publish* a submission referred to in paragraph (c) to the extent it contains information which has been clearly identified as confidential by the person making the submission.
- (e) The *AER* may give such weight to *confidential information* identified in accordance with paragraph (d) in a submission as it considers appropriate, having regard to the fact that such information has not been made publicly available.
- (f) Paragraph (d) does not apply to the extent that any other provision of the Law or the *Rules* permits or requires such information to be publicly released by the *AER*.

Part F Cost Allocation

6.15 Cost allocation

6.15.1 Duty to comply with Cost Allocation Method

A *Distribution Network Service Provider* must comply with the *Cost Allocation Method* that has been approved in respect of that provider from time to time by the *AER* under this rule 6.15.

6.15.2 Cost Allocation Principles

The following principles constitute the *Cost Allocation Principles*:

- (1) the detailed principles and policies used by a *Distribution Network Service Provider* to allocate costs between different categories of *distribution services* must be described in sufficient detail to enable the *AER* to replicate reported outcomes through the application of those principles and policies;
- (2) the allocation of costs must be determined according to the substance of a transaction or event rather than its legal form;
- (3) only the following costs may be allocated to a particular category of *distribution services*:
 - (i) costs which are directly attributable to the provision of those services;

- (ii) costs which are not directly attributable to the provision of those services but which are incurred in providing those services, in which case such costs must be allocated to the provision of those services using an appropriate allocator which should:
 - (A) except to the extent the cost is immaterial or a causal based method of allocation cannot be established without undue cost and effort, be causation based; and
 - (B) to the extent the cost is immaterial or a causal based method of allocation cannot be established without undue cost and effort, be an allocator that accords with a well accepted cost allocation method;
- (4) any cost allocation method which is used, the reasons for using that method and the numeric quantity (if any) of the chosen allocator must be clearly described;
- (5) the same cost must not be allocated more than once;
- (6) the principles, policies and approach used to allocate costs must be consistent with the *Distribution Ring-Fencing Guidelines*;
- (7) costs which have been allocated to a particular service cannot be reallocated to another service during the course of a *regulatory control period*.

Note

The Cost Allocation Guidelines are required by clause 6.15.3 to give effect to and be consistent with, the Cost Allocation Principles.

6.15.3 Cost Allocation Guidelines

- (a) The AER must, in accordance with the *distribution consultation procedures*, make guidelines (the *Cost Allocation Guidelines*) relating to the preparation by a *Distribution Network Service Provider* of its *Cost Allocation Method*.
- (b) The *Cost Allocation Guidelines*:
 - (1) must give effect to and be consistent with the *Cost Allocation Principles*; and
 - (2) may be amended by the AER from time to time in accordance with the *distribution consultation procedures*.
- (c) Without limiting the generality of paragraph (b), the *Cost Allocation Guidelines* may specify:

- (1) the format of a *Cost Allocation Method*; and
 - (2) the detailed information that is to be included in a *Cost Allocation Method*; and
 - (3) the categories of *distribution services* which are to be separately addressed in a *Cost Allocation Method*, such categories being determined by reference to the nature of those services, the persons to whom those services are provided or such other factors as the AER considers appropriate; and
 - (4) the allocation methods which are acceptable and the supporting information that is to be included in relation to such methodologies in a *Cost Allocation Method*.
- (d) The AER may, from time to time and in accordance with the *distribution consultation procedures*, amend or replace the *Cost Allocation Guidelines*.
- (e) The AER must, in accordance with the *distribution consultation procedures*, develop and *publish* the first *Cost Allocation Guidelines* within 6 months after the commencement of these *Rules* and there must be *Cost Allocation Guidelines* available at all times after that date.

6.15.4 Cost Allocation Method

- (a) Each *Distribution Network Service Provider* must submit to the AER for its approval a document setting out its proposed *Cost Allocation Method*:
- (1) within 12 months after the commencement of these *Rules*; or
 - (2) in the case of an entity that becomes a *Distribution Network Service Provider* more than 6 months after the commencement of these *Rules*, within 6 months of being required to do so by the AER.
- (b) The *Cost Allocation Method* proposed by a *Distribution Network Service Provider* must give effect to and be consistent with the *Cost Allocation Guidelines*.
- (c) The AER may approve or refuse to approve a *Cost Allocation Method* submitted under paragraph (a).
- (d) The AER must notify the relevant *Distribution Network Service Provider* of its decision to approve or refuse to approve the *Cost Allocation Method* submitted to it under paragraph (a) within 6 months of its submission, failing which the AER will be taken to have approved it.
- (e) As part of giving any approval referred to in paragraph (c), the AER may, after consulting with the relevant *Distribution Network Service Provider*,

amend the *Cost Allocation Method* submitted to it, in which case the *Cost Allocation Method* as so amended will be taken to be approved by the AER.

- (f) A *Distribution Network Service Provider* may, with the AER's approval, amend its *Cost Allocation Method* from time to time but:
 - (1) the amendment:
 - (i) may be approved on condition that the *Distribution Network Service Provider* agree to incorporate into the amendment specified additional changes to the *Cost Allocation Method* the AER reasonably considers necessary or desirable as a result of the amendment as submitted; and
 - (ii) if approved on such a condition, does not take effect unless and until the *Distribution Network Service Provider* notifies the AER of its agreement; and
 - (2) if 6 months elapse from the date of the submission of the amendment and the AER has not notified the *Distribution Network Service Provider* within that period of its approval or refusal to approve the amendment, the amendment is, at the end of that period, conclusively presumed to have been unconditionally approved.
- (g) A *Distribution Network Service Provider* must amend its *Cost Allocation Method* where the amendment is required by the AER to take into account any change to the *Cost Allocation Guidelines*, but the amendment only comes into effect:
 - (1) on the date that the AER approves that amendment, or 3 months after the submission of the amendment, whichever is the earlier; and
 - (2) subject to additional changes to the *Cost Allocation Method* (if any) the AER reasonably considers necessary or desirable as a result of the amendment and notifies to the *Distribution Network Service Provider* before the amendment takes effect.
- (h) A *Distribution Network Service Provider* must maintain a current copy of its *Cost Allocation Method* on its website.

Part G Distribution consultation procedures

6.16 Distribution consultation procedures

- (a) This rule 6.16 applies wherever the AER is required to comply with the *distribution consultation procedures*. For the avoidance of doubt, the *distribution consultation procedures* are separate from, and (where they are

required to be complied with) apply to the exclusion of, the *Rules* consultation procedures under rule 8.9.

- (b) If the *AER* is required to comply with the *distribution consultation procedures* in making, developing or amending any guidelines, models or schemes, or in reviewing any values or methods, it must *publish*:
 - (1) the proposed guideline, model, scheme, amendment or revised value or method; and
 - (2) an explanatory statement that sets out the provision of the *Rules* under or for the purposes of which the guideline, model, scheme or amendment is proposed to be made or developed or the value or method is required to be reviewed, and the reasons for the proposed guideline, model, scheme, amendment or revised value or method; and
 - (3) an invitation for written submissions on the proposed guideline, model, scheme, amendment or revised value or method.
- (c) The invitation must allow no less than 30 *business days* for the making of submissions, and the *AER* is not required to consider any submission made pursuant to that invitation after this time period has expired.
- (d) The *AER* may *publish* such issues, consultation and discussion papers, and hold such conferences and information sessions, in relation to the proposed guideline, model, scheme, amendment or revised value or method as it considers appropriate.
- (e) Within 80 *business days* of *publishing* the documents referred to in paragraph (b), the *AER* must *publish*:
 - (1) its final decision on the guideline, model, scheme, amendment, value or method that sets out:
 - (i) the guideline, model, scheme, amendment or revised value or method (if any); and
 - (ii) the provision of the *Rules* under which or for the purposes of which the guideline, model, scheme or amendment is being made or developed or the value or method is being reviewed; and
 - (iii) the reasons for the guideline, model, scheme, amendment value or method; and
 - (2) notice of the making of the final decision on the guideline, model, scheme, amendment, value or method.

- (f) Subject to paragraph (c), the *AER* must, in making its final decision referred to in paragraph (e)(1), consider any submissions made pursuant to the invitation for submissions referred to in paragraph (b)(3), and the reasons referred to in paragraph (e)(1)(iii) must include:
 - (1) a summary of each issue raised in those submissions that the *AER* reasonably considers to be material; and
 - (2) the *AER*'s response to each such issue.
- (g) The *AER* may extend the time within which it is required to publish its final decision if:
 - (1) the consultation involves questions of unusual complexity or difficulty; or
 - (2) the extension of time has become necessary because of circumstances beyond the *AER*'s control.

Part H Ring-Fencing Arrangements for Distribution Network Service Providers

6.17 Distribution Ring-Fencing Guidelines

6.17.1 Compliance with Distribution Ring-Fencing Guidelines

All *Distribution Network Service Providers* must comply with the *Distribution Ring-Fencing Guidelines* prepared in accordance with clause 6.17.2.

6.17.2 Development of Distribution Ring-Fencing Guidelines

- (a) Guidelines may be developed by the *AER* for the accounting and functional separation of the provision of *direct control services* by *Distribution Network Service Providers* from the provision of other services by *Distribution Network Service Providers* (the *Distribution Ring-Fencing Guidelines*). The guidelines may vary in application as between different *participating jurisdictions*.

Note:

Clause 11.14.5 will have a bearing on the application of these guidelines in certain cases.

- (b) The *Distribution Ring-Fencing Guidelines* may include, but are not limited to:
 - (1) provisions defining the need for and extent of:

- (i) legal separation of the entity through which a *Distribution Network Service Provider* provides *network services* from any other entity through which it conducts business; and
 - (ii) the establishment and maintenance of consolidated and separate accounts for *standard control services*, *alternative control services* and other services provided by the *Distribution Network Service Provider*; and
 - (iii) allocation of costs between *standard control services*, *alternative control services* and other services provided by the *Distribution Network Service Provider*; and
 - (iv) limitations on the flow of information between the *Distribution Network Service Provider* and any other person; and
 - (v) limitations on the flow of information where there is the potential for a competitive disadvantage between those parts of the *Distribution Network Service Provider's* business which provide *direct control services* and parts of the provider's business which provide any other services; and
- (2) provisions allowing the AER to add to or to waive a *Distribution Network Service Provider's* obligations under the *Distribution Ring-Fencing Guidelines*.
- (c) In developing or amending the *Distribution Ring-Fencing Guidelines* the AER must consider, without limitation, the need, so far as practicable, for consistency between the *Distribution Ring-Fencing Guidelines* and the *Transmission Ring-Fencing Guidelines*.
- (d) In developing or amending the *Distribution Ring-Fencing Guidelines*, the AER must consult with *participating jurisdictions*, *Registered Participants*, *NEMMCO* and other *interested parties*, and such consultation must be otherwise in accordance with the *distribution consultation procedures*.

Part I Distribution Pricing Rules

6.18 Distribution Pricing Rules

6.18.1 Application of this Part

This Part applies to tariffs and *tariff classes* related to *direct control services*.

6.18.2 Pricing proposals

- (a) A *Distribution Network Service Provider* must:

- (1) submit to the *AER*, as soon as practicable, and in any case within 15 *business days*, after *publication* of the distribution determination, a *pricing proposal* (the "*initial pricing proposal*") for the first *regulatory year* of the *regulatory control period*; and
 - (2) submit to the *AER*, at least 2 months before the commencement of the second and each subsequent *regulatory year* of the *regulatory control period*, a further *pricing proposal* (an "*annual pricing proposal*") for the relevant *regulatory year*.
- (b) *A pricing proposal must:*
- (1) set out the *tariff classes* that are to apply for the relevant *regulatory year*; and
 - (2) set out the proposed tariffs for each *tariff class*; and
 - (3) set out, for each proposed tariff, the *charging parameters* and the elements of service to which each *charging parameter* relates; and
 - (4) set out, for each *tariff class* related to *standard control services*, the expected weighted average revenue for the relevant *regulatory year* and also for the current *regulatory year*; and
 - (5) set out the nature of any variation or adjustment to the tariff that could occur during the course of the *regulatory year* and the basis on which it could occur; and
 - (6) set out how charges incurred by the *Distribution Network Service Provider* for *transmission use of system services* are to be passed on to customers and any adjustments to tariffs resulting from over or under recovery of those charges in the previous *regulatory year*; and
 - (7) demonstrate compliance with the *Rules* and any applicable distribution determination; and
 - (8) describe the nature and extent of change from the previous *regulatory year* and demonstrate that the changes comply with the *Rules* and any applicable distribution determination.
- (c) The *AER* must on receipt of a *pricing proposal* from a *Distribution Network Service Provider* *publish* the proposal.

6.18.3 Tariff classes

- (a) *A pricing proposal* must define the *tariff classes* into which customers for *direct control services* are divided.

- (b) Each customer for *direct control services* must be a member of 1 or more *tariff classes*.
- (c) Separate *tariff classes* must be constituted for customers to whom *standard control services* are supplied and customers to whom *alternative control services* are supplied (but a customer for both *standard control services* and *alternative control services* may be a member of 2 or more *tariff classes*).
- (d) A *tariff class* must be constituted with regard to:
 - (1) the need to group customers together on an economically efficient basis; and
 - (2) the need to avoid unnecessary transaction costs.

6.18.4 Principles governing assignment or re-assignment of customers to tariff classes and assessment and review of basis of charging

- (a) In formulating provisions of a distribution determination governing the assignment of customers to *tariff classes* or the re-assignment of customers from one *tariff class* to another, the AER must have regard to the following principles:
 - (1) customers should be assigned to *tariff classes* on the basis of one or more of the following factors:
 - (i) the nature and extent of their usage;
 - (ii) the nature of their *connection* to the *network*;
 - (iii) whether remotely-read interval metering or other similar metering technology has been installed at the customer's premises as a result of a *regulatory obligation or requirement*;
 - (2) customers with a similar *connection* and usage profile should be treated on an equal basis;
 - (3) however, customers with micro-generation facilities should be treated no less favourably than customers without such facilities but with a similar load profile;
 - (4) a *Distribution Network Service Provider's* decision to assign a customer to a particular *tariff class*, or to re-assign a customer from one *tariff class* to another should be subject to an effective system of assessment and review.

Note:

If (for example) a customer is assigned (or reassigned) to a tariff class on the basis of the customer's actual or assumed maximum demand, the system of assessment and review should allow for the reassignment of a customer who demonstrates a reduction or increase in maximum demand to a tariff class that is more appropriate to the customer's load profile.

- (b) If the *charging parameters* for a particular tariff result in a basis of charge that varies according to the usage or load profile of the customer, a distribution determination must contain provisions for an effective system of assessment and review of the basis on which a customer is charged.

6.18.5 Pricing principles

- (a) For each *tariff class*, the revenue expected to be recovered should lie on or between:
 - (1) an upper bound representing the stand alone cost of serving the customers who belong to that class; and
 - (2) a lower bound representing the avoidable cost of not serving those customers.
- (b) A tariff, and if it consists of 2 or more *charging parameters*, each *charging parameter* for a *tariff class*:
 - (1) must take into account the long run marginal cost for the service or, in the case of a *charging parameter*, for the element of the service to which the *charging parameter* relates; and
 - (2) must be determined having regard to:
 - (i) transaction costs associated with the tariff or each *charging parameter*; and
 - (ii) whether customers of the relevant *tariff class* are able or likely to respond to price signals.
- (c) If, however, as a result of the operation of paragraph (b), the *Distribution Network Service Provider* may not recover the expected revenue, the provider must adjust its tariffs so as to ensure recovery of expected revenue with minimum distortion to efficient patterns of consumption.

6.18.6 Side constraints on tariffs for standard control services

- (a) This clause applies only to *tariff classes* related to the provision of *standard control services*.
- (b) The expected weighted average revenue to be raised from a *tariff class* for a particular *regulatory year* of a *regulatory control period* must not exceed

the corresponding expected weighted average revenue for the preceding *regulatory year* by more than the permissible percentage.

- (c) The permissible percentage is the greater of the following:
- (1) the CPI-X limitation on any increase in the *Distribution Network Service Provider's* expected weighted average revenue between the two *regulatory years* plus 2%;

Note:

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

- (2) CPI plus 2%.

Note:

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

- (d) In deciding whether the permissible percentage has been exceeded in a particular *regulatory year*, the following are to be disregarded:
- (1) the recovery of revenue to accommodate a variation to the distribution determination under rule 6.6 or 6.13;
 - (2) the recovery of revenue to accommodate pass through of charges for *transmission use of system services* to customers.
- (e) This clause does not, however, limit the extent a tariff for customers with remotely-read interval metering or other similar metering technology may vary according to the time or other circumstances of the customer's usage.

6.18.7 Recovery of charges for transmission use of system services

- (a) A *pricing proposal* must provide for tariffs designed to pass on to customers the charges to be incurred by the *Distribution Network Service Provider* for *transmission use of system services*.
- (b) The amount to be passed on to customers for a particular *regulatory year* must not exceed the estimated amount of the *transmission use of system* charges for the relevant *regulatory year* adjusted for over or under recovery in the previous *regulatory year*.
- (c) The extent of the over or under recovery is the difference between:
 - (1) the amount actually paid by the *Distribution Network Service Provider* by way of *transmission use of system* charges in the previous *regulatory year*; and

- (2) the amount passed on to customers by way of *transmission use of system* charges by the *Distribution Network Service Provider* in the previous *regulatory year*.

6.18.8 Approval of pricing proposal

- (a) The *AER* must approve a *pricing proposal* if the *AER* is satisfied that:
 - (1) the proposal complies with this Part and any applicable distribution determination; and
 - (2) all forecasts associated with the proposal are reasonable.
- (b) If the *AER* determines that a *pricing proposal* is deficient:
 - (1) the *AER* may require the *Distribution Network Service Provider*, within 10 *business days* after receiving notice of the determination, to re-submit the proposal with the amendments necessary to correct the deficiencies identified in the determination and (unless the *AER* permits further amendment) no further amendment; or
 - (2) the *AER* may itself make the amendments necessary to correct the deficiencies.
- (c) If the service provider fails to comply with a requirement under paragraph (b), or the resubmitted proposal fails to correct the deficiencies in the former proposal, the *AER* may itself amend the proposal to bring it into conformity with the requirements of this Part and any applicable distribution determination.
- (d) An *approved pricing proposal* takes effect:
 - (1) in the case of an initial *pricing proposal* – at the commencement of the first *regulatory year* of the *regulatory control period* for which the distribution determination is made; and
 - (2) in the case of an annual *pricing proposal* – at the commencement of the *regulatory year* to which the proposal relates.

Note:

The operation of this paragraph may, in some instances, be displaced or modified by clause 6.11.3(b).

6.18.9 Publication of information about tariffs and tariff classes

- (a) A *Distribution Network Service Provider* must maintain on its website:

- (1) a statement of the provider's *tariff classes* and the tariffs applicable to each class; and
 - (2) for each tariff – the *charging parameters* and the elements of the service to which each *charging parameter* relates; and
 - (3) a statement of expected price trends (to be updated for each *regulatory year*) giving an indication of how the *Distribution Network Service Provider* expects prices to change over the *regulatory control period* and the reasons for the expected changes.
- (b) The information for a particular *regulatory year* must, if practicable, be posted on the website 20 *business days* before the commencement of the relevant *regulatory year* and, if that is not practicable, as soon as practicable thereafter.

6.19. Data Required for Distribution Service Pricing

6.19.1 Forecast use of networks by Distribution Customers and Embedded Generators

Any information required by *Distribution Network Service Providers* must be provided by *Service Applicants* as part of the *connection* and access requirements set out in Chapter 5.

6.19.2 Confidentiality of distribution network pricing information

- (a) Subject to the Law and the *Rules*, all information about a *Service Applicant* or *Distribution Network User* used by *Distribution Network Service Providers* for the purposes of *distribution service* pricing is confidential information and must be treated in accordance with rule 8.6.
- (b) No requirement in this Chapter 6 to publish information about a *tariff class* is to be construed as requiring publication of information about an individual customer.

Part J Billing and Settlements

6.20 Billing and Settlements Process

This clause describes the manner in which *Distribution Customers* and *Embedded Generators* are billed by *Distribution Network Service Providers* for *distribution services* and how payments for *distribution services* are settled.

6.20.1 Billing for distribution services

- (a) A *Distribution Network Service Provider* must bill *Distribution Network Users* for *distribution services* as follows:

(1) *Embedded Generators*:

- (i) by applying the *entry charge* as a fixed annual charge to each *Embedded Generator*; and
- (ii) by applying any other charge the *Distribution Network Service Provider* makes consistently with these *Rules* and the applicable distribution determination.

(2) *Distribution Customers*:

The charges to *Distribution Customers* must be determined according to use of the *distribution network* as determined in accordance with a *metrology procedure* or, in the absence of a *metrology procedure* allowing such a determination to be made, by *meter* or by agreement between the *Distribution Customer* and the *Distribution Network Service Provider* by applying one or more of the following measures:

- (i) demand-based prices to the *Distribution Customer's* metered or agreed half-hourly demand;
 - (ii) energy-based prices to the *Distribution Customer's* metered or agreed energy;
 - (iii) the *Distribution Customer* charge determined under this clause as a fixed periodic charge to each *Distribution Customer*;
 - (iv) a fixed periodic charge, a prepayment or other charge determined by agreement with the *Distribution Customer*;
 - (v) any other measure the *Distribution Network Service Provider* is authorised to apply by the applicable distribution determination.
- (b) Subject to paragraph (c), where a *Distribution Customer* (other than a *Market Customer*) incurs *distribution service* charges, the *Distribution Network Service Provider* must bill the *Market Customer* from whom the *Distribution Customer* purchases electricity directly or indirectly for such *distribution services* in accordance with paragraph (a)(2).
- (c) If a *Distribution Customer* and the *Market Customer* from whom it purchases electricity agree, the *Distribution Network Service Provider* may bill the *Distribution Customer* directly for *distribution services* used by that *Distribution Customer* in accordance with paragraph (a)(2).

- (d) *Distribution Network Service Providers* must:
- (1) calculate *transmission service charges* and *distribution service charges* for all *connection points* in their *distribution network*; and
 - (2) pay to *Transmission Network Service Providers* the *transmission service charges* incurred in respect of use of a *transmission network* at each *connection point* on the relevant *transmission network*.
- (e) Charges for *distribution services* based on metered kW, kWh, kVA, or kVAh for:
- (1) *Embedded Generators* that are *Market Generators*; and
 - (2) *Market Customer*; and
 - (3) *Second-Tier Customers*;
- must be calculated by the *Distribution Network Service Provider* from:
- (1) *settlements ready data* obtained from *NEMMCO's metering database*, for those *Embedded Generators*, *Market Customers* and *Second-Tier Customers* with *connection points* that have a type 1, 2, 3 or 4 *metering installation*; and
 - (2) *energy data*, in accordance with a *metrology procedure* that allows the *Distribution Network Service Provider* to use *energy data* for this purpose, or otherwise *settlements ready data* obtained from *NEMMCO's metering database*, for those *Embedded Generators*, *Market Customers* and *Second-Tier Customers* with *connection points* that have a type 5, 6 or 7 *metering installation*.
- (f) Charges for *distribution services* based on metered kW, kWh, kVA or kVAh for:
- (1) *Embedded Generators* that are not *Market Generators*; and
 - (2) *Non-Registered Customers*; and
 - (3) *franchise customers*,
- must be calculated by the *Distribution Network Service Provider* using data that is consistent with the *metering data* used by the relevant *Local Retailer* in determining *energy settlements*.
- (g) The *Distribution Network Service Provider* may bill the relevant *Local Retailer* for *distribution services* used by *Non-Registered Customers* and *franchise customers*.

- (h) Where the billing for a *Distribution Customer* for a particular *financial year* is based on quantities which are undefined until after the commencement of the *financial year*, charges must be estimated from the previous year's billing quantities with a reconciliation to be made when the actual billing quantities are known.
- (i) Where the previous year's billing quantities are unavailable or no longer suitable, nominated quantities may be used as agreed between the parties.

6.20.2 Minimum information to be provided in distribution network service bills

The following is the minimum information that must be provided with a bill for a *network coupling point* issued by a *Distribution Network Service Provider* directly to a *Registered Participant*:

- (1) the *network coupling point* identifier; and
- (2) the dates on which the billing period starts and ends; and
- (3) the identifier of the *distribution service* price from which the *network coupling point* charges are calculated; and
- (4) measured quantities, billed quantities, prices and amounts charged for each component of the total *distribution service* account.

6.20.3 Settlement between Distribution Network Service Providers

The billing and settlement process specified in this clause must be applied to all *Distribution Customers* including other *Distribution Network Service Providers*.

6.20.4 Obligation to pay

A *Distribution Network User* must pay *distribution service* charges properly charged to it and billed in accordance with this clause by the due date specified in the bill.

Part K Prudential requirements, capital contributions and prepayments

6.21 Distribution Network Service Provider Prudential Requirements

This clause sets out the arrangements by which *Distribution Network Service Providers* may minimise financial risks associated with investment in *network assets* and provides for adoption of cost-reflective payment options in conjunction with the use of average distribution prices. The clause also prevents *Distribution*

Network Service Providers from receiving income twice for the same assets through prudential requirements and *distribution service* prices.

6.21.1 Prudential requirements for distribution network service

- (a) A *Distribution Network Service Provider* may require an *Embedded Generator* or *Distribution Customer* that requires a new *connection* or a modification in service for an existing *connection* to establish prudential requirements for *connection service* and/or *distribution use of system service*.
- (b) Prudential requirements for *connection service* and/or *distribution use of system service* are a matter for negotiation between the *Distribution Network Service Provider* and the *Embedded Generator* or *Distribution Customer* and the terms agreed must be set out in the *connection agreement* between the *Distribution Network Service Provider* and the *Embedded Generator* or *Distribution Customer*.
- (c) The *connection agreement* may include one or more of the following provisions:
 - (1) the conditions under which and the time frame within which other *Distribution Network Users* who use that part of the *distribution network* contribute to refunding all or part of the payments;
 - (2) the conditions under which financial arrangements may be terminated; and
 - (3) the conditions applying in the event of default by the *Distribution Customer* or *Embedded Generator*.
- (d) The prudential requirements may incorporate, but are not limited to, one or more of the following arrangements:
 - (1) financial capital contributions;
 - (2) non-cash contributions;
 - (3) *distribution service* charge prepayments;
 - (4) guaranteed minimum *distribution service charges* for an agreed period;
 - (5) guaranteed minimum *distribution service* quantities for an agreed period;
 - (6) provision for financial guarantees for *distribution service charges*.

6.21.2 Capital contributions, prepayments and financial guarantees

Despite any other provision in this Chapter, in relation to capital contributions, prepayments and financial guarantees:

- (1) the *Distribution Network Service Provider* is not entitled to recover, under a mechanism for the economic regulation of *direct control services*, any component representing asset related costs for assets provided by *Distribution Network Users*; and
- (2) the *Distribution Network Service Provider* may receive a capital contribution, prepayment and/or financial guarantee up to the provider's future revenue related to the provision of *direct control services* for any new assets installed as part of a new *connection* or modification to an existing *connection*, including any *augmentation* to the *distribution network*; and
- (3) where assets have been the subject of a contribution or prepayment, the *Distribution Network Service Provider* must amend the provider's revenue related to the provision of *direct control services*.

6.21.3 Treatment of past prepayments and capital contributions

- (a) Payments made by *Distribution Customers* and *Embedded Generators* for *distribution service* prior to 13 December 1998 must be made in accordance with any contractual arrangements with the relevant *Distribution Network Service Providers* applicable at that time.
- (b) Where contractual arrangements referred to in clause 6.22.2(a) are not in place, past *distribution service* prepayments or capital contributions may be incorporated in the capital structure of the *Distribution Network Service Provider's* business.
- (c) The *AER* may intervene in and resolve any dispute under this clause which cannot be resolved between the relevant *Distribution Network Service Provider* and *Distribution Customer* or *Embedded Generator*.

Part L Dispute resolution

6.22 Dispute Resolution

6.22.1 Dispute Resolution by the AER

- (a) A dispute between a *Distribution Network Service Provider* and a *Service Applicant* as to the *terms and conditions of access* to a *direct control service* or to a *negotiated distribution service* is an access dispute for the purposes of Part 10 of the Law.

- (b) A dispute between a *Distribution Network Service Provider* and a *Service Applicant* about *access charges* is an access dispute for the purposes of Part 10 of the Law.
- (c) A dispute between a *Distribution Network Service Provider* and a *Connection Applicant* about matters referred to in clause 5.5(f) or clause 5.5(h) is an access dispute for the purposes of Part 10 of the Law.

6.22.2 Determination of dispute

- (a) In determining an access dispute about *terms and conditions of access* to a *direct control service*, the AER must apply:
 - (1) in relation to price, the *Distribution Network Service Provider's approved pricing proposal* or, in respect of the *Distribution Network Service Provider's transmission standard control services* in respect of which the AER has made a determination under clause 6.25(b) that pricing in respect of those services should be regulated under Part J of Chapter 6A through the application of rule 6.26, the *Distribution Network Service Provider's approved pricing methodology*;
 - (2) in relation to other terms and conditions, Chapters 4, 5, this Chapter 6 and Chapter 7 of the *Rules* and any other *applicable regulatory instrument*; and
 - (3) in relation to all *terms and conditions of access* (including price) the decisions of NEMMCO or the AER where those decisions relate to those terms and conditions and are made under Chapters 4, 5, this Chapter 6 and Chapter 7 of the *Rules*.
- (b) In determining an access dispute about the *terms and conditions of access* to a *direct control service*, the AER may:
 - (1) have regard to other matters the AER considers relevant; and
 - (2) hear evidence or receive submissions from NEMMCO about *power system security* and from *Distribution Network Users* who may be adversely affected.

Note:

Section 130 of the Law requires the AER, in making an access determination, to give effect to a network revenue or pricing determination applicable to the services that are the subject of the dispute even though the determination may not have been in force when the dispute arose.

- (c) In determining an access dispute about *terms and conditions of access* to a *negotiated distribution service*, the AER must apply:

- (1) in relation to price (including *access charges*), the *Negotiated Distribution Service Criteria* that are applicable to the dispute in accordance with the relevant distribution determination; and
- (2) in relation to other terms and conditions, the *Negotiated Distribution Service Criteria* that are applicable to the dispute and Chapters 4, 5, this Chapter 6 and Chapter 7 of the *Rules*; and
- (3) in relation to all *terms and conditions of access* (including price) the decisions of *NEMMCO* or the *AER* where those decisions relate to those terms and conditions and are made under Chapters 4, 5, this Chapter 6 and Chapter 7 of the *Rules*;

and must have regard:

- (4) to the relevant *negotiating framework* prepared by the *Distribution Network Service Provider* and approved by the *AER*.
- (d) In determining an access dispute about the *terms and conditions of access* to a *negotiated distribution service*, the *AER* may:
- (1) have regard to other matters the *AER* considers relevant; and
 - (2) hear evidence or receive submissions from *NEMMCO* and *Distribution Network Users* notified and consulted under the *Distribution Network Service Provider's negotiating framework*.
- (e) In determining an access dispute about *access charges*, or involving *access charges*, the *AER* must give effect to the following principle:

Access charges should be based on the costs reasonably incurred by the *Distribution Network Service Provider* in providing *distribution network user access* and, where they consist of compensation referred to in clause 5.5(f)(4)(ii) and (iii), on the revenue that is likely to be foregone and the costs that are likely to be incurred by a person referred to in those provisions where an event referred to in those provisions occurs.

6.22.3 Termination of access dispute without access determination

- (a) If the *AER* considers that an access dispute could be effectively resolved by some means other than an access determination, the *AER* may give the parties to the dispute notice of the alternative means of resolving the dispute.

Example:

The AER might give such a notice if of the opinion that a particular dispute could be dealt with more efficiently, and with less expense, by a jurisdictional ombudsman.

- (b) The giving of such a notice is a specified dispute termination circumstance for the purposes of section 131(3) of the Law.

Note:

It follows that the AER may exercise its power to terminate the dispute without making an access determination (See section 131(1)(d) of the Law).

Part M Separate disclosure of transmission and distribution charges

6.23 Separate disclosure of transmission and distribution charges

- (a) *A Distribution Customer:*
 - (1) with a *load* greater than 10MW or 40GWh per annum; or
 - (2) with *metering* equipment capable of capturing relevant *transmission* and *distribution* system usage data,

may make a request (a **TUOS/DUOS disclosure request**) to a *Distribution Network Service Provider* to provide the *Distribution Customer* with a statement (a **TUOS/DUOS disclosure statement**) identifying the separate components of the *transmission use of system* and *distribution use of system* charges comprised in the charges for electricity supplied to the *Distribution Customer's connection points*.

- (b) Within 10 *business days* of receipt of a *TUOS/DUOS disclosure request*, a *Distribution Network Service Provider* must notify the *Distribution Customer* of the estimated charge (including details of how the charge is calculated) for providing the *TUOS/DUOS disclosure statement*. The charge must be no greater than the reasonable costs directly incurred by the *Distribution Network Service Provider* in preparing the statement for the *Distribution Customer*.
- (c) If the *Distribution Customer* advises the *Distribution Network Service Provider* within 20 *business days* of receipt of the notice referred to in paragraph (b) that it still requires the requested *TUOS/DUOS disclosure statement*, the *Distribution Network Service Provider* must prepare the statement and provide it to the *Distribution Customer* within 20 *business days* of being so advised. The *TUOS/DUOS disclosure statement* must include detailed information on the method used to determine the *distribution use of system* charges and the allocation of the *transmission use of system* charges to the *Distribution Customer* for electricity supplied to its

connection points. The information must be sufficient to allow the *Distribution Customer* to assess the impact on its *network* charges of a change in its *network* use.

- (d) The *TUOS/DUOS disclosure statement* must also separately identify the amounts that have been allocated to the *Distribution Customer's connection points* under Part J of Chapter 6A in respect of each of the *categories of prescribed transmission services*, where the *Distribution Customer* requests this information.
- (e) Where the *Distribution Customer* requests the information referred to in paragraph (d), the *Distribution Network Service Provider* must separately identify the component of the charge notified under paragraph (b) that relates to the provision of the additional information.
- (f) Each *Distribution Network Service Provider* must publish information annually disclosing the *transmission use of system* and *distribution use of system* charges for each of the classes of *Distribution Customers* identified for this purpose by the *Distribution Network Service Provider*, or as required by the AER.

Part N Dual Function Assets

6.24 Dual Function Assets

6.24.1 Application of this Part

This Part applies to *Distribution Network Service Providers* which own, control or operate both a *distribution system* and a *dual function asset*.

6.24.2 Dual Function Assets

Subject to rule 6.26, for the purposes of Chapters 6 and 6A:

- (a) any part of a *network* owned, operated or controlled by a *Distribution Network Service Provider* which operates between 66 kV and 220 kV and which operates in parallel, and provides support, to the higher voltage *transmission network* is deemed to be a *dual function asset*;
- (b) any service that is provided by a *Distribution Network Service Provider* by means of, or in connection with, the *Distribution Network Service Provider's dual function assets* that, but for this Part, would be a *prescribed transmission service* for the purposes of Chapter 6A is deemed to be a *standard control service*;
- (c) any service that is provided by a *Distribution Network Service Provider* by means of, or in connection with, the *Distribution Network Service Provider's dual function assets* that, but for this Part, would be a *negotiated*

transmission service under Chapter 6A is deemed to be a *negotiated distribution service*; and

- (d) references to *prescribed transmission services* do not include a service provided by means of, or in connection with, a *dual function asset*.

6.25 AER determination of applicable pricing regime for Dual Function Assets

- (a) A *Distribution Network Service Provider* which owns, controls or operates *dual function assets* must advise the AER at least 24 months prior to the end of the current *regulatory control period* of the value of that *Distribution Network Service Provider's dual function assets* which provide *standard control services* that would be *prescribed transmission services* were it not for the operation of clause 6.24.2 (referred to as *transmission standard control services*). The value to be advised is the value ascribed to the relevant *dual function assets* in the relevant *Distribution Network Service Provider's* regulatory asset base as at the start of the *regulatory year* which commences 24 months prior to the end of the current *regulatory control period*.
- (b) The AER must review the information provided under paragraph (a) and determine, following consultation with the relevant *Distribution Network Service Provider* and with other interested parties in the course of preparing the *framework and approach paper* for that *Distribution Network Service Provider*, whether the value of that *Distribution Network Service Provider's dual function assets* which provide *transmission standard control services* comprise such a material proportion of that *Distribution Network Service Provider's* regulatory asset base that pricing in respect of those services should be regulated under Part J of Chapter 6A through the application of rule 6.26.
- (c) In making its determination under paragraph (b) the AER must consider:
 - (1) whether regulating the pricing of the *transmission standard control services* provided by a *Distribution Network Service Provider's dual function assets*:
 - (i) under Part I of Chapter 6 as though they were *prescribed distribution services*; rather than
 - (ii) under Part J of Chapter 6A as though they were *prescribed transmission services*,

will result in materially different prices for *Distribution Customers* (including those connected directly to the relevant *dual function assets* and those connected to other *distribution networks*);

- (2) whether the materiality of the different prices is likely to impact on future consumption, production and investment decisions by actual or potential *Network Users*; and
- (3) any other matter that the *AER* considers relevant.
- (d) The *AER's* determination under paragraph (b) must be notified to the relevant *Distribution Network Service Provider* in the *framework and approach paper* applicable to that *Distribution Network Service Provider*.

6.26 Division of Distribution Network Service Provider's revenue

- (a) This rule 6.26 applies if the *AER* has determined under rule 6.25(b) that pricing in respect of *transmission standard control services* provided by a *Distribution Network Service Provider's dual function assets* should be regulated under Part J of Chapter 6A.
- (b) The *AER* must, for the purposes of the distribution determination for the relevant *Distribution Network Service Provider*, divide the revenue calculated under Part C of Chapter 6 into the following two portions:
 - (1) a portion relevant to the *Distribution Network Service Provider's transmission standard control services* provided by its *dual function assets*. This portion is defined as its *transmission standard control service revenue*; and
 - (2) a portion relevant to the other *standard control services* provided by the *Distribution Network Service Provider*. This portion is defined as its *distribution standard control service revenue*,based on the *Distribution Network Service Provider's* approved *Cost Allocation Method*.
- (c) The relevant *Distribution Network Service Provider* must submit a proposed *pricing methodology* to the *AER* in respect of its *transmission standard control service revenue* as if it were a *Transmission Network Service Provider* as part of its regulatory proposal under Chapter 6, and Part E of Chapter 6A applies in respect of that *pricing methodology* (with the necessary changes).
- (d) The *AER* and the relevant *Distribution Network Service Provider* must apply and comply with all aspects of Part J of Chapter 6A instead of, and to the exclusion of, Parts I, J and K of Chapter 6 in respect of the *dual function assets* which provide *transmission standard control services*, subject to the following:
 - (1) for the purposes of Part J of Chapter 6A:

- (i) the *dual function assets* are relevantly deemed to be *transmission network assets* which provide *prescribed transmission services*;
 - (ii) the *Distribution Network Service Provider* which owns, controls or operates the relevant *dual function assets* is relevantly deemed to be a *Transmission Network Service Provider*;
 - (2) the *maximum allowed revenue* referred to in clause 6A.22.1 is taken to be the *transmission standard control service revenue*;
 - (3) the reference in clause 6A.22.1(1) to clause 6A.3.2 is taken to be a reference to rules 6.6 and 6.13;
 - (4) references to "*transmission determination*" are to be read as references to the relevant "*distribution determination*", with the *AER* being required to include in the distribution determination a decision to approve a proposed *pricing methodology* in relation to the *transmission standard control services* provided by the relevant *dual function assets*; and
 - (5) if there is no previous method to establish prices under clause 6A.24.3(b)(3), the relevant *Distribution Network Service Provider* must apply the *pricing methodology* of the largest *Transmission Network Service Provider* operating in the *participating jurisdiction* in which that *Distribution Network Service Provider* operates the relevant *dual function assets*.
- (e) The pricing rules in Part I of Chapter 6 are to be applied to the *Distribution Network Service Provider's distribution standard control service revenue*.

Schedule 6.1 Contents of building block proposals

S6.1.1 Information and matters relating to capital expenditure

A *building block proposal* must contain at least the following information and matters relating to capital expenditure:

- (1) a forecast of the required capital expenditure that complies with the requirements of clause 6.5.7 of the *Rules* and identifies the forecast capital expenditure by reference to well accepted categories such as:
 - (i) asset class (eg. *distribution lines*, *substations* etc); or
 - (ii) category driver (eg. *regulatory obligation or requirement*, replacement, *reliability*, net market benefit, business support etc),and identifies, in respect of proposed material assets:
 - (iii) the location of the proposed asset; and
 - (iv) the anticipated or known cost of the proposed asset; and
 - (v) the categories of *distribution services* which are to be provided by the proposed asset;
- (2) the method used for developing the capital expenditure forecast;
- (3) the forecasts of load growth relied upon to derive the capital expenditure forecasts and the method used for developing those forecasts of load growth;
- (4) the key assumptions that underlie the capital expenditure forecast;
- (5) a certification of the reasonableness of the key assumptions by the directors of the *Distribution Network Service Provider*;
- (6) capital expenditure for each of the past *regulatory years* of the previous and current *regulatory control period*, and the expected capital expenditure for each of the last two *regulatory years* of the current *regulatory control period*, categorised in the same way as for the capital expenditure forecast;
- (7) an explanation of any significant variations in the forecast capital expenditure from historical capital expenditure.

S6.1.2 Information and matters relating to operating expenditure

A *building block proposal* must contain at least the following information and matters relating to operating expenditure:

- (1) a forecast of the required operating expenditure that complies with the requirements of clause 6.5.6 of the *Rules* and identifies the forecast operating expenditure by reference to well accepted categories such as:
 - (i) particular programs; or
 - (ii) types of operating expenditure (eg. maintenance, payroll, materials etc),and identifies in respect of each such category:
 - (iii) to what extent that forecast expenditure is on costs that are fixed and to what extent it is on costs that are variable; and
 - (iv) the categories of *distribution services* to which that forecast expenditure relates;
- (2) the method used for developing the operating expenditure forecast;
- (3) the forecasts of key variables relied upon to derive the operating expenditure forecast and the method used for developing those forecasts of key variables;
- (4) the method used for determining the cost associated with planned maintenance programs designed to improve the performance of the relevant *distribution system* for the purposes of any *service target performance incentive scheme* that is to apply to the *Distribution Network Service Provider* in respect of the relevant *regulatory control period*;
- (5) the key assumptions that underlie the operating expenditure forecast;
- (6) a certification of the reasonableness of the key assumptions by the directors of the *Distribution Network Service Provider*;
- (7) operating expenditure for each of the past *regulatory years* of the previous and current *regulatory control period*, and the expected operating expenditure for each of the last two *regulatory years* of the current *regulatory control period*, categorised in the same way as for the operating expenditure forecast;
- (8) an explanation of any significant variations in the forecast operating expenditure from historical operating expenditure.

S6.1.3 Additional information and matters

A *building block proposal* must contain at least the following additional information and matters:

- (1) an identification and explanation of any significant interactions between the forecast capital expenditure and forecast operating expenditure programs;
- (2) a proposed pass through clause with a proposal as to the events that should be defined as *pass through events*;
- (3) a description, including relevant explanatory material, of how the *Distribution Network Service Provider* proposes the *efficiency benefit sharing scheme* should apply for the relevant *regulatory control period*;
- (4) a description, including relevant explanatory material, of how the *Distribution Network Service Provider* proposes the *service target performance incentive scheme* should apply for the relevant *regulatory control period*;
- (5) a description, including relevant explanatory material, of how the *Distribution Network Service Provider* proposes the *demand management incentive scheme* (if applicable) should apply for the relevant *regulatory control period*;
- (6) the provider's calculation of revenues or prices for the purposes of the control mechanism proposed by the provider together with:
 - (i) details of all amounts, values and inputs (including X factors) relevant to the calculation; and
 - (ii) an explanation of the calculation and the amounts, values and inputs involved in the calculation; and
 - (iii) a demonstration that the calculation and the amounts, values and inputs on which it is based comply with relevant requirements of the Law and the *Rules*;
- (7) the provider's calculation of the regulatory asset base for the relevant *distribution system* for each *regulatory year* of the relevant *regulatory control period* using the *roll forward model* referred to in clause 6.5.1 of the *Rules*, together with:
 - (i) details of all amounts, values and other inputs used by the provider for that purpose; and

- (ii) a demonstration that any such amounts, values and other inputs comply with the relevant requirements of Part C of Chapter 6 of the *Rules*; and
 - (iii) an explanation of the calculation of the regulatory asset base for each *regulatory year* of the relevant *regulatory control period* and of the amounts, values and inputs referred to in subparagraph (i);
- (8) the commencement and length of the period nominated by the *Distribution Network Service Provider* for the purposes of clause 6.5.2(c)(2) of the *Rules*;
- (9) the provider's calculation of the proposed rate of return, including any proposed departure from the values, methods or credit rating levels set out in an applicable *statement of regulatory intent*;
- (10) the *post-tax revenue model* completed to show its application to the *Distribution Network Service Provider* and the completed *roll-forward model*;
- (11) the provider's estimate of the cost of corporate income tax for each *regulatory year* of the *regulatory control period*;
- (12) the depreciation schedules nominated by the *Distribution Network Service Provider* for the purposes of clause 6.5.5 of the *Rules*, which categorise the relevant assets for these purposes by reference to well accepted categories such as:
 - (i) asset class (eg *distribution lines* and *substations*); or
 - (ii) category driver (eg *regulatory obligation or requirement*, replacement, *reliability*, net market benefit, and business support),together with:
 - (iii) details of all amounts, values and other inputs used by the provider to compile those depreciation schedules; and
 - (iv) a demonstration that those depreciation schedules conform with the requirements set out in clause 6.5.5(b) of the *Rules*; and
 - (v) an explanation of the calculation of the amounts, values and inputs referred to in subparagraph (iii);
- (13) the commencement and length of the *regulatory control period* proposed by the *Distribution Network Service Provider*.

Schedule 6.2 Regulatory Asset Base

S6.2.1 Establishment of opening regulatory asset base for a regulatory control period

(a) Application of this clause

This clause S6.2.1

- (1) applies to the establishment of the value of the regulatory asset base for a *distribution system* as at the beginning of a *regulatory control period* on the roll forward of the regulatory asset base to that *regulatory control period* from the previous *regulatory control period*; and
- (2) also applies to the establishment of the value of the regulatory asset base for a *distribution system* as at the beginning of a *regulatory control period* where the *distribution system* was not immediately before that time the subject of a *building block determination*.

(b) Roll forward model to comply with this clause

The values to be used for completing the *roll forward model* must be established in accordance with this clause and clauses S6.2.2 and S6.2.3.

(c) Distribution systems of specific providers

- (1) In the case of a *distribution system* owned, controlled or operated by one of the following *Distribution Network Service Providers* as at the commencement of this schedule, the value of the regulatory asset base for that *distribution system* as at the beginning of that first *regulatory year* must be determined by rolling forward the regulatory asset base for that *distribution system*, as set out in the table below, in accordance with this schedule:

Jurisdiction	<i>Distribution Network Service Provider</i>	Regulatory Asset Base (\$m)
Australian Capital Territory	ActewAGL	510.54 (as at 1 July 2004 in July 2004 dollars)
New South Wales	Country Energy	2,440 (as at 1 July 2004 in July 2004 dollars)
	EnergyAustralia	4,116 (as at 1 July 2004 in July 2004 dollars)

Jurisdiction	<i>Distribution Network Service Provider</i>	Regulatory Asset Base (\$m)
	Integral Energy	2,283 (as at 1 July 2004 in July 2004 dollars)
Queensland	ENERGEX	4,308.1 (as at 1 July 2005 in July 2005 dollars)
	Ergon Energy	4,198.2 (as at 1 July 2005 in July 2005 dollars) but, if the Queensland Competition Authority nominates a different amount in writing to the <i>AER</i> , the regulatory asset base is the amount so nominated.
South Australia	ETSA Utilities	2,466 (as at 1 July 2005 in December 2004 dollars)
Tasmania	Aurora Energy	981.108 (as at 1 January 2008 in July 2006 dollars)
Victoria	AGL Electricity	578.4 (as at 1 January 2006 in July 2004 dollars)
	Citipower	990.9 (as at 1 January 2006 in July 2004 dollars)
	Powercor	1,626.5 (as at 1 January 2006 in July 2004 dollars)
	SP AusNet	1,307.2 (as at 1 January 2006 in July 2004 dollars)
	United Energy	1,220.3 (as at 1 January 2006 in July 2004 dollars)

- (2) The values in the table above are to be adjusted for the difference between:
- (i) any estimated capital expenditure that is included in those values for any part of a previous *regulatory control period*; and
 - (ii) the actual capital expenditure for that part of the previous *regulatory control period*.

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

- (3) When rolling forward a regulatory asset base under subparagraph (1), the *AER* must take into account the derivation of the values in the above table from past regulatory decisions and the consequent fact that they relate only to the regulatory asset base identified in those decisions.

(d) Other distribution systems

- (1) This paragraph (d) applies to a *distribution system* not referred to in paragraphs (c) when *standard control services* that are provided by means of, or in connection with, that system are to be regulated under a *building block determination*.
- (2) The value of the regulatory asset base for that *distribution system* as at the beginning of the first *regulatory year* of the first *regulatory control period* for the relevant *Distribution Network Service Provider* is the prudent and efficient value of the assets that are used by the provider to provide those *standard control services* (but only to the extent that they are used to provide such services), as determined by the *AER*. In determining this value, the *AER* must have regard to the matters referred to in clause S6.2.2.
- (3) The value of the regulatory asset base for that *distribution system* as at the beginning of the first *regulatory year* of any subsequent *regulatory control period* must be determined by rolling forward the value of the regulatory asset base for that *distribution system* as at the beginning of the first *regulatory year* of the first *regulatory control period* in accordance with this schedule.

(e) Method of adjustment of value of regulatory asset base

Except as otherwise provided in paragraph (c) or (d), the value of the regulatory asset base for a *distribution system* as at the beginning of the first *regulatory year* of a *regulatory control period* must be calculated by adjusting the value (the ‘**previous value**’) of the regulatory asset base for that *distribution system* as at the beginning of the first *regulatory year* of the immediately preceding *regulatory control period* (the ‘**previous control period**’) as follows:

- (1) The previous value of the regulatory asset base must be increased by the amount of all capital expenditure incurred during the previous control period.
- (2) The previous value of the regulatory asset base must be increased by the amount of the estimated capital expenditure approved by the *AER*

for any part of the previous control period for which actual capital expenditure is not available.

- (3) The previous value of the regulatory asset base must be adjusted for the difference between:
 - (i) the estimated capital expenditure for any part of a previous *regulatory control period* where that estimated capital expenditure has been included in that value; and
 - (ii) the actual capital expenditure for that part of the previous *regulatory control period*.

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

- (4) The previous value of the regulatory asset base must only be increased by actual or estimated capital expenditure to the extent that all such capital expenditure is properly allocated to the provision of *standard control services* in accordance with the *Cost Allocation Method* for the relevant *Distribution Network Service Provider*.
- (5) The previous value of the regulatory asset base must be reduced by the amount of depreciation of the regulatory asset base during the previous *regulatory control period*, calculated in accordance with the distribution determination for that period.
- (6) The previous value of the regulatory asset base must be reduced by the disposal value of any asset where that asset has been disposed of during the previous *regulatory control period*.
- (7) The previous value of the regulatory asset base must be reduced by the value of an asset where the asset was previously used to provide *standard control services* (or their equivalent under the previous regulatory system) but, as a result of a change to the classification of a particular service under Part B, is not to be used for that purpose for the relevant *regulatory control period*.
- (8) The previous value of the regulatory asset base may be increased by the value of an asset to which this subparagraph applies to the extent that:
 - (i) the *AER* considers the asset to be reasonably required to achieve one or more of the *capital expenditure objectives*; and
 - (ii) the value of the asset has not been otherwise recovered.

This subparagraph applies to an asset that:

- (i) was not used to provide *standard control services* (or their equivalent under the previous regulatory system) in the previous *regulatory control period* but, as a result of a change to the classification of a particular service under Part B, is to be used for that purpose for the relevant *regulatory control period*; or
 - (ii) was never previously used to provide *standard control services* (or their equivalent under the previous regulatory system) but is to be used for that purpose for the relevant *regulatory control period*.
- (f) An increase or reduction in the value of the regulatory asset base under subparagraph (7) or (8) of paragraph (e) is to be based on the portion of the value of the asset properly allocated, or formerly properly allocated, to *standard control services* in accordance with the principles and policies set out in the *Cost Allocation Method* for the relevant *Distribution Network Service Provider*. The value of the relevant asset is taken to be its value as shown in independently audited and published accounts.

S6.2.2 Prudency and efficiency of capital expenditure

In determining the prudency or efficiency of capital expenditure under clause S6.2.1(d)(2), the *AER* must have regard to the following:

- (1) the need to provide a reasonable opportunity for the relevant *Distribution Network Service Provider* to recover the efficient costs of complying with all applicable *regulatory obligations or requirements* associated with the provision of *standard control services*;
- (2) the need to provide effective incentives to the provider to promote economic efficiency in the provision of *standard control services*;
- (3) whether the relevant project in respect of which capital expenditure was made was evaluated against, and satisfied, the *regulatory test*;
- (4) whether the provider undertook the capital expenditure in a manner consistent with good business practice and so as to practicably achieve the lowest sustainable cost of delivering the *standard control services* to be provided as a consequence of that capital expenditure;
- (5) the desirability of minimising investment uncertainty for the provider;
- (6) the need to provide incentives to the provider to avoid undertaking inefficient capital expenditure;
- (7) the value of the relevant asset as shown in independently audited and published accounts.

In determining the prudence or efficiency of capital expenditure the *AER* must only take into account information and analysis that the provider could reasonably be expected to have considered or undertaken at the time that it undertook the relevant capital expenditure.

S6.2.3 Roll forward of regulatory asset base within the same regulatory control period

(a) Application of this clause

This clause applies to the establishment of the value of the regulatory asset base for a *distribution system* as at the beginning of one *regulatory year* in a *regulatory control period* on the roll forward of the regulatory asset base to that *regulatory year* from the immediately preceding *regulatory year* (if any) in that *regulatory control period*.

(b) Roll forward model to comply with this clause

The *roll forward model* referred to in clause 6.5.1 of the *Rules* must provide for that value to be established in accordance with the requirements of this clause.

(c) Method of adjustment of value of regulatory asset base

The value of the regulatory asset base for a *distribution system* as at the beginning of the second or a subsequent year ('the **later year**') in a *regulatory control period* must be calculated by adjusting the value ('the **previous value**') of the regulatory asset base for that *distribution system* as at the beginning of the immediately preceding *regulatory year* ('the **previous year**') in that *regulatory control period* as follows:

- (1) The previous value of the regulatory asset base must be increased by the amount of forecast capital expenditure accepted or substituted by the *AER* for the previous year in accordance with clause 6.5.7(c) or clause 6.12.1(3) (as the case may be).
- (2) The previous value of the regulatory asset base must be reduced by the amount of depreciation included in the *Distribution Network Service Provider's annual revenue requirement* for the previous year.
- (3) The previous value of the regulatory asset base must be reduced by the disposal value of any asset included in that value where the asset is forecast to be disposed of during the previous year.
- (4) The previous value of the regulatory asset base must be increased by an amount necessary to maintain the real value of the regulatory asset base as at the beginning of the later year by adjusting that value for inflation.

(d) Allowance for working capital

If the *AER* determines that it is appropriate to do so, it may include an allowance for working capital in the regulatory asset base for a *distribution system* which is rolled forward in accordance with this clause.

CHAPTER 6A

6A. Economic Regulation of Transmission Services

Part A - Introduction

6A.1 Introduction to Chapter 6A

6A.1.1 Economic regulation of transmission services generally

- (a) Part B of this Chapter 6A states the general obligation of the *AER* to make *transmission determinations* for *Transmission Network Service Providers* in respect of:
 - (1) *prescribed transmission services*; and
 - (2) *negotiated transmission services*.
- (b) Part C of this Chapter 6A regulates the revenues that may be earned by *Transmission Network Service Providers* from the provision by them of *transmission services* that are the subject of *transmission determinations*.
- (c) Part D of this Chapter 6A regulates the *terms and conditions of access* to be applied (including the prices that may be charged) by *Transmission Network Service Providers* for the provision by them of *negotiated transmission services*.
- (d) Part E of this Chapter 6A sets out the procedure that applies for the purposes of the *AER* making a *transmission determination*.
- (d) Part F of this Chapter 6A contains provisions regarding the disclosure, use and protection of information.
- (e) Part G of this Chapter 6A contains provisions regarding cost allocation.
- (f) Part H of this Chapter 6A contains provisions regarding the *transmission consultation procedures*.
- (g) Part I of this Chapter 6A contains provisions regarding *Transmission Ring-Fencing Guidelines*.
- (h) Part J of this Chapter 6A regulates the prices that may be charged by *Transmission Network Service Providers* for the provision of *prescribed transmission services* and establishes principles to be applied by providers in setting prices that allow those providers to earn the whole of the *aggregate annual revenue requirement*.

- (i) Part K of this Chapter 6A provides for a *commercial arbitrator* to be appointed to resolve *transmission services access disputes* in relation to the *terms and conditions of access* for the provision of *negotiated transmission services* and for *prescribed transmission services*.
- (j) Other *transmission services* provided by *Transmission Network Service Providers* ('*non-regulated transmission services*') are not subject to regulation under this Chapter 6A.
- (k) Services provided by *dual function assets* are not subject to regulation under this Chapter 6A except to the extent provided in Part N of Chapter 6.

6A.1.2 Meaning of terms and conditions of access for transmission services

For the purposes of the economic regulation of *prescribed transmission services* and *negotiated transmission services*, the *terms and conditions of access*:

- (a) in relation to *negotiated transmission services*, are:
 - (1) the price of those services (including, for services provided under rule 5.4A, *access charges*); and
 - (2) other terms and conditions for the provision of those *negotiated transmission services*,

under Chapters 4, 5 and this Chapter 6A of the *Rules*; and
- (b) in relation to *prescribed transmission services*, are:
 - (1) the price of those services as determined under the *pricing methodology* of the relevant *Transmission Network Service Provider*; and
 - (2) other terms and conditions for the provision of those *prescribed transmission services*,

under Chapters 4, 5 and this Chapter 6A of the *Rules*.

6A.1.3 Access to prescribed and negotiated transmission services

Subject to and in accordance with the *Rules*:

- (1) a person who is an existing or intending *Registered Participant*, or a person who is eligible to become a *Registered Participant* ('a *Service Applicant*') may apply to a *Transmission Network Service Provider* for provision of *prescribed transmission services* or *negotiated transmission services*.

- (2) a *Transmission Network Service Provider* must provide *prescribed transmission services* or *negotiated transmission services* (as the case may be) on *terms and conditions of access* that are consistent with the requirements of Chapters 4, 5 and this Chapter 6A of the *Rules*.
- (3) a *Transmission Network Service Provider* or a person who is provided *prescribed transmission services* or *negotiated transmission services* (whether the person is provided those services under an agreement, as a result of a determination of a *commercial arbitrator* or otherwise under the *Rules*) must not engage in conduct for the purpose of preventing or hindering access to those services.

6A.1.4 National regulatory arrangements

- (a) The *AER* is, in accordance with this Chapter 6A, responsible for the economic regulation of *prescribed transmission services* provided by *Transmission Network Service Providers* by means of, or in connection with, *transmission systems* that form part of the *national grid*.
- (b) Subject to any contrary determination by the *AER*, those parts of a *transmission network* operating at nominal *voltages* between 66kV and 220kV that:
 - (1) do not operate in parallel to; and
 - (2) do not provide support to,

the higher *voltage transmission network* may be deemed by the relevant *Transmission Network Service Provider* to be subject to the regulatory arrangements for *distribution service pricing* set out in Chapter 6.

6A.1.5 Application of Chapter 6A to Market Network Service Providers

- (a) Notwithstanding anything contained in this Chapter 6A:
 - (1) Parts B, C, D and J do not regulate the revenues that may be earned by *Market Network Service Providers* from, or the prices that may be charged by *Market Network Service Providers* for, the provision by them of *market network services*; and
 - (2) Part E does not apply to *Market Network Service Providers*.
- (b) Part D of this Chapter 6A does not regulate the terms and conditions of access for provision by *Transmission Network Service Providers* of *network services* provided to:
 - (1) a *Market Network Service Provider*; or

- (2) another *Network Service Provider* for electricity delivered to a *Market Network Service Provider* through the *network* of the other *Network Service Provider* (except for any such electricity which is ultimately consumed within the other *Network Service Provider's network*).
- (c) Charges for the *network services* referred to in paragraph (b) are governed by the applicable provisions of rule 5.4A.
- (d) Part K of this Chapter 6A does not apply to disputes relating to the terms and conditions of access for *network services* referred to under this clause 6A.1.5.

Part B - Transmission Determinations Generally

6A.2 Transmission determinations

6A.2.1 Duty of AER to make transmission determinations

The AER must make *transmission determinations* for *Transmission Network Service Providers* in accordance with this Chapter 6A in respect of:

- (1) *prescribed transmission services*; and
- (2) *negotiated transmission services*.

6A.2.2 Components of transmission determinations

A *transmission determination* for a *Transmission Network Service Provider* consists of:

- (1) a *revenue determination* for the provider in respect of the provision by the provider of *prescribed transmission services*;
- (2) a determination relating to the provider's *negotiating framework*;
- (3) a determination that specifies the *Negotiated Transmission Service Criteria* that apply to the provider; and
- (4) a determination that specifies the *pricing methodology* that applies to the provider.

Part C - Regulation of Revenue - Prescribed Transmission Services

6A.3 Allowed revenue from prescribed transmission services

6A.3.1 Allowed revenue for regulatory year

The revenue that a *Transmission Network Service Provider* may earn in any *regulatory year* of a *regulatory control period* from the provision of *prescribed transmission services* is the *maximum allowed revenue* subject to any adjustments referred to in clause 6A.3.2, and is to be determined in accordance with:

- (1) the *revenue determination* forming part of the applicable *transmission determination*; and
- (2) the provisions of this Part C.

6A.3.2 Adjustment of maximum allowed revenue

The *maximum allowed revenue* that a *Transmission Network Service Provider* may earn in any *regulatory year* of a *regulatory control period* from the provision of *prescribed transmission services* is subject to adjustment in accordance with rules 6A.7, 6A.8 or 6A.15.

6A.4 Revenue determinations

6A.4.1 Introduction

- (a) The procedure for making a *revenue determination* for a *Transmission Network Service Provider* is contained in Part E of this Chapter 6A, and involves the submission to the AER of a *Revenue Proposal* by the provider.
- (b) Such a *Revenue Proposal* must comply with the requirements of this Chapter 6A, and in particular must:
 - (1) be prepared using the *post-tax revenue model* referred to in rule 6A.5; and
 - (2) comply with the requirements of the *submission guidelines* referred to in clause 6A.10.2.

6A.4.2 Contents of revenue determination

- (a) A *revenue determination* for a *Transmission Network Service Provider* is to specify, for a *regulatory control period*, the following matters:
 - (1) the amount of the estimated *total revenue cap* for the *regulatory control period* or the method of calculating that amount;

- (2) the *annual building block revenue requirement* for each *regulatory year* of the *regulatory control period*;
 - (3) the amount of the *maximum allowed revenue* for each *regulatory year* of the *regulatory control period* or the method of calculating that amount;
 - (4) appropriate methodologies for the indexation of the regulatory asset base;
 - (5) the values that are to be attributed to the *performance incentive scheme parameters* for the purposes of the application to the provider of any *service target performance incentive scheme* that applies in respect of the *regulatory control period*;
 - (6) the values that are to be attributed to the *efficiency benefit sharing scheme parameters* for the purposes of the application to the provider of any *efficiency benefit sharing scheme* that applies in respect of the *regulatory control period*;
 - (7) the commencement and length of the *regulatory control period*; and
 - (8) such amounts, values or inputs as have been used by the AER in place of those referred to in clause 6A.10.2(b)(9).
- (b) Unless otherwise determined by the AER:
- (1) the *total revenue cap* may not relate to more than one *transmission system* that is owned, controlled or operated by a *Transmission Network Service Provider*; and
 - (2) there is to be a separate *total revenue cap* for each such *transmission system*.
- (c) A *regulatory control period* in respect of a *Transmission Network Service Provider* must be not less than 5 *regulatory years*.

6A.5 Post-tax revenue model

6A.5.1 Introduction

- (a) The process of preparing a *revenue determination* for a *Transmission Network Service Provider* involves the submission of a *Revenue Proposal* to the AER by the provider under clause 6A.10.1. The provider is required to prepare the *Revenue Proposal* using a *post-tax revenue model* in relation to that proposal, in accordance with the requirements of this Chapter 6A.

- (b) The principal purpose of the *post-tax revenue model* is to calculate the *maximum allowed revenue* under the *revenue determination*.
- (c) The *post-tax revenue model*, together with the *Revenue Proposal*, form the basis on which the AER assesses a *Revenue Proposal* and makes a *revenue determination*.

6A.5.2 Preparation, publication and amendment of post-tax revenue model

- (a) The AER must, in accordance with the *transmission consultation procedures*, prepare and *publish* a *post-tax revenue model*.
- (b) The AER may, from time to time and in accordance with the *transmission consultation procedures*, amend or replace the *post-tax revenue model*.
- (c) The AER must develop and *publish* the first *post-tax revenue model* by 28 September 2007² and there must be such a model in force at all times after that date.

6A.5.3 Contents of post-tax revenue model

- (a) The *post-tax revenue model* must set out the manner in which the following matters, referable only to the provision of *prescribed transmission services*, are to be calculated in respect of a *Transmission Network Service Provider* for a *regulatory control period*:
 - (1) the *total revenue cap* for the provider for the period;
 - (2) the *maximum allowed revenue* for the provider for each *regulatory year* of the period; and
 - (3) the *annual building block revenue requirement* for the provider for each *regulatory year*, determined in accordance with clause 6A.5.4.
- (b) The *post-tax revenue model* must specify:
 - (1) a methodology that the AER determines is likely to result in the best estimates of expected inflation;
 - (2) the timing assumptions and associated discount rates that are to apply in relation to the calculation of the building blocks referred to in clause 6A.5.4;
 - (3) the manner (if any) in which working capital is to be treated;
 - (4) the manner in which the estimated cost of corporate income tax is to be calculated; and

- (5) the CPI - X methodology that is to be applied in escalating the *maximum allowed revenue* for the provider for each *regulatory year* (other than the first *regulatory year*) of a *regulatory control period*.
- (c) The *post-tax revenue model* must be such that:
 - (1) the net present value of the expected *maximum allowed revenue* for the provider for each *regulatory year* of the *regulatory control period* is equal to the net present value of the *annual building block revenue requirement* for the provider for each *regulatory year*;
 - (2) the *maximum allowed revenue* for the provider for the first *regulatory year* is expressed as a dollar amount;
 - (3) the *maximum allowed revenue* for the provider for each *regulatory year* (other than the first *regulatory year*) is calculated by escalating the *maximum allowed revenue* for the provider for the previous *regulatory year* using a CPI - X methodology; and
 - (4) the *total revenue cap* for the provider for a *regulatory control period* is calculated as the sum of the *maximum allowed revenues* for the provider for each *regulatory year*.
- (d) For the purposes of this clause 6A.5.3, the X factor is that determined in accordance with clause 6A.6.8.

6A.5.4 Building blocks approach

(a) **Building blocks generally**

The *annual building block revenue requirement* for a *Transmission Network Service Provider* for each *regulatory year* of a *regulatory control period* must be determined using a building blocks approach, under which the building blocks are:

- (1) indexation of the regulatory asset base - see paragraph (b)(1);
- (2) a return on capital for that year - see paragraph (b)(2);
- (3) the depreciation for that year - see paragraph (b)(3);
- (4) the estimated cost of corporate income tax of the provider for that year - see paragraph (b)(4);
- (5) certain revenue increments or decrements for that year arising from the *efficiency benefit sharing scheme* - see paragraph (b)(5);
- (6) the forecast operating expenditure accepted or substituted by the *AER* for that year – see paragraph (b)(6); and

- (7) compensation for other risks - see paragraph (b)(7).

(b) Details about the building blocks

For the purposes of paragraph (a):

- (1) for indexation of the regulatory asset base:
 - (i) the regulatory asset base is calculated in accordance with clause 6A.6.1 and schedule 6A.2; and
 - (ii) the building block comprises a negative adjustment equal to the amount referred to in clause S6A.2.4(c)(4) for that year;
- (2) the return on capital is calculated in accordance with clause 6A.6.2;
- (3) the depreciation is calculated in accordance with clause 6A.6.3;
- (4) the estimated cost of corporate income tax is determined in accordance with clause 6A.6.4;
- (5) the revenue increments or decrements are those that arise as a result of the operation of the applicable *efficiency benefit sharing scheme*, as referred to in clause 6A.6.5;
- (6) the forecast operating expenditure is accepted or substituted by the *AER* in accordance with clause 6A.6.6(c) or clause 6A.13.2(b)(3) and (5) (as the case may be); and
- (7) the compensation for other risks is such amounts as the *AER* determines are necessary for that year to compensate a *Transmission Network Service Provider* for risks that are not otherwise compensated for in the return on capital, including the risk referred to in clause S6A.2.3(b) of schedule 6A.2.

6A.6 Matters relevant to the making of revenue determinations

6A.6.1 Regulatory asset base

Nature of regulatory asset base

- (a) The regulatory asset base for a *transmission system* owned, controlled or operated by a *Transmission Network Service Provider* is the value of those assets that are used by the provider to provide *prescribed transmission services*, but only to the extent that they are used to provide such services.

Preparation, publication and amendment of model for rolling forward regulatory asset base

- (b) The *AER* must, in accordance with the *transmission consultation procedures*, develop and *publish* a model for the roll forward of the regulatory asset base for *transmission systems*, referred to as the *roll forward model*.
- (c) The *AER* may, from time to time and in accordance with the *transmission consultation procedures*, amend or replace the *roll forward model*.
- (d) The *AER* must develop and *publish* the first *roll forward model* by 28 September 2007, and there must be such a model available at all times after that date.

Contents of roll forward model

- (e) The *roll forward model* must set out the method for determining the roll forward of the regulatory asset base for *transmission systems*:
 - (1) from the immediately preceding *regulatory control period* to the beginning of the first year of the subsequent *regulatory control period*, so as to establish the value of the regulatory asset base as at the beginning of the first *regulatory year* of that subsequent *regulatory control period*; and
 - (2) from one *regulatory year* in a *regulatory control period* to a subsequent *regulatory year* in that same *regulatory control period*, so as to establish the value of the regulatory asset base as at the beginning of the subsequent *regulatory year* of that *regulatory control period*;

under which:

- (3) the roll forward of the regulatory asset base from the immediately preceding *regulatory control period* to the beginning of the first *regulatory year* of a subsequent *regulatory control period* entails the value of the first mentioned regulatory asset base being adjusted for outturn inflation, consistent with the methodology that was used in the *transmission determination* (if any) for the first mentioned *regulatory control period* for the indexation of the *maximum allowed revenue* during that *regulatory control period*.

Other provisions relating to regulatory asset base

- (f) Other provisions relating to regulatory asset bases are set out in schedule 6A.2.

6A.6.2 Return on capital

Calculation of return on capital

- (a) The return on capital for each *regulatory year* must be calculated by applying a rate of return for the relevant *Transmission Network Service Provider* for that *regulatory control period* (calculated in accordance with this clause 6A.6.2) to the value of the regulatory asset base for the relevant *transmission system* as at the beginning of that *regulatory year* (as established in accordance with clause 6A.6.1 and schedule 6A.2).

Weighted average cost of capital

- (b) The rate of return for a *Transmission Network Service Provider* for a *regulatory control period* is the cost of capital as measured by the return required by investors in a commercial enterprise with a similar nature and degree of non-diversifiable risk as that faced by the *transmission* business of the provider and, subject to any revised values, methodologies and levels arising from a review under paragraphs (f)-(j), must be calculated as a nominal post-tax *weighted average cost of capital* ("WACC") in accordance with the following formula:

$$WACC = k_e \frac{E}{V} + k_d \frac{D}{V}$$

where:

k_e is the return on equity (determined using the Capital Asset Pricing Model) and is calculated as:

$$r_f + \beta_e \times MRP$$

where:

r_f is the nominal risk free rate for the *regulatory control period* determined in accordance with paragraph (c);

β_e is the equity beta, which is deemed to be 1.0; and

MRP is the market risk premium, which is deemed to be 6.0%;

k_d is the return on debt and is calculated as:

$$r_f + DRP$$

where:

DRP is the debt risk premium for the *regulatory control period* determined in accordance with paragraph (e);

E/V is the market value of equity as a proportion of the market value of equity and debt, which is $1 - D/V$; and

D/V is the market value of debt as a proportion of the market value of equity and debt, which is deemed to be 0.6.

Meaning of nominal risk free rate

- (c) The nominal risk free rate for a *regulatory control period* is the rate determined for that *regulatory control period* by the AER on a moving average basis from the annualised yield on Commonwealth Government bonds with a maturity of 10 years using:
- (1) the indicative mid rates published by the Reserve Bank of Australia; and
 - (2) a period of time which is either:
 - (i) a period ('the **agreed period**') proposed by the relevant *Transmission Network Service Provider*, and agreed by the AER (such agreement is not to be unreasonably withheld); or
 - (ii) a period specified by the AER, and notified to the provider prior to the commencement of that period, if the period proposed by the provider is not agreed by the AER under subparagraph (i),and, for the purposes of subparagraph (i):
 - (iii) the start date and end date for the agreed period may be kept confidential, but only until the expiration of the agreed period; and
 - (iv) the AER must notify the *Transmission Network Service Provider* whether or not it agrees with the proposed period within 30 *business days* of the date of submission of the *Revenue Proposal* under clause 6A.10.1(a).
- (d) If there are no Commonwealth Government bonds with a maturity of 10 years on any day in the period referred to in paragraph (c)(2), the AER must determine the nominal risk free rate for the *regulatory control period* by interpolating on a straight line basis from the two Commonwealth Government bonds closest to the 10 year term and which also straddle the 10 year expiry date.

Meaning of debt risk premium

- (e) The debt risk premium for a *regulatory control period* is the premium determined for that *regulatory control period* by the AER as the margin between the annualised nominal risk free rate and the observed annualised Australian benchmark corporate bond rate for corporate bonds which have a BBB+ credit rating from Standard and Poors and a maturity equal to that used to derive the nominal risk free rate.

Review of rate of return parameters

- (f) The *AER* must, in accordance with the *transmission consultation procedures* and paragraphs (g)-(j), carry out reviews of the matters referred to in paragraph (i).
- (g) The *AER* must conclude the first review by 31 March 2009 and conclude subsequent reviews at intervals of five years thereafter.
- (h) The *AER* may, as a consequence of a review, adopt revised values, methodologies or credit rating levels, and, if it does so, it must use those revised values, methodologies and levels, but only for the purposes of a *Revenue Proposal* that is submitted to the *AER* under clause 6A.10.1(a) after the completion of the first review or after completion of the five yearly reviews (as the case may be).
- (i) The *AER* may only review:
 - (1) the values of and methodologies used to calculate:
 - (i) the nominal risk free rate;
 - (ii) the equity beta;
 - (iii) the market risk premium;
 - (iv) the maturity period and bond rates referred to in paragraph (d); and
 - (v) the ratio of the market value of debt to the market value of equity and debt,as set out in this clause 6A.6.2 or as subsequently revised under paragraph (h); and
 - (2) the credit rating level as referred to in paragraph (e) or as subsequently revised under paragraph (h).
- (j) In undertaking a review under this clause 6A.6.2 and under clause 6A.6.4(b), the *AER* must have regard to:
 - (1) the need for the rate of return calculated for the purposes of paragraph (b) to be a forward looking rate of return that is commensurate with prevailing conditions in the market for funds and the risk involved in providing *prescribed transmission services*;
 - (2) the need for the return on debt to reflect the current cost of borrowings for comparable debt;
 - (3) the need for the credit rating levels or the values attributable to, or the methodologies used to calculate, the parameters referred to in

paragraphs (i)(1)(ii), (iv), (v) and (i)(2) to be based on a benchmark efficient *Transmission Network Service Provider*; and

- (4) where the credit rating levels or the values that are attributable to, or the methodologies used to calculate, the parameters referred to in paragraph (i) cannot be determined with certainty:
 - (i) the need to achieve an outcome that is consistent with the *national electricity objective*; and
 - (ii) the need for persuasive evidence before adopting a credit rating level or a value for, or a methodology used to calculate, that parameter that differs from the credit rating level, value or methodology that has previously been adopted for it.

6A.6.3 Depreciation

- (a) The depreciation for each *regulatory year*:
 - (1) must be calculated on the value of the assets as included in the regulatory asset base, as at the beginning of that *regulatory year*, for the relevant *transmission system*; and
 - (2) must be calculated:
 - (i) providing such depreciation schedules conform with the requirements set out in paragraph (b), using the depreciation schedules for each asset or category of assets that are nominated in the relevant *Transmission Network Service Provider's Revenue Proposal*; or
 - (ii) to the extent the depreciation schedules nominated in the provider's Revenue Proposal do not so conform, using the depreciation schedules determined for that purpose by the *AER* in its final decision on the provider's Revenue Proposal.
- (b) The depreciation schedules referred to in paragraph (a) must conform to the following requirements:
 - (1) except as provided in paragraph (c), the schedules must depreciate using a profile that reflects the nature of the assets or category of assets over the economic life of that asset or category of assets;
 - (2) the sum of the real value of the depreciation that is attributable to any asset or category of assets over the economic life of that asset or category of assets (such real value being calculated as at the time the value of that asset or category of assets was first included in the regulatory asset base for the relevant *transmission system*) must be

equivalent to the value at which that asset or category of assets was first included in the regulatory asset base for the relevant *transmission system*; and

- (3) the economic life of the relevant assets and the depreciation methodologies and rates underpinning the calculation of actual depreciation for a given *regulatory control period* must be consistent with those determined for the same assets on a prospective basis in the *transmission determination* for that period.

(c) To the extent that:

- (1) an asset (or group of assets) the value of which forms part of the regulatory asset base for a *transmission system* is dedicated to one *Transmission Network User* (not being a *Distribution Network Service Provider*) or a small group of *Transmission Network Users*; and
- (2) the value of the assets (or group of assets), as included in the value of that regulatory asset base as at the beginning of the first *regulatory year* of the current *regulatory control period*, exceeds the *indexed amount*, as at the commencement of that *regulatory control period*, of \$20 million,

that asset (or group of assets) must be depreciated on a straight line basis over the life at which that asset (or group of assets) was first included in the regulatory asset base for that *transmission system*.

6A.6.4 Estimated cost of corporate income tax

- (a) The estimated cost of corporate income tax of a *Transmission Network Service Provider* for each *regulatory year* (ETC_t) must be calculated in accordance with the following formula:

$$ETC_t = (ETI_t \times r_t) (1 - \gamma)$$

where:

ETI_t is an estimate of the taxable income for that *regulatory year* that would be earned by a benchmark efficient entity as a result of the provision of *prescribed transmission services* if such an entity, rather than the *Transmission Network Service Provider*, operated the business of the *Transmission Network Service Provider*, such estimate being determined in accordance with the *post-tax revenue model*;

r_t is the expected statutory income tax rate for that *regulatory year* as determined by the *AER*; and

γ is the assumed utilisation of imputation credits, which is deemed to be 0.5.

For these purposes:

- (1) the cost of debt must be based on that of a benchmark efficient *Transmission Network Service Provider*; and
 - (2) the estimate must take into account the estimated depreciation for that *regulatory year* for *tax* purposes, for a benchmark efficient *Transmission Network Service Provider*, of assets where the value of those assets is included in the regulatory asset base for the relevant *transmission system* for that *regulatory year*.
- (b) The *AER* must, in accordance with the *transmission consultation procedures* and clause 6A.6.2(j), carry out reviews of the matters referred to in paragraph (d).
 - (c) The *AER* must conclude the first review by 31 March 2009 and conclude subsequent reviews at intervals of five years thereafter.
 - (d) The *AER* may only review the value of and methodology used to calculate the assumed utilisation of imputation credits as referred to in paragraph (a) (or as subsequently revised under this clause 6A.6.4).
 - (e) Where the value of the assumed utilisation of imputation credits referred to in paragraph (d) cannot be determined with certainty, the *AER* must have regard to:
 - (1) the need to achieve an outcome that is consistent with the *national electricity objective*; and
 - (2) the need for persuasive evidence before adopting a value that differs from the value that has previously been adopted for it.
 - (f) If, as a consequence of a review, the *AER* decides to adopt a revised value or methodology, it must use that revised value or methodology, but only for the purposes of a *Revenue Proposal* that is submitted to the *AER* under clause 6A.10.1(a) after the completion of the first review or after completion of the five yearly reviews (as the case may be).

6A.6.5 Efficiency benefit sharing scheme

- (a) The *AER* must, in accordance with the *transmission consultation procedures*, develop and *publish* a scheme (an *efficiency benefit sharing scheme*) that provides for a fair sharing between *Transmission Network Service Providers* and *Transmission Network Users* of:
 - (1) the efficiency gains derived from the operating expenditure of *Transmission Network Service Providers* for a *regulatory control period* being less than; and

- (2) the efficiency losses derived from the operating expenditure of *Transmission Network Service Providers* for a *regulatory control period* being more than,

the forecast operating expenditure accepted or substituted by the *AER* for that *regulatory control period* in accordance with clause 6A.6.6(c) or clause 6A.13.2(b)(3) and (5) (as the case may be).

- (b) In developing and implementing an *efficiency benefit sharing scheme*, the *AER* must have regard to:
 - (1) the need to provide *Transmission Network Service Providers* with a continuous incentive (that is equal in each year of any *regulatory control period*) to reduce operating expenditure;
 - (2) the desirability of both rewarding *Transmission Network Service Providers* for efficiency gains and penalising *Transmission Network Service Providers* for efficiency losses; and
 - (3) any incentives that *Transmission Network Service Providers* may have to inappropriately capitalise operating expenditure.
- (c) At the same time as it *publishes* an *efficiency benefit sharing scheme* under this clause 6A.6.5, the *AER* must also *publish* parameters ('the *efficiency benefit sharing scheme parameters*') for the scheme. For the avoidance of doubt, unless the *AER* provides otherwise in that scheme, such values may differ as between *Transmission Network Service Providers* and over time.
- (d) The *AER* must set out in each *efficiency benefit sharing scheme* any requirements with which the values attributed to the *efficiency benefit sharing scheme parameters* must comply, but such requirements must not be inconsistent with those factors to which the *AER* must have regard under paragraph (b).
- (e) The *AER* must develop and *publish* the first *efficiency benefit sharing scheme* by 28 September 2007, and there must be an *efficiency benefit sharing scheme* in force at all times after that date.
- (f) The *AER* may, from time to time and in accordance with the *transmission consultation procedures*, amend or replace an *efficiency benefit sharing scheme*, except that no such amendment or replacement may change the application of the scheme to a *Transmission Network Service Provider* in respect of a *regulatory control period* that has commenced before, or that will commence within 15 months of, the amendment or replacement coming into operation.

- (g) Subject to paragraph (h) the *AER* may, from time to time and in accordance with the *transmission consultation procedures*, amend or replace the values to be attributed to the *efficiency benefit sharing scheme parameters*.
- (h) An amendment or replacement referred to in paragraph (g) must not change the values to be attributed to the *efficiency benefit sharing scheme parameters* where:
 - (1) those values must be included in information accompanying a *Revenue Proposal*; and
 - (2) the *Revenue Proposal* is required to be submitted under clause 6A.10.1(a) at a time that is within 2 months of the *publication* of the amended or replaced *efficiency benefit sharing scheme parameters*.

6A.6.6 Forecast operating expenditure

- (a) A *Revenue Proposal* must include the total forecast operating expenditure for the relevant *regulatory control period* which the *Transmission Network Service Provider* considers is required in order to achieve each of the following ('the *operating expenditure objectives*'):
 - (1) meet the expected demand for *prescribed transmission services* over that period;
 - (2) comply with all applicable *regulatory obligations or requirements* associated with the provision of *prescribed transmission services*;
 - (3) maintain the quality, reliability and security of supply of *prescribed transmission services*; and
 - (4) maintain the reliability, safety and security of the *transmission system* through the supply of *prescribed transmission services*.
- (b) The forecast of required operating expenditure of a *Transmission Network Service Provider* that is included in a *Revenue Proposal* must:
 - (1) comply with the requirements of the *submission guidelines*;
 - (2) be for expenditure that is properly allocated to *prescribed transmission services* in accordance with the principles and policies set out in the *Cost Allocation Methodology* for the *Transmission Network Service Provider*; and
 - (3) include both:
 - (i) the total of the forecast operating expenditure for the relevant *regulatory control period*; and

- (ii) the forecast of the operating expenditure for each *regulatory year* of the relevant *regulatory control period*.
- (c) The *AER* must accept the forecast of required operating expenditure of a *Transmission Network Service Provider* that is included in a *Revenue Proposal* if the *AER* is satisfied that the total of the forecast operating expenditure for the *regulatory control period* reasonably reflects:
 - (1) the efficient costs of achieving the *operating expenditure objectives*;
 - (2) the costs that a prudent operator in the circumstances of the relevant *Transmission Network Service Provider* would require to achieve the *operating expenditure objectives*; and
 - (3) a realistic expectation of the demand forecast and cost inputs required to achieve the *operating expenditure objectives*.

(‘the *operating expenditure criteria*’).
- (d) If the *AER* is not satisfied as referred to in paragraph (c), it must not accept the forecast of required operating expenditure of a *Transmission Network Service Provider* that is included in a *Revenue Proposal*.
- (e) In deciding whether or not the *AER* is satisfied as referred to in paragraph (c), the *AER* must have regard to the following (‘the *operating expenditure factors*’):
 - (1) the information included in or accompanying the *Revenue Proposal*;
 - (2) submissions received in the course of consulting on the *Revenue Proposal*;
 - (3) such analysis as is undertaken by or for the *AER* and is *published* prior to or as part of the draft decision of the *AER* on the *Revenue Proposal* under rule 6A.12 or the final decision of the *AER* on the *Revenue Proposal* under rule 6A.13 (as the case may be);
 - (4) benchmark operating expenditure that would be incurred by an efficient *Transmission Network Service Provider* over the *regulatory control period*;
 - (5) the actual and expected operating expenditure of the provider during any preceding *regulatory control periods*;
 - (6) the relative prices of operating and capital inputs;
 - (7) the substitution possibilities between operating and capital expenditure;

- (8) whether the total labour costs included in the capital and operating expenditure forecasts for the *regulatory control period* are consistent with the incentives provided by the applicable *service target performance incentive scheme* in respect of the *regulatory control period*;
 - (9) the extent to which the forecast of required operating expenditure of the *Transmission Network Service Provider* is referable to arrangements with a person other than the provider that, in the opinion of the *AER*, do not reflect arm's length terms; and
 - (10) whether the forecast of required operating expenditure includes amounts relating to a project that should more appropriately be included as a *contingent project* under clause 6A.8.1(b).
- (f) If, in its final decision on the *Revenue Proposal* under rule 6A.13, the *AER* does not accept the total of the forecast required operating expenditure for the *regulatory control period* under paragraph (d), then the *AER* must, in accordance with clause 6A.13.2(b), use a substituted forecast of required operating expenditure.

6A.6.7 Forecast capital expenditure

- (a) A *Revenue Proposal* must include the total forecast capital expenditure for the relevant *regulatory control period* which the *Transmission Network Service Provider* considers is required in order to achieve each of the following ('the *capital expenditure objectives*')
- (1) meet the expected demand for *prescribed transmission services* over that period;
 - (2) comply with all applicable *regulatory obligations or requirements* associated with the provision of *prescribed transmission services*;
 - (3) maintain the quality, reliability and security of supply of *prescribed transmission services*; and
 - (4) maintain the reliability, safety and security of the *transmission system* through the supply of *prescribed transmission services*.
- (b) The forecast of required capital expenditure of a *Transmission Network Service Provider* that is included in a *Revenue Proposal* must:
- (1) comply with the requirements of the *submission guidelines*;
 - (2) be for expenditure that is properly allocated to *prescribed transmission services* in accordance with the principles and policies

set out in the *Cost Allocation Methodology* for the *Transmission Network Service Provider*;

- (3) include both:
 - (i) the total of the forecast capital expenditure for the relevant *regulatory control period*; and
 - (ii) the forecast of the capital expenditure for each *regulatory year* of the relevant *regulatory control period*; and
- (4) identify any forecast capital expenditure:
 - (i) that is for a *reliability augmentation*; or
 - (ii) that is for an option that has satisfied the *regulatory test*.
- (c) The *AER* must accept the forecast of required capital expenditure of a *Transmission Network Service Provider* that is included in a *Revenue Proposal* if the *AER* is satisfied that the total of the forecast capital expenditure for the *regulatory control period* reasonably reflects:
 - (1) the efficient costs of achieving the *capital expenditure objectives*;
 - (2) the costs that a prudent operator in the circumstances of the relevant *Transmission Network Service Provider* would require to achieve the *capital expenditure objectives*; and
 - (3) a realistic expectation of the demand forecast and cost inputs required to achieve the *capital expenditure objectives*.

(‘the *capital expenditure criteria*’).
- (d) If the *AER* is not satisfied as referred to in paragraph (c), it must not accept the forecast of required capital expenditure of a *Transmission Network Service Provider*.
- (e) In deciding whether or not the *AER* is satisfied as referred to in paragraph (c), the *AER* must have regard to the following (‘the *capital expenditure factors*’):
 - (1) the information included in or accompanying the *Revenue Proposal*;
 - (2) submissions received in the course of consulting on the *Revenue Proposal*;
 - (3) such analysis as is undertaken by or for the *AER* and is *published* prior to or as part of the draft decision of the *AER* on the *Revenue Proposal*

- under rule 6A.12 or the final decision of the *AER* on the *Revenue Proposal* under rule 6A.13 (as the case may be);
- (4) benchmark capital expenditure that would be incurred by an efficient *Transmission Network Service Provider* over the *regulatory control period*;
 - (5) the actual and expected capital expenditure of the *Transmission Network Service Provider* during any preceding *regulatory control periods*;
 - (6) the relative prices of operating and capital inputs;
 - (7) the substitution possibilities between operating and capital expenditure;
 - (8) whether the total labour costs included in the capital and operating expenditure forecasts for the *regulatory control period* are consistent with the incentives provided by the applicable *service target performance incentive scheme* in respect of the *regulatory control period*;
 - (9) the extent to which the forecast of required capital expenditure of the *Transmission Network Service Provider* is referable to arrangements with a person other than the provider that, in the opinion of the *AER*, do not reflect arm's length terms; and
 - (10) whether the forecast of required capital expenditure includes amounts relating to a project that should more appropriately be included as a *contingent project* under clause 6A.8.1(b).
- (f) If, in its final decision on the *Revenue Proposal* made under rule 6A.13, the *AER* does not accept the total of the forecast of required capital expenditure for the *regulatory control period* under paragraph (d), then the *AER* must, in accordance with clause 6A.13.2(b), use a substitute forecast of required capital expenditure.

Forecast capital expenditure and contingent projects

- (g) Paragraphs (h) - (k) apply where:
- (1) in a *regulatory control period* (the **first regulatory control period**) the *AER* determines under clause 6A.8.2(e)(1)(iii) that the likely completion date for a *contingent project* is a date which occurs in the immediately following *regulatory control period* (the **second regulatory control period**); and
 - (2) there is an unspent amount of capital expenditure for that *contingent project* under paragraph (h).

- (h) A *Transmission Network Service Provider's Revenue Proposal* for the second *regulatory control period*, must include in the forecast of required capital expenditure referred to in paragraph (a) an amount of any unspent capital expenditure for each *contingent project* as described in paragraph (g)(2), that equals the difference (if any) between:
 - (1) the total capital expenditure for that *contingent project*, as determined by the *AER* in the first *regulatory control period* under clause 6A.8.2(e)(1)(ii); and
 - (2) the total of the capital expenditure actually incurred (or estimated capital expenditure for any part of the first *regulatory control period* for which actual capital expenditure is not available) in the first *regulatory control period* for that *contingent project*.
- (i) The *AER* must include in any forecast capital expenditure for the second *regulatory control period* which is accepted in accordance with paragraph (c), estimated in accordance with clause 6A.14.1(2)(ii) or substituted in accordance with clause 6A.13.2(b)(4) and (5) (as the case may be), the amount of any unspent capital expenditure calculated in accordance with paragraph (h).
- (j) Without limiting the requirement in paragraph (i), in deciding whether or not to accept the forecast of required capital expenditure of a *Transmission Network Service Provider* for the second *regulatory control period* in accordance with this clause 6A.6.7, the *AER* must not:
 - (1) assess the reasonableness of the amount of unspent capital expenditure for a *contingent project* referred to in paragraph (h) or the remaining period to which the *contingent project* applies;
 - (2) assess the reasonableness of the timing of the unspent capital expenditure within the remaining period for a *contingent project* referred to in paragraph (h) except as part of the assessment of the total forecast capital expenditure under paragraph (c); or
 - (3) take into account any amount which represents for a *contingent project* referred to in paragraph (h) the difference between:
 - (i) the amount representing the sum of the forecast capital expenditure for that *contingent project* for each year of the immediately preceding *regulatory control period* referred to in clause 6A.8.2(e)(1)(i); and
 - (ii) the total capital expenditure actually incurred (or estimated capital expenditure for any part of the preceding *regulatory control period* for which actual capital expenditure is not

available) in the immediately preceding *regulatory control period* for that *contingent project*.

- (k) A *Revenue Proposal* in respect of the second *regulatory control period* must not include in the forecast of required capital expenditure referred to in paragraph (a) any capital expenditure for a *contingent project* for the first *regulatory control period*:
 - (1) to the extent that the capital expenditure was included in the amount of capital expenditure for that *contingent project* as determined in the first *regulatory control period* under clause 6A.8.2(e)(1)(i); and
 - (2) the capital expenditure actually incurred (or estimated capital expenditure for any part of the first *regulatory control period* for which actual capital expenditure is not available) in the first *regulatory control period* for that *contingent project* exceeded the capital expenditure referred to in subparagraph (1).

6A.6.8 The X factor

- (a) A *revenue determination* is to include the X factor for each *regulatory year* for a *Transmission Network Service Provider*.
- (b) The X factors for each *regulatory year* must be:
 - (1) providing they comply with the requirements set out in paragraph (c), the X factors for those *regulatory years* that are nominated in the *Transmission Network Service Provider's Revenue Proposal*; or
 - (2) to the extent that the X factors nominated in the *Transmission Network Service Provider's Revenue Proposal* do not so comply, the X factors determined for that purpose by the AER in its final decision on the *Transmission Network Service Provider's Revenue Proposal*.
- (c) The X factor for each *regulatory year* must be such that:
 - (1) the net present value of the expected *maximum allowed revenue* for the relevant *Transmission Network Service Provider* for each *regulatory year* (as calculated in accordance with the *post-tax revenue model*) is equal to the net present value of the *annual building block revenue requirement* for the provider for each *regulatory year* (as calculated in accordance with the *post-tax revenue model*); and
 - (2) the expected *maximum allowed revenue* for the provider for the last *regulatory year* (as calculated in accordance with the *post-tax revenue model*) is as close as reasonably possible to the *annual building block revenue requirement* for the provider for that *regulatory year* (as calculated in accordance with the *post-tax revenue model*).

- (d) For the avoidance of doubt, there may be a different X factor that applies for different *regulatory years* of the *regulatory control period*.

6A.7 Matters relevant to the adjustment of revenue cap after making of revenue determination

6A.7.1 Reopening of revenue determination for capital expenditure

- (a) Subject to paragraph (b), a *Transmission Network Service Provider* may, during a *regulatory control period*, apply to the AER to revoke and substitute a *revenue determination* that applies to it where:
 - (1) an event that is beyond the reasonable control of the provider has occurred during that *regulatory control period* and the occurrence of that event during that period (or of an event of a similar kind) could not reasonably have been foreseen by the provider at the time of the making of the *revenue determination* ('the **event**');
 - (2) no forecast capital expenditure was accepted or substituted by the AER for that period under clause 6A.6.7(c) or clause 6A.13.2(b)(4) and (5) (as the case may be) in relation to the event that has occurred;
 - (3) the provider proposes to undertake capital expenditure to rectify the adverse consequences of the event;
 - (4) the total of the capital expenditure required during the *regulatory control period* to rectify the adverse consequences of the event:
 - (i) exceeds 5% of the value of the regulatory asset base for the relevant *Transmission Network Service Provider* for the first year of the relevant *regulatory control period*;
 - (ii) is such that, if undertaken, it is reasonably likely (in the absence of any other reduction in capital expenditure) to result in the total actual capital expenditure for that *regulatory control period* exceeding the total of the forecast capital expenditure for that *regulatory control period* as accepted or substituted by the AER in accordance with clause 6A.6.7(c) or clauses 6A.13.2(b)(4) and (5) (as the case may be); and
 - (5) the provider can demonstrate that it is not able to reduce capital expenditure in other areas to avoid the consequence referred to in clause 6A.7.1(a)(4)(ii) without materially adversely affecting the *reliability* and security of the relevant *transmission system*;
 - (6) a failure to rectify the adverse consequences of the event would be likely to materially adversely affect the *reliability* and security of the relevant *transmission system*; and

- (7) the event is not a *pass through event* or a *contingent project*.

In this paragraph (a), a reference to an event includes a series of events or a state of affairs, which may include a greater than anticipated increase in demand.

- (b) An application referred to in paragraph (a) must not be made within 90 *business days* prior to the end of a *regulatory year*.
- (c) Following its receipt of an application made in accordance with paragraphs (a) and (b), the *AER* must:
 - (1) consult with the *Transmission Network Service Provider* and such other persons as it considers appropriate in relation to the application; and
 - (2) make its decision on the application within 60 *business days* of that application being made.
- (d) The *AER* must, and must only, revoke a *revenue determination* following an application made in accordance with paragraphs (a) and (b) if the *AER* is satisfied of each of the matters referred to in paragraph (a).
- (e) If the *AER* revokes a *revenue determination* under paragraph (d), the *AER* must make a new *revenue determination* in substitution for the revoked determination to apply for the remainder of the *regulatory control period* for which the revoked determination was to apply.
- (f) The substituted *revenue determination* must only vary from the revoked *revenue determination* to the extent necessary:
 - (1) to adjust the forecast capital expenditure for that *regulatory control period* to accommodate the amount of such additional capital expenditure as the *AER* determines is appropriate (in which case the amount of that adjustment will be taken to be accepted by the *AER* under clause 6A.6.7(c)); and
 - (2) to reflect the effect of any resultant increase in forecast capital expenditure on:
 - (i) the forecast operating expenditure for the remainder of the *regulatory control period*;
 - (ii) the *maximum allowed revenue* for each *regulatory year* in the remainder of the *regulatory control period*; and
 - (iii) the X factor for each of the remaining *regulatory years* of the *regulatory control period*.

- (g) If the *AER* revokes and substitutes a *revenue determination* under paragraph (e), that revocation and substitution must take effect from the commencement of the next *regulatory year*.

6A.7.2 Network support pass through

- (a) This clause applies where a *network support event* occurs with respect to a *regulatory year* ('the **previous regulatory year**').
- (b) If a *network support event* occurs, a *Transmission Network Service Provider* must seek a determination by the *AER* to pass through to *Transmission Network Users* a *network support pass through amount*.
- (c) Where a *Transmission Network Service Provider* seeks a determination as referred to in paragraph (b), the provider must, within 60 *business days* of the end of the previous *regulatory year*, submit to the *AER* a written statement which specifies:
 - (1) the details of the *network support event* including whether the event was a *negative network support event* or a *positive network support event*;
 - (2) the amount that the provider proposes should be passed through to *Transmission Network Users* in the *regulatory year* following the previous *regulatory year* as a result of the *network support event*;
 - (3) evidence:
 - (i) of the actual increase in the amount of *network support payments*, including certification by an independent and appropriately qualified expert; and
 - (ii) that such amounts occur solely as a consequence of the positive *network support event*; and
 - (4) such other information as may be required pursuant to the *information guidelines* in force under clause 6A.17.2.
- (d) If the *AER* determines that a *positive network support event* has occurred in respect of a statement under paragraph (c), the *AER* must determine the *network support pass through amount*, taking into account the matters referred to in paragraph (i).
- (e) If the *AER* does not make the determination referred to in paragraph (d) within 60 *business days* from the date it receives the *Transmission Network Service Provider's* statement and accompanying evidence under paragraph (c), then, on the expiry of that period, the *AER* is taken to have determined

that the amount as proposed in the provider's statement under paragraph (c) is the *network support pass through amount*.

- (f) If a *negative network support event* occurs (whether or not the occurrence of that event is notified by the provider to the AER under paragraph (c)) and the AER determines to impose a requirement on the *Transmission Network Service Provider* in relation to that *negative network support event*, the AER must determine the *network support pass through amount* taking into account the matters referred to in paragraph (i).
- (g) A *Transmission Network Service Provider* must provide the AER with such information as the AER requires for the purpose of making a determination under paragraph (f) within the time specified by the AER in a notice provided to the provider by the AER for that purpose.

Consultation

- (h) Before making a determination under paragraph (d) or (f), the AER may consult with the relevant *Transmission Network Service Provider* and such other persons as the AER considers appropriate, on any matters arising out of the relevant *network support event* as the AER considers appropriate.

Relevant factors

- (i) In making a determination under paragraph (d) or (f), the AER must take into account:
 - (1) the matters and proposals set out in any statement given to the AER by the *Transmission Network Service Provider* under paragraph (c);
 - (2) in the case of a *positive network support event*, the increase in costs in the provision of *prescribed transmission services* that the provider has incurred in the preceding *regulatory year* as a result of the *positive network support event*;
 - (3) in the case of a *positive network support event*, the efficiency of the provider's decisions and actions in relation to the risk of the event, including whether the provider has failed to take any action that could reasonably be taken to reduce the magnitude of the *positive network support event* and whether the provider has taken or omitted to take any action where such action or omission has increased the magnitude of the amount in respect of that event;
 - (4) the time cost of money based on the *weighted average cost of capital* for the provider for the relevant *regulatory control period*;
 - (5) the need to ensure that the provider only recovers any actual increment in costs under this paragraph (i) to the extent that such increment is solely as a consequence of a *network support event*; and

- (6) any other factors the *AER* considers relevant.

6A.7.3 Cost pass through

- (a) If a *positive change event* occurs, a *Transmission Network Service Provider* may seek the approval of the *AER* to pass through to *Transmission Network Users* a *positive pass through amount*.
- (b) If a *negative change event* occurs, the *AER* may require the *Transmission Network Service Provider* to pass through to *Transmission Network Users* a *negative pass through amount* as determined by the *AER* under paragraph (g).

Positive pass through

- (c) To seek the approval of the *AER* to pass through a *positive pass through amount*, a *Transmission Network Service Provider* must submit to the *AER*, within 90 *business days* of the relevant *positive change event* occurring, a written statement which specifies:
 - (1) the details of the *positive change event*;
 - (2) the date on which the *positive change event* occurred;
 - (3) the *eligible pass through amount* in respect of that *positive change event*;
 - (4) the *positive pass through amount* the provider proposes in relation to the *positive change event*;
 - (5) the amount of the *positive pass through amount* that the provider proposes should be passed through to *Transmission Network Users* in each *regulatory year* during the *regulatory control period*;
 - (6) evidence:
 - (i) of the actual and likely increase in costs referred to in subparagraph (3); and
 - (ii) that such costs occur solely as a consequence of the *positive change event*; and
 - (7) such other information as may be required pursuant to *information guidelines* in force under clause 6A.17.2.
- (d) If the *AER* determines that a *positive change event* has occurred in respect of a statement under paragraph (c), the *AER* must determine:
 - (1) the *approved pass through amount*; and

- (2) the amount of that *approved pass through amount* that should be passed through to *Transmission Network Users* in each *regulatory year* during the *regulatory control period*,

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

- (e) If the *AER* does not make the determinations referred to in paragraph (d) within 60 *business days* from the date it receives the *Transmission Network Service Provider's* statement and accompanying evidence under paragraph (c), then, on the expiry of that period, the *AER* is taken to have determined that:

- (1) the *positive pass through amount* as proposed in the provider's statement under paragraph (c) is the *approved pass through amount* in respect of that *positive change event*; and
- (2) the amount of that *positive pass through amount* that the provider proposes in its statement under paragraph (c) should be passed through to *Transmission Network Users* in each *regulatory year* during the *regulatory control period*, is the amount that should be so passed through in each such *regulatory year*.

Negative pass through

- (f) A *Transmission Network Service Provider* must submit to the *AER*, within 60 *business days* of becoming aware of the occurrence of a *negative change event* for the provider, a written statement which specifies:
 - (1) the details of the *negative change event* concerned;
 - (2) the date the *negative change event* occurred;
 - (3) the costs in the provision of *prescribed transmission services* that the provider has saved and is likely to save until the end of the *regulatory control period* as a result of the *negative change event*;
 - (4) the aggregate amount of those saved costs that the provider proposes should be passed through to *Transmission Network Users*;
 - (5) the amount of the costs referred to in subparagraph (4) the provider proposes should be passed through to *Transmission Network Users* in each *regulatory year* during the *regulatory control period*; and
 - (6) such other information as may be required pursuant to *information guidelines* in force under clause 6A.17.2.
- (g) If a *negative change event* occurs (whether or not the occurrence of that *negative change event* is notified by the provider to the *AER* under paragraph (f)) and the *AER* determines to impose a requirement on the

provider in relation to that *negative change event* as described in paragraph (b), the AER must determine:

- (1) the *required pass through amount*; and
 - (2) taking into account the matters referred to in paragraph (j):
 - (i) how much of that *required pass through amount* should be passed through to *Transmission Network Users* ('the *negative pass through amount*'); and
 - (ii) the amount of that *negative pass through amount* that should be passed through to *Transmission Network Users* in each *regulatory year* during the *regulatory control period*.
- (h) A *Transmission Network Service Provider* must provide the AER with such information as the AER requires for the purpose of making a determination under paragraph (g) within the time specified by the AER in a notice provided to the provider by the AER for that purpose.

Consultation

- (i) Before making a determination under paragraph (d) or (g), the AER may consult with the relevant *Transmission Network Service Provider* and such other persons as the AER considers appropriate, on any matters arising out of the relevant *pass through event* as the AER considers appropriate.

Relevant factors

- (j) In making a determination under paragraph (d) or (g) in respect of a *Transmission Network Service Provider*, the AER must take into account:
 - (1) the matters and proposals set out in any statement given to the AER by the provider under paragraphs (c) or (f) (as the case may be);
 - (2) in the case of a *positive change event*, the increase in costs in the provision of *prescribed transmission services* that the provider has incurred and is likely to incur until the end of the *regulatory control period* as a result of the *positive change event*;
 - (3) in the case of a *positive change event*, the efficiency of the provider's decisions and actions in relation to the risk of the *positive change event*, including whether the provider has failed to take any action that could reasonably be taken to reduce the magnitude of the *eligible pass through amount* in respect of that *positive change event* and whether the provider has taken or omitted to take any action where such action or omission has increased the magnitude of the amount in respect of that *positive change event*;

- (4) the time cost of money based on the *weighted average cost of capital* for the provider for the relevant *regulatory control period*;
- (5) the need to ensure that the provider only recovers any actual or likely increment in costs under this paragraph (j) to the extent that such increment is solely as a consequence of a *pass through event*;
- (6) in the case of a *tax change event*, any change in the way another *tax* is calculated, or the removal or imposition of another *tax*, which, in the *AER's* opinion, is complementary to the *tax change event* concerned; and
- (7) any other factors the *AER* considers relevant.

6A.7.4 Service target performance incentive scheme

- (a) The *AER* must, in accordance with the *transmission consultation procedures*, develop and *publish* an incentive scheme ('a *service target performance incentive scheme*') that complies with the principles in paragraph (b).
- (b) The principles are that the *service target performance incentive scheme* should:
 - (1) provide incentives for each *Transmission Network Service Provider* to:
 - (i) provide greater *reliability* of the *transmission system* that is owned, controlled or operated by it at all times when *Transmission Network Users* place greatest value on the *reliability* of the *transmission system*; and
 - (ii) improve and maintain the *reliability* of those elements of the *transmission system* that are most important to determining *spot prices*;
 - (2) result in a potential adjustment to the revenue that the *Transmission Network Service Provider* may earn, from the provision of *prescribed transmission services*, in each *regulatory year* in respect of which the *service target performance incentive scheme* applies;
 - (3) ensure that the maximum revenue increment or decrement as a result of the operation of the *service target performance incentive scheme* will fall within a range that is between 1% and 5% of the *maximum allowed revenue* for the relevant *regulatory year*;
 - (4) take into account the *regulatory obligations or requirements* with which *Transmission Network Service Providers* must comply;

- (5) take into account any other incentives provided for in the *Rules* that *Transmission Network Service Providers* have to minimise capital or operating expenditure; and
 - (6) take into account the age and ratings of the assets comprising the relevant *transmission system*.
- (c) At the same time as it *publishes* a *service target performance incentive scheme*, the *AER* must also *publish* parameters (the *performance incentive scheme parameters*) for the scheme. For the avoidance of doubt, the parameters may differ as between *Transmission Network Service Providers* and over time.
- (d) The *AER* must set out in each *service target performance incentive scheme* any requirements with which the values attributed to the *performance incentive scheme parameters* must comply, and those requirements must be consistent with the principles set out in paragraph (b).
- (e) The *AER* must develop and *publish* the first *service target performance incentive scheme* under the *Rules* by 28 September 2007 and there must be a *service target performance incentive scheme* in force at all times after that date.
- (f) The *AER* may, from time to time and in accordance with the *transmission consultation procedures*, amend or replace any scheme that is developed and *published* under this clause, except that no such amendment or replacement may change the application of the scheme to a *Transmission Network Service Provider* in respect of a *regulatory control period* that has commenced before, or that will commence within 15 months of, the amendment or replacement coming into operation.
- (g) Subject to paragraph (h) the *AER* may, from time to time and in accordance with the *transmission consultation procedures*, amend or replace the values to be attributed to the *performance incentive scheme parameters*.
- (h) An amendment or replacement referred to in paragraph (g) must not change the values to be attributed to the *performance incentive scheme parameters* where:
 - (1) those values must be included in information accompanying a *Revenue Proposal*; and
 - (2) the *Revenue Proposal* is required to be submitted under clause 6A.10.1(a) at a time that is within 2 months of the *publication* of the amended or replaced *performance incentive scheme parameters*.

6A.8 Contingent Projects

6A.8.1 Acceptance of a Contingent Project in a revenue determination

- (a) A *Revenue Proposal* may include *proposed contingent capital expenditure*, which the *Transmission Network Service Provider* considers is reasonably required for the purpose of undertaking a *proposed contingent project*.
- (b) The AER must determine that a *proposed contingent project* is a *contingent project* if the AER is satisfied that:
 - (1) the *proposed contingent project* is reasonably required to be undertaken in order to achieve any of the *capital expenditure objectives*;
 - (2) the *proposed contingent capital expenditure*:
 - (i) is not otherwise provided for (either in part or in whole) in the total of the forecast capital expenditure for the relevant *regulatory control period* which is accepted in accordance with clause 6A.6.7(c) or substituted in accordance with clauses 6A.13.2(b)(4) and (5) (as the case may be);
 - (ii) reasonably reflects the *capital expenditure criteria*, taking into account the *capital expenditure factors*, in the context of the *proposed contingent project* as described in the *Revenue Proposal*; and
 - (iii) exceeds either \$10 million or 5% of the value of the *maximum allowed revenue* for the relevant *Transmission Network Service Provider* for the first year of the relevant *regulatory control period* whichever is the larger amount;
 - (3) the *proposed contingent project* and the *proposed contingent capital expenditure*, as described or set out in the *Revenue Proposal*, and the information provided in relation to these matters, complies with the requirements of *submission guidelines* made under clause 6A.10.2; and
 - (4) the *trigger events* in relation to the *proposed contingent project* which are proposed by the *Transmission Network Service Provider* in its *Revenue Proposal* are appropriate.
- (c) In determining whether a *trigger event* in relation to a *proposed contingent project* is appropriate for the purposes of subparagraph (b)(5), the AER must have regard to the need for:
 - (1) a *trigger event* to be reasonably specific and capable of objective verification;

- (2) a *trigger event* to be a condition or event, which, if it occurs, makes the undertaking of the *proposed contingent project* reasonably necessary in order to achieve any of the *capital expenditure objectives*;
- (3) a *trigger event* to be a condition or event that generates increased costs or categories of costs that relate to a specific location rather than a condition or event that affects the *transmission network* as a whole;
- (4) a *trigger event* to be described in such terms that the occurrence of that event or condition is all that is required for the *revenue determination* to be amended under clause 6A.8.2; and
- (5) a *trigger event* to be an event or condition, the occurrence of which is probable during the *regulatory control period*, but the inclusion of capital expenditure in relation to it under clause 6A.6.7 is not appropriate because:
 - (i) it is not sufficiently certain that the event or condition will occur during the *regulatory control period* or if it may occur after that *regulatory control period* or not at all; or
 - (ii) subject to the requirement to satisfy clause 6A.8.1(b)(2)(iii), the costs associated with the event or condition are not sufficiently certain.

6A.8.2 Amendment of revenue determination for contingent project

- (a) Subject to paragraph (b), a *Transmission Network Service Provider* may, during a *regulatory control period*, apply to the *AER* to amend a *revenue determination* that applies to that provider where a *trigger event* for a *contingent project* in relation to that *revenue determination* has occurred.
- (b) An application referred to in paragraph (a):
 - (1) must not be made within 90 *business days* prior to the end of a *regulatory year*;
 - (2) subject to subparagraph (1), must be made as soon as practicable after the occurrence of the *trigger event*;
 - (3) must contain the following information:
 - (i) an explanation that substantiates the occurrence of the *trigger event*;
 - (ii) a forecast of the total capital expenditure for the *contingent project*;

- (iii) a forecast of the capital and incremental operating expenditure, for each remaining *regulatory year* which the *Transmission Network Service Provider* considers is reasonably required for the purpose of undertaking the *contingent project*;
 - (iv) how the forecast of the total capital expenditure for the *contingent project* meets the threshold as referred to in clause 6A.8.1(b)(2)(iii);
 - (v) the intended date for commencing the *contingent project* (which must be during the *regulatory control period*);
 - (vi) the anticipated date for completing the *contingent project* (which may be after the end of the *regulatory control period*); and
 - (vii) an estimate of the incremental revenue which the *Transmission Network Service Provider* considers is likely to be required to be earned in each remaining *regulatory year* of the *regulatory control period* as a result of the *contingent project* being undertaken as described in clause 6A.8.2(b)(3)(iii); and
- (4) the estimate referred to in clause 6A.8.2(b)(3)(vii) must be calculated:
 - (i) on the basis of the capital expenditure referred to in clause 6A.8.2(b)(3)(iii);
 - (ii) on the basis of the rate of return for that *Transmission Network Service Provider* for the *regulatory control period* as determined pursuant to clause 6A.6.2;
 - (iii) consistently with the manner in which depreciation is calculated under clause 6A.6.3;
 - (iv) to include the incremental operating expenditure referred to in clause 6A.8.2(b)(3)(iii); and
 - (v) in accordance with the requirements for roll forward in the *roll-forward model* and revenue calculation in the *post-tax revenue model*.
- (c) As soon as practicable after its receipt of an application made in accordance with paragraphs (a) and (b), the *AER* must *publish* the application, together with an invitation for written submissions on the application.
- (d) The *AER* must consider any written submissions made under paragraph (c) and must make its decision on the application within 30 *business days* of its receipt of that application. In doing so the *AER* may also take into account

such other information as it considers appropriate, including any analysis (such as benchmarking) that is undertaken by it for that purpose.

- (e) If the *AER* is satisfied that the *trigger event* has occurred, and that the forecast of the total capital expenditure for the *contingent project* meets the threshold as referred to in clause 6A.8.1(b)(2)(iii), it must:
 - (1) determine:
 - (i) the amount of capital and incremental operating expenditure, for each remaining *regulatory year* which the *AER* considers is reasonably required for the purpose of undertaking the *contingent project*;
 - (ii) the total capital expenditure which the *AER* considers is reasonably required for the purpose of undertaking the *contingent project*;
 - (iii) the likely commencement and completion dates for the *contingent project*; and
 - (iv) the incremental revenue which is likely to be required by the *Transmission Network Service Provider* in each remaining *regulatory year* as a result of the *contingent project* being undertaken as described in clause 6A.8.2(e)(1)(i) and (ii), such estimate being calculated in accordance with subparagraph (2);
 - (2) calculate the estimate referred to in clause 6A.8.2(e)(1)(iv):
 - (i) on the basis of the capital expenditure referred to in clause 6A.8.2(e)(1)(i);
 - (ii) to include the incremental operating expenditure referred to in clause 6A.8.2(e)(1)(i); and
 - (iii) otherwise in accordance with subparagraph (b)(4); and
 - (3) amend the *revenue determination* in accordance with paragraph (h).
- (f) In making the determinations referred to in subparagraph (e)(1), the *AER* must accept the relevant amounts and dates, contained in the *Transmission Network Service Provider's* application, as referred to in clauses 6A.8.2(b)(3)(ii) – (vii), if the *AER* is satisfied that:
 - (1) the forecast of the total capital expenditure for the *contingent project* meets the threshold as referred to in clause 6A.8.1(b)(2)(iii);
 - (2) the amounts of forecast capital expenditure and incremental operating expenditure reasonably reflect the *capital expenditure criteria* and the

operating expenditure criteria, taking into account the *capital expenditure factors* and the *operating expenditure factors* respectively, in the context of the *contingent project*;

- (3) the estimates of incremental revenue are reasonable; and
 - (4) the dates are reasonable.
- (g) In making the determinations referred to in paragraphs (e)(1) and (f), the *AER* must take into account:
- (1) the information included in or accompanying the application;
 - (2) submissions received in the course of consulting on the application;
 - (3) such analysis as is undertaken by or for the *AER*;
 - (4) the expenditure that would be incurred in respect of a *contingent project* by an efficient and prudent operator in the circumstances of the *Transmission Network Service Provider*;
 - (5) the actual and expected capital expenditure of the *Transmission Network Service Provider* for *contingent projects* during any preceding *regulatory control periods*;
 - (6) the extent to which the forecast capital expenditure for the *contingent project* is referable to arrangements with a person other than the *Transmission Network Service Provider* that, in the opinion of the *AER*, do not reflect arm's length terms;
 - (7) the relative prices of operating and capital inputs in relation to the *contingent project*;
 - (8) efficient substitution possibilities between operating and capital expenditure in relation to the *contingent project*; and
 - (9) whether the total labour costs included in the capital and operating expenditure forecasts for the *regulatory control period* are consistent with the incentives provided by the *service target performance incentive scheme* that is to apply to the provider in respect of the *regulatory control period*.
- (h) Amendments to a *revenue determination* referred to in paragraph (e)(3) must only vary the determination to the extent necessary:
- (1) to adjust the forecast capital expenditure for that *regulatory control period* to accommodate the amount of capital expenditure determined under clause 6A.8.2(e)(1)(i) (in which case the amount of that

adjustment will be taken to be accepted by the *AER* under clause 6A.6.7(c));

- (2) to adjust the forecast operating expenditure for that *regulatory control period* to accommodate the amount of incremental operating expenditure determined under clause 6A.8.2(e)(1)(i) (in which case the amount of that adjustment will be taken to be accepted by the *AER* under clause 6A.6.6(c));
 - (3) to reflect the effect of any resultant increase in forecast capital and operating expenditure on:
 - (i) the *maximum allowed revenue* for each *regulatory year* in the remainder of the *regulatory control period*; and
 - (ii) the X factor for each of the remaining *regulatory years* of the *regulatory control period*.
- (i) Amendments to a *revenue determination* take effect from the commencement of the next *regulatory year* of the *regulatory control period*.

Part D - Negotiated Transmission Services

6A.9 Negotiated transmission services

6A.9.1 Principles relating to access to negotiated transmission services

The following principles constitute the *Negotiated Transmission Services Principles*:

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

- (ii) exceeds the *network* performance requirements set out in schedules 5.1a and 5.1,

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

- (4) if the *negotiated transmission service* is the provision of a *shared transmission service* that does not meet (and does not exceed) the *network* performance requirements set out in schedules 5.1a and 5.1, the differential between the price for that service and the price for the *shared transmission service* which meets (but does not exceed) the *network* performance requirements set out in schedules 5.1a and 5.1 should reflect the amount of the *Transmission Network Service Provider's* avoided cost of providing that service;
- (5) the price for a *negotiated transmission service* must be the same for all *Transmission Network Users* unless there is a material difference in the costs of providing the *negotiated transmission service* to different *Transmission Network Users* or classes of *Transmission Network Users*;
- (6) the price for a *negotiated transmission service* should be subject to adjustment over time to the extent that the assets used to provide that service are subsequently used to provide services to another person, in which case such adjustment should reflect the extent to which the costs of that asset is being recovered through charges to that other person;
- (7) the price for a *negotiated transmission service* should be such as to enable the *Transmission Network Service Provider* to recover the efficient costs of complying with all *regulatory obligations or requirements* associated with the provision of the *negotiated transmission service*;
- (8) any *access charges* should be based on the costs reasonably incurred by the *Transmission Network Service Provider* in providing *transmission network user access* and (in the case of compensation referred to in rules 5.4A(h) - (j)) on the revenue that is likely to be foregone and the costs that are likely to be incurred by a person referred to in rule 5.4A(h)-(j) where an event referred to in those paragraphs occurs;
- (9) the *terms and conditions of access* for a *negotiated transmission service* should be fair and reasonable and consistent with the safe and

reliable operation of the *power system* in accordance with the *Rules* (for these purposes, the price for a *negotiated transmission service* is to be treated as being fair and reasonable if it complies with principles (1) to (7) of this clause 6A.9.1);

- (10) the *terms and conditions of access* for a *negotiated transmission service* (including, in particular, any exclusions and limitations of liability and indemnities) must not be unreasonably onerous taking into account the allocation of risk between the *Transmission Network Service Provider* and the other party, the price for the *negotiated transmission service* and the costs to the *Transmission Network Service Provider* of providing the *negotiated transmission service*; and
- (11) the *terms and conditions of access* for a *negotiated transmission service* should take into account the need for the service to be provided in a manner that does not adversely affect the safe and *reliable* operation of the *power system* in accordance with the *Rules*.

6A.9.2 Determination of terms and conditions of access for negotiated transmission services

- (a) A *Transmission Network Service Provider* must comply with:
 - (1) the provider's *negotiating framework*; and
 - (2) the provider's *Negotiated Transmission Service Criteria*,when the provider is negotiating the *terms and conditions of access* for *negotiated transmission services* to be provided to a person.
- (b) The *Transmission Network Service Provider* must also comply with Chapters 4, 5, and this Chapter 6A of the *Rules*, including the requirements of:
 - (1) rules 5.3 and 5.4A, when negotiating for the provision of *connection services* and the associated *connection service charges*; and
 - (2) rule 5.4A when negotiating the *use of system services charges* and *access charges* to be paid to or by a *Transmission Network User*.

6A.9.3 Negotiating framework determination

The determination specifying requirements relating to the *negotiating framework* forming part of a *transmission determination* for a *Transmission Network Service Provider* is to set out requirements that are to be complied with in respect of the preparation, replacement, application or operation of the provider's *negotiating framework*.

6A.9.4 Negotiated transmission criteria determination

- (a) The determination by the *AER* specifying the *Negotiated Transmission Service Criteria* forming part of a *transmission determination* for a *Transmission Network Service Provider* is to set out the criteria that are to be applied:
 - (1) by the provider in negotiating:
 - (i) the *terms and conditions of access* for *negotiated transmission services*, including the prices that are to be charged for the provision of those services by the provider for the relevant *regulatory control period*;
 - (ii) any *access charges* which are negotiated by the provider during that *regulatory control period*; and
 - (2) by a *commercial arbitrator* in resolving any dispute, between the *Transmission Network Service Provider* and a person who wishes to receive a *negotiated transmission service*, in relation to:
 - (i) the *terms and conditions of access* for the *negotiated transmission service*, including the price that is to be charged for the provision of that service by the provider;
 - (ii) any *access charges* that are to be paid to or by the provider.
- (b) The *Negotiated Transmission Service Criteria* must give effect to and be consistent with the *Negotiated Transmission Service Principles* set out in clause 6A.9.1.

6A.9.5 Preparation of and requirements for negotiating framework

- (a) A *Transmission 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 transmission service* from the provider, as to the *terms and conditions of access* for provision of the service.
- (b) The *negotiating framework* for a *Transmission Network Service Provider* must comply with and be consistent with:
 - (1) the applicable requirements of a *transmission determination* applying to the provider; and
 - (2) paragraph (c), which sets out the minimum requirements for a *negotiating framework*.

- (c) The *negotiating framework* for a *Transmission 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* for provision of the *negotiated transmission service*;
 - (2) a requirement for the provider to provide all such commercial information as a *Service Applicant* may reasonably require to enable that applicant to engage in effective negotiation with the provider for the provision of the *negotiated transmission service*, including the cost information described in subparagraph (3);
 - (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 transmission service*; and
 - (ii) to demonstrate to a *Service Applicant* that the charges for providing the *negotiated transmission service* reflect those costs and/or the cost increment or decrement (as appropriate);
 - (4) a requirement for a *Service Applicant* to provide all such commercial information as the provider may reasonably require to enable the provider to engage in effective negotiation with that applicant for the provision of the *negotiated transmission service*;
 - (5) a reasonable period of time for commencing, progressing and finalising negotiations with a *Service Applicant* for the provision of the *negotiated transmission service*, and a requirement that each party to the negotiation must use its reasonable endeavours to adhere to those time periods during the negotiation;
 - (6) a process for dispute resolution which provides that all disputes as to the *terms and conditions of access* for provision of *negotiated transmission services* are to be dealt with in accordance with Part K of this Chapter 6A;
 - (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 transmission service*;
 - (8) a requirement that the *Transmission Network Service Provider* determine the potential impact on other *Transmission Network Users* of the provision of the *negotiated transmission service*; and
 - (9) a requirement that the *Transmission Network Service Provider* must notify and consult with any affected *Transmission Network Users* and

ensure that the provision of the *negotiated transmission services* does not result in non-compliance with obligations in relation to other *Transmission Network Users* under the *Rules*.

- (d) Notwithstanding the foregoing, the *negotiating framework* must not be inconsistent with any of the other requirements of Chapters 4, 5 and this Chapter 6A of the *Rules* and, in the event of any inconsistency, the other requirements in the *Rules* prevail.
- (e) Each *Transmission Network Service Provider* and *Service Applicant* who is negotiating for the provision of a *negotiated transmission service* by the provider must comply with the requirements of the *negotiating framework* in accordance with its terms.

6A.9.6 Confidential information

- (a) Commercial information which is required to be provided to a *Service Applicant* in accordance with clause 6A.9.5(c)(2):
 - (1) does not include confidential information provided to the *Transmission Network Service Provider* by another person; and
 - (2) may be provided subject to a condition that a *Service Applicant* must not provide any part of that commercial information to any other person without the consent of the *Transmission Network Service Provider* which provided the information to that applicant.
- (b) Commercial information which is required to be provided to a *Transmission Network Service Provider* in accordance with clause 6A.9.5(c)(4):
 - (1) does not include confidential information provided to a *Service Applicant* by another person; and
 - (2) may be provided subject to a condition that the provider must not provide any part of that commercial information to any other person without the consent of the *Service Applicant* which provided the information to the provider.

6A.9.7 Commercial arbitration for negotiated transmission services

Part K of this Chapter 6A applies to any dispute which may arise between a *Transmission Network Service Provider* and a *Service Applicant* as to the *terms and conditions of access* which the provider proposes to apply to the *Service Applicant* for the provision of a *negotiated transmission service*.

Part E - Procedure – Revenue determinations, negotiating frameworks and pricing methodologies

6A.10 Revenue Proposal, proposed negotiating framework and proposed pricing methodology

6A.10.1 Submission of proposal, framework, pricing methodology and information

- (a) A *Transmission Network Service Provider* must submit to the AER a *Revenue Proposal* and a proposed *pricing methodology* relating to the *prescribed transmission services* that are provided by means of, or in connection with, a *transmission system* that is owned, controlled or operated by that provider:
 - (1) if any of those *prescribed transmission services* are subject to a *transmission determination*, 13 months before the expiry of the period in respect of which that *transmission determination* applies; or
 - (2) if any of those *prescribed transmission services* are not subject to a *transmission determination*, 3 months after being required to do so by the AER.
- (b) At the same time as it submits a *Revenue Proposal* under paragraph (a), the provider must also submit to the AER a proposed *negotiating framework*.
- (c) The *Revenue Proposal* and the proposed *negotiating framework* must comply with the requirements of, and must contain or be accompanied by such information as is required by, the *submission guidelines* made for that purpose under this rule 6A.10.
- (d) The proposed *negotiating framework* must also comply with the requirements of clause 6A.9.5.
- (e) A proposed *pricing methodology* must:
 - (1) give effect to and be consistent with the *Pricing Principles for Prescribed Transmission Services*; and
 - (2) comply with the requirements of, and contain or be accompanied by such information as is required by, the *pricing methodology guidelines* made for that purpose under rule 6A.25.

6A.10.2 Submission guidelines

- (a) The AER must make guidelines, referred to as '*submission guidelines*', for the purposes of this Part E.

- (b) The *submission guidelines* must specify:
- (1) the form of a *Revenue Proposal* and *negotiating framework*;
 - (2) the requirements for any information contained in or accompanying the *Revenue Proposal* to be audited or otherwise verified;
 - (3) what parts (if any) of the *Revenue Proposal* or the information accompanying it will not be publicly disclosed without the consent of the *Transmission Network Service Provider*, with the presumption being that at least the matters or information referred to in the following clauses will be publicly disclosed:
 - (i) clause S6A.1.1;
 - (ii) clause S6A.1.2;
 - (iii) clauses S6A.1.3(1)-(3), (4)(i) and (ii), (6), (8) and (9); and
 - (iv) clauses 6A.10.2(b)(7) and (8);
 - (4) that the *Revenue Proposal* must contain at least the information and matters relating to capital expenditure set out in clause S6A.1.1;
 - (5) that the *Revenue Proposal* must contain at least the information and matters relating to operating expenditure set out in clause S6A.1.2;
 - (6) that the *Revenue Proposal* must contain at least the additional information and matters set out in clause S6A.1.3;
 - (7) that the *Revenue Proposal* must be accompanied by such information as is necessary to enable the *AER* and other interested parties to understand the manner in which the *Transmission Network Service Provider* proposes that negotiations as to the price of *negotiated transmission services* or the amount of *access charges* will be conducted in accordance with the provider's proposed *negotiating framework*;
 - (8) such other information as the *AER* considers should be contained in, or should accompany, a *Revenue Proposal* on the basis that such information is necessary to enable the *AER* and other interested parties to:
 - (i) understand how the *Transmission Network Service Provider* derived the elements of its *Revenue Proposal*; and
 - (ii) form an opinion as to whether the *Revenue Proposal* complies with the requirements of Parts B and E of this Chapter 6A; and

- (9) in the case of amounts, values or inputs that:
 - (i) cannot be determined before the submission of the *Revenue Proposal*; or
 - (ii) are required to be estimated, approved or otherwise determined by the *AER* but are not so estimated, approved or otherwise determined before the submission of the *Revenue Proposal*,

what amounts, values or inputs are to be used in their place for the purposes of the *Revenue Proposal* or revised *Revenue Proposal* (as the case may be).
- (c) Without limiting any other provision of this rule 6A.10, the *submission guidelines* must provide that:
 - (1) the information accompanying the *Revenue Proposal* must include:
 - (i) the *post-tax revenue model*, completed in such a way as to show its application to the *Transmission Network Service Provider*; and
 - (ii) the completed *roll forward model*; and
 - (2) the completed *post-tax revenue model* and proposed *roll forward model*, and the information in those models, will not be publicly disclosed without the consent of the provider, except to the extent that the information is aggregated or otherwise available apart from it being contained in those models.
- (d) The *AER* must, in accordance with the *transmission consultation procedures*, develop and make the *submission guidelines* by 28 September 2007, and there must be *submission guidelines* available at all times after that date.
- (e) The *submission guidelines* may be amended or replaced by the *AER* from time to time, in accordance with the *transmission consultation procedures*.

6A.11 Preliminary examination and consultation

6A.11.1 Preliminary examination and determination of non-compliance with relevant requirements

- (a) If the *AER* determines that:
 - (1) a *Revenue Proposal* submitted by a *Transmission Network Service Provider*;
 - (2) a proposed *negotiating framework* submitted by the provider;

- (3) a proposed *pricing methodology* submitted by the provider; or
- (4) information contained in or accompanying such a *Revenue Proposal*, proposed *negotiating framework*, or proposed *pricing methodology*,

under clause 6A.10.1 does not comply with the requirements of:

- (5) the *submission guidelines* (in respect of a *Revenue Proposal*);
- (6) clause 6A.9.5 (in respect of a proposed *negotiating framework*); or
- (7) clause 6A.10.1(e) (in respect of a proposed *pricing methodology*),

the *AER* must notify the provider of that determination as soon as practicable after receiving that *Revenue Proposal*, proposed *negotiating framework*, proposed *pricing methodology* or information (as the case may be).

- (b) A determination referred to in paragraph (a) must be accompanied by written reasons that set out:
 - (1) the respects in which the *Revenue Proposal*, proposed *negotiating framework*, proposed *pricing methodology* or information does not comply with the relevant requirements of the *submission guidelines* clause 6A.9.5, or clause 6A.10.1(e) (as the case may be) and the requirements that have not been complied with; and
 - (2) in the case of information which does not comply with those requirements, the reason that the submission of information in accordance with those requirements would assist the *AER* in assessing the *Revenue Proposal*, proposed *negotiating framework* or proposed *pricing methodology*.

6A.11.2 Resubmission of proposal, framework, pricing methodology or information

- (a) If the *AER* notifies a *Transmission Network Service Provider* of a determination under clause 6A.11.1, the provider must, within 1 month of that notice, resubmit its *Revenue Proposal*, proposed *negotiating framework*, proposed *pricing methodology* or the required information (as the case may be) in a form that complies with the relevant requirements set out in that determination.
- (b) A *Transmission Network Service Provider* may only make changes to its *Revenue Proposal*, proposed *negotiating framework*, or proposed *pricing methodology* for the purposes of paragraph (a) to address the matters raised in the determination under clause 6A.11.1.

6A.11.3 Resubmission of proposal, framework, pricing methodology or information

- (a) Except to the extent that the *submission guidelines* or the *pricing methodology guidelines* provide that it will not be publicly disclosed (and, in that case, the relevant *Transmission Network Service Provider* has not otherwise consented), the *AER* must *publish*:

- (1) the *Revenue Proposal*;
- (2) the proposed *negotiating framework*;
- (3) the proposed *pricing methodology*; and
- (4) the information,

submitted or resubmitted to it by the provider under rule 6A.9, 6A.10 or this rule 6A.11, together with:

- (5) the *AER's* proposed *Negotiated Transmission Service Criteria* for the provider; and
- (6) an invitation for written submissions on the documents and information referred to in subparagraphs (1)-(4),

as soon as practicable after the *AER* determines that the *Revenue Proposal*, proposed *negotiating framework*, proposed *pricing methodology* and information comply with the requirements of the *submission guidelines*, clause 6A.9.5 or clause 6A.10.1(e) (as applicable).

- (b) The *AER* may *publish* an issues paper examining the issues raised in connection with the *Revenue Proposal*, the proposed *negotiating framework*, the proposed *pricing methodology* and the proposed *Negotiated Transmission Service Criteria*, at the same time as, or subsequent to, *publication* of the invitation to make submissions referred to in paragraph (a)(6).
- (c) Any person may make a written submission to the *AER* on the *Revenue Proposal*, the proposed *negotiating framework*, the proposed *pricing methodology* or the proposed *Negotiated Transmission Service Criteria* for the provider within the time specified in the invitation referred to in paragraph (a)(6), which must be not earlier than 30 *business days* after the invitation for submissions is *published* under that paragraph.

6A.12 Draft decision and further consultation

6A.12.1 Making of draft decision

- (a) Subject to rule 6A.16(a), the *AER* must consider any written submissions made under rule 6A.11 and must make a draft decision in relation to the *Transmission Network Service Provider*.
- (b) The *AER*'s draft decision must be made in accordance with, and must comply with, the relevant requirements of rule 6A.14.
- (c) If the *AER* refuses to approve any of the amounts or values referred to in clause 6A.14.1(1), the *AER*'s draft decision must include details of the changes required or matters to be addressed before the *AER* will approve those amounts or values.
- (d) If the *AER* refuses to approve the proposed *negotiating framework*, the *AER*'s draft decision must include details of the changes required or matters to be addressed before the *AER* will approve the framework.
- (e) If the *AER* refuses to approve any aspect of a proposed *pricing methodology*, the *AER*'s draft decision must include details of the changes required or matters to be addressed before the *AER* will approve the proposed methodology.

6A.12.2 Publication of draft decision and consultation

- (a) The *AER* must, as soon as practicable but not later than 6 months after the relevant date referred to in clause 6A.10.1(a), *publish*:
 - (1) its draft decision and reasons under clause 6A.12.1 and rule 6A.14;
 - (2) notice of the making of the draft decision;
 - (3) notice of a predetermination conference; and
 - (4) an invitation for written submissions on its draft decision.
- (b) The *AER* must hold a predetermination conference at the time, date and place specified in the notice under paragraph (a)(3) for the purpose of explaining its draft decision and receiving oral submissions from interested parties. Any person may attend such a predetermination conference but the procedure to be adopted at the conference will be at the discretion of the senior *AER* representative in attendance.
- (c) Any person may make a written submission to the *AER* on the draft decision within the time specified in the invitation referred to in paragraph (a)(4), which must be not earlier than 45 *business days* after the holding of a predetermination conference.

6A.12.3 Submission of revised proposal, framework or pricing methodology

- (a) In addition to making such other written submissions as it considers appropriate, the *Transmission Network Service Provider* may, not more than 30 *business days* after the publication of the draft decision, submit to the AER:
 - (1) a revised *Revenue Proposal*;
 - (2) a revised proposed *negotiating framework*; or
 - (3) a revised proposed *pricing methodology*.
- (b) A *Transmission Network Service Provider* may only make the revisions referred to in paragraph (a) so as to incorporate the substance of any changes required by, or to address matters raised in, the draft decision.
- (c) A revised *Revenue Proposal* or revised proposed *negotiating framework* must comply with the requirements of, and must contain or be accompanied by such information as is required by, the *submission guidelines*.
- (d) The revised proposed *negotiating framework* must also comply with the requirements of clause 6A.9.5.
- (e) A revised proposed *pricing methodology* must:
 - (1) give effect to and be consistent with the *Pricing Principles for Prescribed Transmission Services*; and
 - (2) comply with the requirements of, and must contain or be accompanied by such information as is required by, the *pricing methodology guidelines*.
- (f) Except to the extent that the *submission guidelines* or the *pricing methodology guidelines* (as the case may be) provide that it will not be publicly disclosed (and, in that case, the *Transmission Network Service Provider* has not otherwise consented), the AER must *publish*:
 - (1) any revised *Revenue Proposal*;
 - (2) any revised proposed *negotiating framework*; or
 - (3) any revised proposed *pricing methodology*,(as the case may be), that is submitted by the *Transmission Network Service Provider* under paragraph (a), together with the accompanying information, as soon as practicable after receipt by the AER.

6A.13 Final decision

6A.13.1 Making of final decision

- (a) Subject to rule 6A.16(a), the *AER* must consider any submissions made on the draft decision, or on any revised *Revenue Proposal*, revised proposed *negotiating framework* or revised proposed *pricing methodology* submitted to it under clause 6A.12.3, and must make a final decision in relation to the *Transmission Network Service Provider*.
- (b) The *AER's* final decision must be made in accordance with, and must comply with, the relevant requirements of rule 6A.14.

6A.13.2 Refusal to approve amounts, values, framework or pricing methodology

- (a) If the *AER's* final decision is to refuse to approve an amount or value referred to in clause 6A.14.1(1), the *AER* must include in its final decision a substitute amount or value which, except as provided in paragraph (b), is:
 - (1) determined on the basis of the current *Revenue Proposal*; and
 - (2) amended from that basis only to the extent necessary to enable it to be approved in accordance with the *Rules*.
- (b) If the *AER's* final decision is to refuse to approve an amount or value referred to in clause 6A.14.1(1) for the reason that, or a reason which includes the reason that, the *AER* is not satisfied that:
 - (1) the total of the forecast operating expenditure for the *regulatory control period* reasonably reflects the *operating expenditure criteria*, taking into account the *operating expenditure factors*; or
 - (2) the total of the forecast capital expenditure for the *regulatory control period* reasonably reflects the *capital expenditure criteria*, taking into account the *capital expenditure factors*,

the *AER* must:

- (3) where subparagraph (1) applies, include in its final decision (in addition to the estimate referred to in clause 6A.14.1(3)(ii)) the forecast operating expenditure for each *regulatory year* which the *AER* is satisfied reasonably reflects the *operating expenditure criteria*, taking into account the *operating expenditure factors*, subject only to the requirement that the total of such forecasts must equate to the estimate referred to in clause 6A.14.1(3)(ii);
- (4) where subparagraph (2) applies, include in its final decision (in addition to the estimate referred to in clause 6A.14.1(2)(ii)) the

forecast capital expenditure for each *regulatory year* which the *AER* is satisfied reasonably reflects the *capital expenditure criteria*, taking into account the *capital expenditure factors*, subject only to the requirement that the total of such forecasts must equate to the estimate referred to in clause 6A.14.1(2)(ii); and

- (5) use each such amount (and its components) in place of the forecast of required operating or capital expenditure that is included in the current *Revenue Proposal* for the purposes of calculating the amount or value that it has refused to approve in its final decision.
- (c) If the *AER's* final decision is to refuse to approve the proposed *negotiating framework* referred to in clause 6A.14.1(6), the *AER* must include in its final decision an amended *negotiating framework* which is:
 - (1) determined on the basis of the current proposed *negotiating framework*; and
 - (2) amended from that basis only to the extent necessary to enable it to be approved in accordance with the *Rules*.
- (d) If the *AER's* final decision is to refuse to approve the proposed *pricing methodology*, the *AER* must include in its final decision an amended *pricing methodology* which is:
 - (1) determined on the basis of the current proposed *pricing methodology*; and
 - (2) amended from that basis only to the extent necessary to enable it to be approved in accordance with the *Rules*.

6A.13.3 Notice of final decision

The *AER* must as soon as practicable, but not later than 2 months before the commencement of the relevant *regulatory control period*, publish:

- (1) notice of the making of the final decision; and
- (2) the final decision, including the reasons required to be included in it.

6A.13.4 Making of transmission determination

The *AER* must, as soon as practicable after making its final decision, make the *transmission determination* to which the final decision relates.

6A.14 Requirements relating to draft and final decisions

6A.14.1 Contents of decisions

A draft decision under rule 6A.12 or a final decision under rule 6A.13 is a decision by the *AER*:

- (1) on the *Transmission Network Service Provider's* current *Revenue Proposal* in which the *AER* either approves or refuses to approve:

- (i) the *total revenue cap* for the provider for the *regulatory control period*;
- (ii) the *maximum allowed revenue* for the provider for each *regulatory year* of the *regulatory control period*;
- (iii) the values that are to be attributed to the *performance incentive scheme parameters* for the *service target performance incentive scheme* that is to apply to the provider in respect of the *regulatory control period*;
- (iv) the values that are to be attributed to the *efficiency benefit sharing scheme parameters* for the *efficiency benefit sharing scheme* that is to apply to the provider in respect of the *regulatory control period*; and
- (v) the commencement and length of the *regulatory control period* that has been proposed by the provider,

as set out in the *Revenue Proposal*, setting out the reasons for the decision;

- (2) in which the *AER* either:

- (i) acting in accordance with clause 6A.6.7(c), accepts the total of the forecast capital expenditure for the *regulatory control period* that is included in the current *Revenue Proposal*; or
- (ii) acting in accordance with clause 6A.6.7(d), does not accept the total of the forecast capital expenditure for the *regulatory control period* that is included in the current *Revenue Proposal*, in which case the *AER* must set out its reasons for that decision and an estimate of the total of the *Transmission Network Service Provider's* required capital expenditure for the *regulatory control period* that the *AER* is satisfied reasonably reflects the *capital expenditure criteria*, taking into account the *capital expenditure factors*;

- (3) in which the *AER* either:

- (i) acting in accordance with clause 6A.6.6(c), accepts the total of the forecast operating expenditure for the *regulatory control period* that is included in the current *Revenue Proposal*; or
 - (ii) acting in accordance with clause 6A.6.6(d), does not accept the total of the forecast operating expenditure for the *regulatory control period* that is included in the current *Revenue Proposal*, in which case the *AER* must set out its reasons for that decision and an estimate of the total of the *Transmission Network Service Provider's* required operating expenditure for the *regulatory control period* that the *AER* is satisfied reasonably reflects the *operating expenditure criteria*, taking into account the *operating expenditure factors*;
- (4) in which the *AER* determines:
 - (i) whether each of the *proposed contingent projects* (if any) described in the current *Revenue Proposal* are *contingent projects* for the purposes of the *revenue determination* in which case the decision must clearly identify each of those *contingent projects*;
 - (ii) the capital expenditure that it is satisfied reasonably reflects the *capital expenditure criteria*, taking into account the *capital expenditure factors*, in the context of each *contingent project* as described in the current *Revenue Proposal*;
 - (iii) the *trigger events* in relation to each *contingent project* (in which case the decision must clearly specify those *trigger events*); and
 - (iv) if the *AER* determines that such a *proposed contingent project* is not a *contingent project* for the purposes of the *revenue determination*, its reasons for that conclusion, having regard to the requirements of clause 6A.8.1(b);
- (5) in which the *AER* sets out the amounts, values or inputs that it has used in place of those referred to in clause 6A.10.2(b)(9);
- (6) on the provider's current proposed *negotiating framework*, in which the *AER* either approves or refuses to approve the proposed *negotiating framework*, setting out reasons for its decision;
- (7) in which the *AER* specifies the *Negotiated Transmission Service Pricing Criteria* for the *Transmission Network Service Provider*, setting out the reasons for the decision; and

- (8) on the *Transmission Network Service Provider's* current proposed *pricing methodology*, in which the *AER* either approves or refuses to approve that methodology and sets out reasons for its decision.

6A.14.2 Reasons for decisions

The reasons given by the *AER* for a draft decision under rule 6A.12 or a final decision under rule 6A.13 must set out the basis and rationale of the decision, including:

- (1) details of the qualitative and quantitative methodologies applied in any calculations and formulae made or used by the *AER* for the purposes of its decision;
- (2) the values adopted by the *AER* for each of the input variables in any calculations and formulae, including:
 - (i) whether those values have been taken or derived from the provider's current *Revenue Proposal*; and
 - (ii) if not, the rationale for the adoption of those values;
- (3) details of any assumptions made by the *AER* in undertaking any material qualitative and quantitative analyses for the purposes of the decision; and
- (4) reasons for the making of any decisions, the giving or withholding of any approvals, and the exercise of any discretions, as referred to in Part C of this Chapter 6A, for the purposes of the decision.

6A.14.3 Circumstances in which matters must be approved or accepted

- (a) This clause set out the circumstances in which the *AER* must approve or accept certain matters for the purposes of a draft decision under rule 6A.12 or a final decision under rule 6A.13. Subject to any provision of this Chapter 6A, if the *AER* is not required to approve or accept such a matter in accordance with this clause, it may, but is not required to, refuse to approve or accept that matter.
- (b) The *AER* must approve:
 - (1) the *total revenue cap* for a *Transmission Network Service Provider* for a *regulatory control period*; and
 - (2) the *maximum allowed revenue* for the provider for each *regulatory year* of the *regulatory control period*,

as set out in the current *Revenue Proposal*, if the *AER* is satisfied that:

- (3) those amounts have been properly calculated using the *post-tax revenue model*; and
 - (4) those amounts, and any amount required to be calculated, determined or forecast for the purposes of calculating those amounts, have otherwise been calculated, determined or forecast in accordance with the requirements of Part C of this Chapter 6A, (for these purposes, the *AER* is taken to be so satisfied in respect of a particular amount if another provision of this Chapter 6A requires the *AER* to approve or accept that amount).
- (c) If a *Transmission Network Service Provider's* revised *Revenue Proposal* submitted under clause 6A.12.3(a) includes:
- (1) an amount of total forecast capital expenditure for the *regulatory control period* that is the same as that accepted or estimated (as the case may be) by the *AER* in a draft decision under rule 6A.12; or
 - (2) an amount of total forecast operating expenditure for the *regulatory control period* that is the same as that accepted or estimated (as the case may be) by the *AER* in a draft decision under rule 6A.12,

then, except to the extent that:

- (3) either or both of the following apply:
 - (i) other changes have been made in the revised *Revenue Proposal*; or
 - (ii) the information contained in or accompanying the revised *Revenue Proposal* differs from that contained in or accompanying the previous *Revenue Proposal*; and
- (4) the changes are such that the *AER* is not satisfied as referred to in clauses 6A.6.6(c) or 6A.6.7(c) (as the case may be),

the *AER*, in its final decision, must accept the forecast of required operating expenditure or of required capital expenditure (as the case may be) that is included in the revised *Revenue Proposal*.

- (d) The *AER* must approve:
- (1) the values that are to be attributed to the *performance incentive scheme parameters* for the *service target performance incentive scheme* that is to apply to a *Transmission Network Service Provider* in respect of a *regulatory control period*; and
 - (2) the values that are to be attributed to the *efficiency benefit sharing scheme parameters* for the *efficiency benefit sharing scheme* that is to

apply to a *Transmission Network Service Provider* in respect of a *regulatory control period*,

as set out in the current *Revenue Proposal*, if the *AER* is satisfied that those values comply with the requirements relating to them set out in the *service target performance incentive scheme* or the *efficiency benefit sharing scheme* (as the case may be).

- (e) The *AER* must approve the commencement and length of the *regulatory control period* as proposed by a *Transmission Network Service Provider* in the provider's current *Revenue Proposal* if the length of the *regulatory control period* as so proposed is 5 *regulatory years*.
- (f) The *AER* must approve a *Transmission Network Service Provider's* current proposed *negotiating framework* if the *AER* is satisfied that the relevant proposed *negotiating framework* meets the requirements set out in clause 6A.9.5(c).
- (g) The *AER* must approve a *Transmission Network Service Provider's* current proposed *pricing methodology* if the *AER* is satisfied that the methodology:
 - (1) gives effect to and is consistent with the *Pricing Principles for Prescribed Transmission Services*; and
 - (2) complies with the requirements of the *pricing methodology guidelines*.
- (h) If a *Transmission Network Service Provider's* revised *Revenue Proposal*, revised proposed *negotiating framework* or revised proposed *pricing methodology* (as the case may be) submitted under clause 6A.12.3(a):
 - (1) contains the changes required under clause 6A.12.1; or
 - (2) does not contain those changes but otherwise (in the *AER's* view), adequately addresses the matters which prompted the *AER* to require those changes,

then, except to the extent that:

- (3) either or both of the following apply:
 - (i) other changes have been made in the revised *Revenue Proposal*, the revised proposed *negotiating framework* or the revised proposed *pricing methodology*, by the provider; or
 - (ii) the information contained in or accompanying the revised *Revenue Proposal*, revised proposed *negotiating framework* or revised proposed *pricing methodology* differs from that contained in or accompanying the previous *Revenue Proposal*,

proposed *negotiating framework* or proposed *pricing methodology* submitted or resubmitted; and

- (4) the changes would justify the *AER*, in its final decision, in refusing to approve the amounts or values referred to in clause 6A.14.1(5), the proposed *negotiating framework* referred to in clause 6A.13.2(c) or the proposed *pricing methodology* referred to in clause 6A.13.2(d),

the *AER*'s final decision must be to approve those amounts or values, that proposed *negotiating framework* or that proposed *pricing methodology*.

- (i) The *AER* must only specify criteria as *Negotiated Transmission Service Criteria* for a *Transmission Network Service Provider* in a draft or final decision under rule 6A.12 or 6A.13 if those criteria give effect to and are consistent with the *Negotiated Transmission Services Principles*.

6A.15 Revocation of revenue determination or amendment of pricing methodology for wrong information or error

- (a) Except as provided in clause 6A.7.1(d), the *AER* may only revoke a *revenue determination* or amend an existing *pricing methodology* during a *regulatory control period* where it appears to the *AER* that:
 - (1) the *total revenue cap* was set or the *pricing methodology* was approved on the basis of information provided by or on behalf of the relevant *Transmission Network Service Provider* to the *AER* that was false or misleading in a material particular; or
 - (2) there was a material error in the *total revenue cap* or in the *pricing methodology*.
- (b) If the *AER* revokes a *revenue determination* under paragraph (a)(1), the *AER* must make a new *revenue determination* in substitution for the revoked *revenue determination* to apply for the remainder of the *regulatory control period* for which the revoked *revenue determination* was to apply.
- (c) If the *AER* revokes a *revenue determination* under paragraph (a)(2), the substituted *revenue determination* must only vary from the revoked *revenue determination* to the extent necessary to correct the relevant error.
- (d) If the *AER* amends a *pricing methodology* under paragraph (a)(1), the amended methodology applies to the setting of prices for the next *financial year* and for the remainder of the relevant *regulatory control period*.
- (e) If the *AER* amends a *pricing methodology* under paragraph (a)(2), the amended methodology must only vary from the existing *pricing methodology* to the extent necessary to correct the relevant error.

- (f) The *AER* may only revoke and substitute a *revenue determination* or amend a *pricing methodology* under this rule 6A.15, if it has first consulted with the relevant *Transmission Network Service Provider* and such other persons as it considers appropriate.

6A.16 Miscellaneous

- (a) The *AER* may, but is not required to, consider any submission made pursuant to an invitation for submissions after the time for making the submission has expired.
- (b) Nothing in this Part E is to be construed as precluding the *AER* from *publishing* any issues, consultation and discussion papers, or holding any conferences and information sessions, that the *AER* considers appropriate.
- (c) Subject to paragraph (d), as soon as practicable after the *AER* receives a submission in response to an invitation referred to in clause 6A.11.3(a)(6) or 6A.12.2(a)(4) (whether or not the submission was made before the time for making it has expired), the *AER* must *publish* that submission.
- (d) The *AER* must not *publish* a submission referred to in paragraph (c) to the extent it contains information which has been clearly identified as confidential by the person making the submission.
- (e) The *AER* may give such weight to confidential information identified in accordance with paragraph (d) in a submission as it considers appropriate, having regard to the fact that such information has not been made publicly available.
- (f) Paragraph (d) does not apply to the extent that any other provision of the *Rules* permits or requires such information to be publicly released by the *AER*.

Part F - Information Disclosure

6A.17 Information disclosure by Transmission Network Service Providers

6A.17.1 Information to be provided to AER

- (a) In this rule 6A.17, ‘**certified annual statement**’ means an annual statement provided by a *Transmission Network Service Provider* under this rule 6A.17 and certified in accordance with the *information guidelines*.

- (b) A *Transmission Network Service Provider* must submit to the *AER*, in the manner and form set out in the *information guidelines*, annual statements that:
 - (1) provide a true and fair statement of the financial and operating performance of the provider;
 - (2) are certified in accordance with the *information guidelines*; and
 - (3) otherwise comply with the requirements of this clause and the *information guidelines*.
- (c) In addition to the certified annual statements, the *AER* may require a *Transmission Network Service Provider* to provide, by a date and in the form and manner specified by the *AER*, any additional information the *AER* reasonably requires for a purpose set out in paragraph (d).
- (d) The certified annual statements and additional information provided by a *Transmission Network Service Provider* to the *AER* under this rule 6A.17 may be used by the *AER* only for the following purposes:
 - (1) to monitor, report on and enforce the compliance of the provider with the *total revenue cap* for the provider for a *regulatory control period*, the *maximum allowed revenue* for the provider for each *regulatory year*, and any requirements that are imposed on the provider under a *transmission determination*;
 - (2) to monitor, report on and enforce compliance with the provider's *Cost Allocation Methodology*;
 - (3) as an input regarding the financial, economic and operational performance of the provider, to inform the *AER*'s decision-making for the making of *revenue determinations* or other regulatory controls to apply in future *regulatory control periods*; and
 - (4) to monitor and report on the performance of the provider under any *service target performance incentive scheme* that applies to it;
 - (5) for the preparation of a *network service provider performance report*.
- (e) The *AER* may request or undertake verification or independent audit of any information sought by it, or provided to it, under this rule 6A.17.

6A.17.2 Information Guidelines

Preparation, publication and amendment of Information Guidelines

- (a) The *AER* must, in accordance with the *transmission consultation procedures*, prepare and *publish information guidelines*.

- (b) The *AER* may, from time to time and in accordance with the *transmission consultation procedures*, amend or replace the *information guidelines*.
- (c) The *AER* must develop and publish the first *information guidelines* by 28 September 2007 and there must be *information guidelines* available at all times after that date.

Contents of information guidelines

- (d) The *information guidelines* must provide for the manner and form in which *Transmission Network Service Providers* must submit certified annual statements to the *AER*, including the date each year by which those statements must be submitted to the *AER*.
- (e) The *information guidelines* may only require the inclusion in the certified annual statements of:
 - (1) such information as the *AER* reasonably requires for a purpose set out in clause 6A.17.1(d);
 - (2) information on the amount of each instance, during the relevant reporting period, of a reduction under clause 6A.26.1(c) in the prices payable by a *Transmission Customer* for *prescribed TUOS services* or *prescribed common transmission services* provided by the *Transmission Network Service Provider*;
 - (3) information on each instance, during the relevant reporting period, of a reduction in the prices payable by a *Transmission Customer* for *prescribed TUOS services* or *prescribed common transmission services* (or both) that were recovered under rule 6A.26 from other *Transmission Customers* for *prescribed TUOS services* or *prescribed common transmission services*; and
 - (4) information to substantiate any claim by the *Transmission Network Service Provider* that the information provided to the *AER* with respect to reductions in the prices payable by a *Transmission Customer* for the relevant *prescribed transmission services* under subparagraph (2) or (3) is confidential information.
- (f) The *information guidelines* may provide for the information that must accompany a written statement seeking approval of the *AER* to pass through a *positive pass through amount* or a *negative pass through amount* under clause 6A.7.3.
- (g) The *information guidelines* may specify the information that must be submitted with any application made under clause 6A.26.2(b), including:
 - (1) details of the circumstances in which a discount amount has arisen and of the calculation of the proposed recovery amount; and

- (2) the information necessary to substantiate how the requirements of clause 6A.26.1(f) are satisfied.
- (h) The *information guidelines* may provide, for the purposes of rule 6A.27, rule 6A.28 and rule 6A.29, for:
 - (1) the information that each *Transmission Network Service Provider* must supply to a *Co-ordinating Network Service Provider* and other *Transmission Network Service Providers* for the purposes of cost allocation under the provider's *pricing methodology*, including:
 - (i) electrical parameters for each optimised element of the *network* and the *network* configuration;
 - (ii) hourly *load* data for each exit point for the *survey period*;
 - (iii) hourly *generation* data for each entry point for the *survey period*;
 - (iv) *voltage* control arrangements and *voltage* profile; and
 - (v) the *ASRR* for the categories of *prescribed TUOS services* and *prescribed common transmission services*.
 - (2) the derivation of hourly *load* data from *metering data* by the aggregation of the *energy meter* reading figures in respect of each hour.

6A.18 [Deleted]

Part G - Cost Allocation

6A.19 Cost allocation

6A.19.1 Duty to comply with Cost Allocation Methodology

A *Transmission Network Service Provider* must comply with the *Cost Allocation Methodology* that has been approved in respect of that provider from time to time by the AER under this rule 6A.19.

6A.19.2 Cost Allocation Principles

The following principles constitute the *Cost Allocation Principles*:

- (1) the detailed principles and policies used by a *Transmission Network Service Provider* to allocate costs between different categories of *transmission services* must be described in sufficient detail to enable

the *AER* to replicate reported outcomes through the application of those principles and policies;

- (2) the allocation of costs must be determined according to the substance of a transaction or event rather than its legal form;
- (3) only the following costs may be allocated to a particular category of *transmission services*:
 - (i) costs which are directly attributable to the provision of those services; and
 - (ii) costs which are not directly attributable to the provision of those services but which are incurred in providing those services, in which case such costs must be allocated to the provision of those services using an appropriate allocator which should:
 - (A) except to the extent the cost is immaterial or a causal based method of allocation cannot be established without undue cost and effort, be causation based; and
 - (B) to the extent the cost is immaterial or a causal based method of allocation cannot be established without undue cost and effort, be an allocator that accords with a well accepted *Cost Allocation Methodology*;
- (4) any *Cost Allocation Methodology* which is used, the reasons for using that methodology and the numeric quantity (if any) of the chosen allocator must be clearly described;
- (5) the same cost must not be allocated more than once;
- (6) the principles, policies and approach used to allocate costs must be consistent with the *Transmission Ring-Fencing Guidelines*;
- (7) costs which have been allocated to *prescribed transmission services* must not be reallocated to *negotiated transmission services*; and
- (8) costs which have been allocated to *negotiated transmission services* may be reallocated to *prescribed transmission services* to the extent they satisfy the principle referred to in subparagraph (3).

Note. The Cost Allocation Guidelines are required by clause 6A.19.3 to give effect to and be consistent with, the Cost Allocation Principles.

6A.19.3 Cost Allocation Guidelines

- (a) The *AER* must, in accordance with the *transmission consultation procedures*, make guidelines (the *Cost Allocation Guidelines*) relating to the

preparation by a *Transmission Network Service Provider* of its *Cost Allocation Methodology*.

- (b) The *Cost Allocation Guidelines*:
 - (1) must give effect to and be consistent with the *Cost Allocation Principles*; and
 - (2) may be amended by the AER from time to time in accordance with the *transmission consultation procedures*.
- (c) Without limiting the generality of paragraph (b), the *Cost Allocation Guidelines* may specify:
 - (1) the format of a *Cost Allocation Methodology*;
 - (2) the detailed information that is to be included in a *Cost Allocation Methodology*;
 - (3) the categories of *transmission services* which are to be separately addressed in a *Cost Allocation Methodology*, such categories being determined by reference to the nature of those services, the persons to whom those services are provided or such other factors as the AER considers appropriate; and
 - (4) the allocation methodologies which are acceptable and the supporting information that is to be included in relation to such methodologies in a *Cost Allocation Methodology*.
- (d) The AER may, from time to time and in accordance with the *transmission consultation procedures*, amend or replace the *Cost Allocation Guidelines*.
- (e) The AER must, in accordance with the *transmission consultation procedures*, develop and *publish* the first *Cost Allocation Guidelines* by 28 September 2007 and there must be *Cost Allocation Guidelines* available at all times after that date.

6A.19.4 Cost Allocation Methodology

- (a) Each *Transmission Network Service Provider* must submit to the AER for its approval a document setting out its proposed *Cost Allocation Methodology*:
 - (1) by no later than 28 March 2008; or
 - (2) in the case of an entity that is not a *Transmission Network Service Provider* as at 28 September 2007, within 6 months of being required to do so by the AER.

- (b) The *Cost Allocation Methodology* proposed by a *Transmission Network Service Provider* must give effect to and be consistent with the *Cost Allocation Guidelines*.
- (c) The *AER* may approve or refuse to approve a *Cost Allocation Methodology* submitted under paragraph (a).
- (d) The *AER* must notify the relevant *Transmission Network Service Provider* of its decision to approve or refuse to approve the *Cost Allocation Methodology* submitted to it under paragraph (a) within 6 months of its submission, failing which the *AER* will be taken to have approved it.
- (e) As part of giving any approval referred to in paragraph (c), the *AER* may, after consulting with the relevant *Transmission Network Service Provider*, amend the *Cost Allocation Methodology* submitted to it, in which case the *Cost Allocation Methodology* as so amended will be taken to be approved by the *AER*.
- (f) A *Transmission Network Service Provider* may amend its *Cost Allocation Methodology* from time to time but the amendment only comes into effect:
 - (1) 6 months after the submission of the amendment, together with detailed reasons for the amendment, to the *AER* (unless the *AER* approves that amendment earlier, in which case it will come into effect when that earlier approval is given); and
 - (2) subject to such changes to the *Cost Allocation Methodology* (including the proposed amendment) as the *AER* notifies to the *Transmission Network Service Provider* within that period, being changes that the *AER* reasonably considers are necessary or desirable as a result of that amendment.
- (g) A *Transmission Network Service Provider* must amend its *Cost Allocation Methodology* where the amendment is required by the *AER* to take into account any change to the *Cost Allocation Guidelines*, but the amendment only comes into effect:
 - (1) on the date that the *AER* approves that amendment, or 3 months after the submission of the amendment, whichever is the earlier; and
 - (2) subject to such changes to the *Cost Allocation Methodology* (including the proposed amendment) as the *AER* notifies to the *Transmission Network Service Provider* within that period, being changes that the *AER* reasonably considers are necessary or desirable as a result of that amendment.
- (h) A *Transmission Network Service Provider* must maintain a current copy of its *Cost Allocation Methodology* on its website.

Part H - Transmission Consultation Procedures

6A.20 Transmission consultation procedures

- (a) This rule 6A.20 applies wherever the *AER* or the *AEMC* is required to comply with the *transmission consultation procedures*. For the avoidance of doubt, the *transmission consultation procedures*:
 - (1) are separate from, and do not apply to, the process for changing the *Rules* under Part 7 of the *National Electricity Law*; and
 - (2) are separate from, and (where they are required to be complied with) apply to the exclusion of, the *Rules consultation procedures* under rule 8.9.
- (b) If the *AER* or the *AEMC* is required to comply with the *transmission consultation procedures* in making, developing or amending any guidelines, models or schemes, or in reviewing any values or methodologies, it must *publish*:
 - (1) the proposed guideline, model, scheme, amendment or revised value or methodology;
 - (2) an explanatory statement that sets out the provision of the *Rules* under or for the purposes of which the guideline, model, scheme or amendment is proposed to be made or developed or the value or methodology is required to be reviewed, and the reasons for the proposed guideline, model, scheme, amendment or revised value or methodology; and
 - (3) an invitation for written submissions on the proposed guideline, model, scheme, amendment or revised value or methodology.
- (c) The invitation must allow no less than 30 *business days* for the making of submissions, and the *AER* or the *AEMC* is not required to consider any submission made pursuant to that invitation after this time period has expired.
- (d) The *AER* or the *AEMC* may publish such issues, consultation and discussion papers, and hold such conferences and information sessions, in relation to the proposed guideline, model, scheme, amendment or revised value or methodology as it considers appropriate.
- (e) Within 80 *business days* of *publishing* the documents referred to in paragraph (b), the *AER* or the *AEMC* must *publish*:

- (1) its final decision on the guideline, model, scheme, amendment, value or methodology that sets out:
 - (i) the guideline, model, scheme, amendment or revised value or methodology (if any);
 - (ii) the provision of the *Rules* under which or for the purposes of which the guideline, model, scheme or amendment is being made or developed or the value or methodology is being reviewed; and
 - (iii) the reasons for the guideline, model, scheme, amendment value or methodology; and
 - (2) notice of the making of the final decision on the guideline, model, scheme, amendment, value or methodology.
- (f) Subject to paragraph (c), the *AER* or the *AEMC* must, in making its final decision referred to in paragraph (e)(1), consider any submissions made pursuant to the invitation for submissions referred to in paragraph (b)(3), and the reasons referred to in paragraph (e)(1)(iii) must include:
- (1) a summary of each issue raised in those submissions that the *AER* or the *AEMC* reasonably considers to be material; and
 - (2) the *AER's* or the *AEMC's* response to each such issue.

Part I - Ring-Fencing Arrangements for Transmission Network Service Providers

6A.21 Transmission Ring-Fencing Guidelines

6A.21.1 Compliance with Transmission Ring-Fencing Guidelines

All *Transmission Network Service Providers* including *Market Network Service Providers*, must comply with the *Transmission Ring-Fencing Guidelines* prepared in accordance with clause 6A.21.2 as from the time that any *jurisdictional derogation* from this rule 6A.21 ceases to apply in respect of the *participating jurisdiction* in which the *Transmission Network Service Provider* is located.

6A.21.2 Development of Transmission Ring-Fencing Guidelines

- (a) *Transmission Ring-fencing guidelines* must be developed by the *AER* in consultation with each *participating jurisdiction* for the accounting and functional separation of the provision of *prescribed transmission services* by

Transmission Network Service Providers from the provision of other services by *Transmission Network Service Providers* (the '*Transmission Ring-Fencing Guidelines*').

- (b) The *Transmission Ring-Fencing Guidelines* may include, but are not limited to:
 - (1) provisions defining the need for and extent of:
 - (i) legal separation of the entity through which a *Transmission Network Service Provider* provides *network services* from any other entity through which it conducts business;
 - (ii) the establishment and maintenance of consolidated and separate accounts for *prescribed transmission services* and other services provided by the *Transmission Network Service Provider*;
 - (iii) allocation of costs between *prescribed transmission services* and other services provided by the *Transmission Network Service Provider*;
 - (iv) limitations on the flow of information between the *Transmission Network Service Provider* and any other person; and
 - (v) limitations on the flow of information where there is the potential for a competitive disadvantage between those parts of the *Transmission Network Service Provider's* business which provide *prescribed transmission services* and parts of the provider's business which provide any other services; and
 - (2) provisions allowing the AER to add to or to waive a *Transmission Network Service Provider's* obligations under the *Transmission Ring-Fencing Guidelines*.
- (c) In developing the *Transmission Ring-Fencing Guidelines* the AER must consider, without limitation, the following matters:
 - (1) the need, so far as practicable, for consistency with Federal and State regulation in each *participating jurisdiction* of ring-fencing requirements of other utility businesses; and
 - (2) the need, so far as practicable, for consistency between the *Transmission Ring-Fencing Guidelines* and *Distribution Ring-Fencing Guidelines*.
- (d) In developing or amending the *Transmission Ring-Fencing Guidelines*, the AER must consult with *participating jurisdictions*, *Registered Participants*, *NEMMCO* and other *interested parties*, and such consultation must be otherwise in accordance with the *transmission consultation procedures*.

- (e) To avoid doubt, despite paragraphs (a), (b), (c) and (d) above and clause 6A.19.2(6), the *Transmission Ring-Fencing Guidelines* must not include any provisions which deal with or require the allocation of costs as between:
 - (1) *prescribed transmission services* and *negotiated transmission services*; or
 - (2) *categories of prescribed transmission services*,in a manner which is inconsistent with the *Cost Allocation Principles*, the *Cost Allocation Guidelines*, the *Pricing Principles for Prescribed Transmission Services* or the *pricing methodology guidelines*.

Part J – Prescribed Transmission Services - Regulation of Pricing

6A.22 Terms used in Part J

6A.22.1 Aggregate annual revenue requirement (AARR)

For the purposes of this Part J, the *aggregate annual revenue requirement (AARR)* for *prescribed transmission services* provided by a *Transmission Network Service Provider*, is the *maximum allowed revenue* referred to in clause 6A.3.1 adjusted:

- (1) in accordance with clause 6A.3.2, and
- (2) by subtracting the operating and maintenance costs expected to be incurred in the provision of *prescribed common transmission services*.

6A.22.2 Annual service revenue requirement (ASRR)

For the purposes of this Part J, the *annual service revenue requirement (ASRR)* for a *Transmission Network Service Provider* is the portion of the AARR for *prescribed transmission services* provided by a *Transmission Network Service Provider* that is allocated to each *category of prescribed transmission services* for that provider and that is calculated by multiplying the AARR by the *attributable cost share* for that category of services in accordance with the principles in clause 6A.23.2.

6A.22.3 Meaning of attributable cost share

- (a) For a *Transmission Network Service Provider* for a *category of prescribed transmission services*, the *attributable cost share* for that provider for that category of services must, subject to any adjustment required under the principles in clause 6A.23.2, substantially reflect the ratio of:

- (1) the costs of the *transmission system* assets directly attributable to the provision of that *category of prescribed transmission services*; to
 - (2) the total costs of all the *Transmission Network Service Provider's transmission system* assets directly attributable to the provision of *prescribed transmission services*.
- (b) The costs of the *transmission system* assets referred to in paragraph (a) refers to optimised replacement cost or to an accepted equivalent to optimised replacement cost that is referable to values contained in the accounts of the *Transmission Network Service Provider*.

6A.22.4 Meaning of attributable connection point cost share

- (a) For a *Transmission Network Service Provider* for *prescribed entry services* and *prescribed exit services*, the *attributable connection point cost share* for that provider for each of those categories of services must substantially reflect the ratio of:
 - (1) the costs of the *transmission system* assets directly attributable to the provision of *prescribed entry services* or *prescribed exit services*, respectively, at a *transmission network connection point*; to
 - (2) the total costs of all the *Transmission Network Service Provider's transmission system* assets directly attributable to the provision of *prescribed entry services* or *prescribed exit services*, respectively.
- (b) The costs of the *transmission system* assets referred to in paragraph (a) refers to optimised replacement cost or to an accepted equivalent to optimised replacement cost that is referable to values contained in the accounts of the *Transmission Network Service Provider*.

6A.23 Pricing Principles for Prescribed Transmission Services

6A.23.1 Introduction

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

6A.23.2 Principles for the allocation of the AARR to categories of prescribed transmission services

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

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

6A.23.3 Principles for the allocation of the ASRR to transmission network connection points

The *annual service revenue requirement* for a *Transmission Network Service Provider* for each *category of prescribed transmission services* is to be allocated to each *transmission network connection point* in accordance with the following principles:

- (a) The whole of the *ASRR* for *prescribed entry services* is to be allocated to *transmission network connection points* in accordance with the *attributable connection point cost share* for *prescribed entry services* that are provided by the *Transmission Network Service Provider* at that *connection point*.

- (b) The whole of the *ASRR* for *prescribed exit services* is to be allocated to *transmission network connection points* in accordance with the *attributable connection point cost share* for *prescribed exit services* that are provided by the *Transmission Network Service Provider* at that *connection point*.
 - (c) Subject to paragraph (e), the *ASRR* for *prescribed TUOS services* is to be allocated to *transmission network connection points* of *Transmission Customers* in the following manner:
 - (1) a share of the *ASRR* (the **locational component**) is to be adjusted by subtracting the estimated *auction amounts* expected to be distributed to the *Transmission Network Service Provider* under clause 3.18.4 from the *connection points* for each relevant *directional interconnector* and this adjusted share is to be allocated as between such *connection points* on the basis of the estimated proportionate use of the relevant *transmission system* assets by each of those customers, and the *CRNP methodology* and *modified CRNP methodology* represent two permitted means of estimating proportionate use;
 - (2) the remainder of the *ASRR* (the **pre-adjusted non-locational component**) is to be adjusted:
 - (i) by subtracting the amount (if any) referred to in paragraph (e);
 - (ii) by subtracting or adding any remaining *settlements residue* (not being *settlements residue* referred to in sub paragraph (1) but including the portion of *settlements residue* due to *intra-regional loss factors*) which is expected to be distributed or recovered (as the case may be) to or from the *Transmission Network Service Provider* in accordance with clause 3.6.5(a);
 - (iii) for any *over-recovery amount* or *under-recovery amount*;
 - (iv) for any amount arising as a result of the application of clause 6A.23.4(h) and (i); and
 - (v) for any amount arising as a result of the application of prudent discounts in clause 6A.26.1(d)-(g),
- (the **adjusted non-locational component**) and this adjusted non-locational component is to be recovered in accordance with clause 6A.23.4.
- (d) The shares of the *ASRR* referred to in paragraph (c) are to be either:
 - (1) a 50% share allocated to the locational component referred to in subparagraph (c)(1) and a 50% share allocated to the pre-adjusted non-locational component referred to in subparagraph (c)(2); or

- (2) an alternative allocation to each component, that is based on a reasonable estimate of future *network* utilisation and the likely need for future *transmission* investment, and that has the objective of providing more efficient locational signals to *Market Participants*, *Intending Participants* and end-users.
- (e) If the result of the adjustment referred to in paragraph (c)(1) would be a negative locational component for the *connection points* of the relevant *directional interconnector* then the locational component will be deemed to be zero and the absolute value of that negative amount is to be subtracted from the pre-adjusted non-locational component under paragraph (c)(2)(i).
- (f) The *ASRR* for *prescribed common transmission services* and the operating and maintenance costs incurred in the provision of those services, are to be recovered through prices charged to *Transmission Customer* and *Network Service Provider transmission network connection points* set in accordance with clause 6A.23.4.

6A.23.4 Price structure principles

- (a) A *Transmission Network Service Provider* is to develop separate prices for the recovery of the *ASRR* in accordance with the principles set out in paragraphs (b)-(i).
- (b) Separate prices are to be developed for each *category of prescribed transmission services*, being:
 - (1) *prescribed entry services*;
 - (2) *prescribed exit services*;
 - (3) *prescribed common transmission services*;
 - (4) *prescribed TUOS services* – locational component; and
 - (5) *prescribed TUOS services* – the adjusted non-locational component.
- (c) Prices for *prescribed entry services* and *prescribed exit services* must be a fixed annual amount.
- (d) Prices for *prescribed common transmission services* must be on a postage-stamp basis.
- (e) Prices for recovering the locational component of providing *prescribed TUOS services* must be based on demand at times of greatest utilisation of the transmission network and for which network investment is most likely to be contemplated.
- (f) Subject to paragraphs (g), (h), and (i), prices for recovering the locational component of the *ASRR* for the provision of *prescribed TUOS services*

must not change by more than 2 per cent per annum compared with the load weighted average price for this component for the relevant region.

- (g) The change in price referred to in paragraph (f) may exceed 2 per cent per annum if, since the last time prices were set:
 - (1) the *load* at the *connection point* has materially changed;
 - (2) in connection with that change, the *Transmission Customer* requested a renegotiation of its *connection agreement* with the *Transmission Network Service Provider*; and
 - (3) the *AER* has approved the change of more than 2 per cent per annum.
- (h) If, in the case of an increase in price, the application of paragraph (f) would result in the under-recovery of part of the locational component of the *ASRR* in charges for *prescribed TUOS services*, any shortfall may be recovered by adjusting upward the charges that would otherwise apply in respect of the adjusted non-locational component of *prescribed TUOS services*.
- (i) If, in the case of a decrease in price, the application of paragraph (f) would result in over-recovery of the locational component of the *ASRR* through charges for *prescribed TUOS services*, any over-recovery must be offset by adjusting downward the charges that would otherwise apply in respect of the adjusted non-locational component of *prescribed TUOS services*.
- (j) Prices for recovering the adjusted non-locational component of *prescribed TUOS services* must be on a *postage-stamp* basis.

6A.24 Pricing methodology

6A.24.1 Pricing methodologies generally

- (a) In making a *transmission determination* under Part E of this Chapter 6A, the *AER* must include a decision to approve a proposed *pricing methodology* as part of that *transmission determination*, in accordance with that Part.
- (b) A *pricing methodology* is a methodology, formula, process or approach that, when applied by a *Transmission Network Service Provider*:
 - (1) allocates the *aggregate annual revenue requirement* for *prescribed transmission services* provided by that provider to:
 - (i) the *categories of prescribed transmission services* for that provider; and
 - (ii) *transmission network connection points* of *Transmission Network Users*; and

- (2) determines the structure of the prices that a *Transmission Network Service Provider* may charge for each of the *categories of prescribed transmission services* for that provider.
- (c) The *pricing methodology* proposed by a *Transmission Network Service Provider* and approved by the *AER* in accordance with Part E of this Chapter 6A must:
 - (1) give effect to and be consistent with the *Pricing Principles for Prescribed Transmission Services*; and
 - (2) comply with the requirements of, and contain or be accompanied by such information as is required by, the *pricing methodology guidelines* made for that purpose under rule 6A.25.
- (d) A *Transmission Network Service Provider* must comply with the *pricing methodology* approved by the *AER* as part of a *transmission determination* that applies to that provider, and any other applicable requirements in the *Rules*, when the provider is setting the prices that may be charged for the provision of *prescribed transmission services*.
- (e) Subject to clause 6A.24.3, a *pricing methodology* applies for the duration of the relevant *regulatory control period*.
- (f) Subject to rule 6A.15, a *pricing methodology* may not be amended during the *regulatory control period*.

6A.24.2 Publication of pricing methodology and transmission network prices

A *Transmission Network Service Provider* must publish:

- (a) a current copy of its *pricing methodology* on its website; and
- (b) the prices for each of the *categories of prescribed transmission services* to apply for the following *financial year*, by 15 May each year for the purposes of determining *distribution service prices*.

6A.24.3 Basis for setting prices pending approval of pricing methodology

- (a) This clause 6A.24.3 applies where:
 - (1) a *Transmission Network Service Provider* has submitted or resubmitted a proposed *pricing methodology* to the *AER* under clause 6A.10.1, 6A.11.2 or 6A.12.3;
 - (2) the *AER* has not made a final decision approving or amending that methodology under rule 6A.13 by a date that is 3 months prior to the commencement of the first *financial year* that a methodology referred

- to in subparagraph (1) would, if approved, apply (the **first pricing year**); and
- (3) the provider is reasonably required to commence the process of setting prices for the first pricing year.
- (b) Despite clause 6A.24.1(d), a *Transmission Network Service Provider* must set prices for the first pricing year in accordance with:
- (1) in the case where the *AER* has made a draft decision in which it proposes to approve a proposed *pricing methodology* - that proposed *pricing methodology*;
 - (2) if subparagraph (1) does not apply, the *pricing methodology* most recently approved for that *Transmission Network Service Provider* prior to the proposed *pricing methodology* referred to in subparagraph (a)(1);
 - (3) if there is no previously approved *pricing methodology* for that *Transmission Network Service Provider*, the previous method used by the *Transmission Network Service Provider* to establish prices, however determined, must be used in place of an approved *pricing methodology*.
- (c) Despite the *AER* subsequently approving a *pricing methodology* for a *Transmission Network Service Provider*:
- (1) the approved *pricing methodology* applies to the setting of prices for the year after the first pricing year and for the remainder of the relevant *regulatory control period*; and
 - (2) the provider is not required to adjust, reverse or recompense any amounts to *Transmission Network Users* or their customers in connection with charges for services established pursuant to this clause 6A.24.3.

6A.25 Pricing methodology guidelines for prescribed transmission services

6A.25.1 Making and amending of pricing methodology guidelines

- (a) The *AER* must, in accordance with the *transmission consultation procedures*, make guidelines (the *pricing methodology guidelines*) relating to the preparation by a *Transmission Network Service Provider* of a proposed *pricing methodology*.
- (b) The *pricing methodology guidelines*:

- (1) must give effect to, and be consistent with, the *Pricing Principles for Prescribed Transmission Services*;
 - (2) may be amended or replaced by the AER from time to time in accordance with the *transmission consultation procedures*; and
 - (3) must be *published* by the AER.
- (c) The AER must develop and publish the first *pricing methodology guidelines* by 31 October 2007 and there must be *pricing methodology guidelines* in force at all times after that date.
- (d) In the event of an inconsistency between the *Rules* and the *pricing methodology guidelines*, the *Rules* prevail to the extent of that inconsistency.

6A.25.2 Contents of pricing methodology guidelines

The *pricing methodology guidelines* must specify or clarify:

- (a) the information that is to accompany a proposed *pricing methodology* being information that is necessary to allow the AER to form a view as to whether the proposed methodology is consistent with and gives effect to, the *Pricing Principles for Prescribed Transmission Services* and the requirements of this Part J;
- (b) permitted pricing structures for recovery of the locational component of providing *prescribed TUOS services* under clause 6A.23.4(e), having regard to:
 - (1) the desirability of consistent pricing structures across the *NEM*; and
 - (2) the role of pricing structures in signaling efficient investment decisions and *network* utilisation decisions;
- (c) in relation to prices set on a *postage-stamp* basis, permissible postage stamping structures for the prices for *prescribed common transmission services* and the recovery of the adjusted non-locational component of providing *prescribed TUOS services* having regard to:
 - (1) the desirability of a consistent approach across the *NEM*, particularly for *Transmission Customers* that have operations in multiple *participating jurisdictions*; and
 - (2) the desirability of signaling to actual and potential *Transmission Network Users* efficient investment decisions and *network* utilisation decisions.

- (d) the types of *transmission system assets* that are directly attributable to each *category of prescribed transmission services*, having regard to the desirability of consistency of cost allocation across the *NEM*; and
- (e) those parts (if any) of a proposed *pricing methodology* or the information accompanying it, that will not be publicly disclosed without the consent of the *Transmission Network Service Provider*.

6A.26 Prudent discounts

6A.26.1 Agreements for prudent discounts for prescribed transmission services

- (a) Subject to this clause 6A.26.1, the prices for *prescribed transmission services* that are determined in accordance with the *pricing methodology* of a *Transmission Network Service Provider*, are the maximum prices that a provider is entitled to charge for the provision of the relevant *prescribed transmission services*.
- (b) A *Transmission Network Service Provider* may, but is not required to, agree with a *Transmission Customer* (the **beneficiary**) to charge lower prices for *prescribed TUOS services* and *prescribed common transmission services* provided to that beneficiary, than the prices determined in accordance with the provider's *pricing methodology*.
- (c) Where a *Transmission Customer* requests a *Transmission Network Service Provider* to charge that user reduced charges for *prescribed TUOS services* or *prescribed common transmission services* (**reduced charges**), the *Transmission Network Service Provider* must negotiate in good faith.
- (d) Subject to this clause 6A.26.1, a *Transmission Network Service Provider* that agrees to charge a beneficiary reduced charges, may recover the difference between the revenue that would be recovered by the application of the maximum prices referred to in paragraph (a) and the reduced charges (the **discount amount**) from either or both charges:
 - (1) to other *Transmission Customers* for the adjusted non-locational component of *prescribed TUOS services*; and
 - (2) for *prescribed common transmission services*,in accordance with the provider's *pricing methodology*.
- (e) A *Transmission Network Service Provider* may recover up to 70 per cent of a discount amount through the charges referred to in subparagraphs (d)(1) and (2).

- (f) A Transmission Network Service Provider may recover greater than 70 percent of the discount amount if:
 - (1) the discount amount is no larger than that necessary to prevent the charges referred to in subparagraphs (d)(1) and (2) altering the beneficiary's behaviour to the point of adopting the most attractive alternative in place of the course of action the beneficiary would have adopted if no such charges were levied; and
 - (2) the giving of the discount would not place other customers of the *Transmission Network Service Provider* in a worse position than if the discount was not offered.
- (g) Where for any reason the *Transmission Network Service Provider* does not recover the proportion of a discount amount that the provider is entitled to recover from other *Transmission Customers* under this clause in the *financial year* in which the reduced charges apply, the *Transmission Network Service Provider* may recover the difference through the charges for the adjusted non-locational component of *prescribed TUOS services* to apply in a subsequent *financial year*, in accordance with the provider's *pricing methodology*.

6A.26.2 Application to AER for approval of proposed prudent discount amounts

- (a) This clause applies where a *Transmission Network Service Provider* has agreed or proposes to agree, to reduced charges in accordance with clause 6A.26.1 and seeks to recover greater than 70 per cent of the discount amount through the charges referred to in clause 6A.26.1(d) to its other *Transmission Customers* (the **proposed recovery amount**).
- (b) A *Transmission Network Service Provider* may apply to the AER for approval to recover the proposed recovery amount.
- (c) A *Transmission Network Service Provider* seeking approval must submit to the AER a written application in accordance with any relevant requirements of the *information guidelines* in force under clause 6A.17.2.
- (d) If the AER determines that the requirements of clause 6A.26.1(f) are satisfied, the AER may approve the recovery of the proposed recovery amount, taking into account the matters referred to in paragraph (i).
- (e) If the AER determines that the requirements of clause 6A.26.1(f) are not satisfied, the AER may refuse the recovery of the proposed recovery amount, and must set out its reasons.
- (f) If the AER does not make a decision referred to in paragraph (d) or (e) within 60 *business days* from the date it receives the *Transmission Network*

Service Provider's application and accompanying evidence under paragraph (c), then, on the expiry of that period, the *AER* is taken to have approved the recovery of the proposed recovery amount.

- (g) A *Transmission Network Service Provider* must provide the *AER* with such information as the *AER* requires for the purpose of making a determination under paragraphs (d) or (e) within the time specified by the *AER* in a notice provided to the provider by the *AER* for that purpose.

Consultation

- (h) Before making a determination under paragraph (d) or (e), the *AER* may consult with the relevant *Transmission Network Service Provider* and such other persons as the *AER* considers appropriate, on any matters arising out of an application to recover a proposed recovery amount as the *AER* considers appropriate.

Relevant factors

- (i) In making a determination under paragraph (d) or (e), the *AER* must take into account:
 - (1) the matters and proposals set out in the application referred to in paragraph (c);
 - (2) the requirements of clause 6A.26.1(f); and
 - (3) any other factors the *AER* considers relevant.
- (j) If the *AER* approves or is taken to approve recovery of the proposed recovery amount under paragraph (d) or (f), that approval is valid so long as the agreement between the *Transmission Network Service Provider* and the *Transmission Customer* remains in effect and its terms are not renegotiated, except where the *Transmission Network Service Provider* has provided information in its application that was materially false or misleading.
- (k) Where a *Transmission Network Service Provider* agrees to charge reduced charges in accordance with clause 6A.26.1, and no approval is granted under this clause 6A.26.2, the *AER* must review the discount amount in the course of making a subsequent *revenue determination* for that provider, and if the recovery of any part of the discount amount does not comply with clause 6A.26.1(f), the *AER* may adjust (with interest) the *total revenue cap* of the *Transmission Network Service Provider* for the following *regulatory control period* in respect of the total amount that has been earned by the *Transmission Network Service Provider* and does not satisfy the requirements under the *Rules*.

6A.27 Billing Process

This rule describes the manner in which *Transmission Network Users* are billed for *prescribed transmission services* and how payments for those services are made.

6A.27.1 Billing for prescribed transmission services

- (a) For each *connection point* on its *transmission networks*, a *Transmission Network Service Provider* must calculate the *transmission service* charges payable by *Transmission Network Users* in accordance with the *transmission service* prices published under clause 6A.24.2.
- (b) A *Transmission Network Service Provider* must issue a bill to *Transmission Network Users* for *prescribed transmission services*.
- (c) Where the billing for a particular *financial year* is based on quantities which are undefined until after the commencement of the *financial year*, charges must be estimated from the previous year's billing quantities with a reconciliation to be made when the actual billing quantities are known and, where the previous year's billing quantities are unavailable or no longer suitable, nominated quantities may be used as agreed between the parties.
- (d) Where charges are to be determined for *prescribed transmission services* from *metering data*, these charges must be based on kW or kWh obtained from the *metering data* managed by *NEMMCO*.

6A.27.2 Minimum information to be provided in network service bills

- (a) The following is the minimum information that must be provided with a bill for a *connection point* issued by a *Transmission Network Service Provider* directly to a *Transmission Network User*:
 - (1) the *connection point* identifier;
 - (2) the dates on which the *billing period* starts and ends;
 - (3) the identifier of the published *transmission service* price from which the *connection point* charges are calculated;
 - (4) measured quantities, billed quantities, agreed quantities, prices and amounts charged for each component of the total *transmission service* account.
- (b) In addition to the minimum information requirements set out in paragraph (a), a bill for a *connection point* issued by a *Transmission Network Service Provider* directly to a *Transmission Customer* must separately identify, for the total amount levied in relation to *prescribed TUOS services* in the *billing period* for that *connection point* each of the following components:

- (1) charges for the locational and the adjusted non-locational component of *prescribed TUOS services*;
- (2) charges for *prescribed common transmission services*.

6A.27.3 Obligation to pay charges for prescribed transmission services

A *Transmission Network User* must pay charges for *prescribed transmission services* properly charged to it and billed in accordance with the *pricing methodology* of the relevant *Transmission Network Service Provider* by the date specified in the bill.

6A.27.4 Payments between Transmission Network Service Providers

- (a) Each *Transmission Network Service Provider* must pay to each other relevant *Transmission Network Service Provider* the revenue which is estimated to be collected during the following year by the first provider as charges for *prescribed transmission services* for the use of *transmission systems* owned by those other *Transmission Network Service Providers*.
- (b) Payments to be made between *Transmission Network Service Providers* within a *region* under paragraph (a) must be determined by the *Co-ordinating Network Service Provider* for that *region*.
- (c) Financial transfers payable under this clause 6A.27.4 must be paid in equal monthly instalments.

6A.27.5 Calculation of financial transfers between Transmission Network Service Providers

- (a) If the *prescribed transmission use of system* revenue allocation and price and charge calculation under the *pricing methodology* of a *Transmission Network Service Provider* result in the allocation of some of a provider's revenue to a *Transmission Customer* in relation to a *connection point* with another *Network Service Provider* then financial transfers between *Network Service Providers* must be made in accordance with paragraph (b).
- (b) Financial transfers referred to in paragraph (a) must be determined by the *Co-ordinating Network Service Provider* as a fixed annual amount for the next *financial year*. The *survey period* for this allocation is the most recent full *financial year* for which operating data is available.

6A.28 Prudential Requirements

This rule sets out the arrangements by which *Transmission Network Service Providers* may minimise financial risks associated with investment in *transmission network* assets.

6A.28.1 Prudential Requirements for prescribed transmission services

A *Transmission Network Service Provider* may require a *Transmission Network User* to establish prudential requirements for either or both *connection services* and *transmission use of system services*. These prudential requirements may take the form of, but need not be limited to, capital contributions, pre-payments or financial guarantees.

6A.28.2 Capital contribution or prepayment for a specific asset

Where the *Transmission Network Service Provider* is required to construct specific assets to provide *connection service* or *transmission use of system service* to a *Transmission Network User*, the provider may require that user to make a capital contribution or prepayment for all or part of the cost of the new assets installed and any contribution made must be taken into account in the determination of *transmission service* prices applicable to that user.

6A.28.3 Treatment of past capital contributions

- (a) The treatment of capital contributions for *connection service* and/or *transmission use of system service* made prior to 13 December 1998, by *Transmission Network Users* must be in accordance with any contractual arrangements with the relevant *Transmission Network Service Providers* applicable at that time.
- (b) Where contractual arrangements referred to in paragraph (a) are not in place, the treatment of past capital contributions for *connection service* and/or *transmission use of system service* must be negotiated by the *Transmission Network Service Provider* and the *Transmission Network User* and, if a dispute arises and cannot be resolved, the matter must be referred to the *AER*.

6A.29 Multiple Transmission Network Service Providers

6A.29.1 Multiple Transmission Network Service Providers within a region

- (a) If *prescribed transmission services* within a *region* are provided by more than one *Transmission Network Service Provider*, the providers within that *region* (the **appointing providers**) must appoint a *Co-ordinating Network Service Provider* who is responsible for the allocation of all relevant *AARR* within that *region*, in accordance with this Part J.
- (b) Each *Transmission Network Service Provider* must determine the *AARR* for its own *transmission system* assets which are used to provide *prescribed transmission services* within each *region*.
- (c) To make the allocation referred to in paragraph (a), the *Co-ordinating Network Service Provider* must use the total *AARR* of all *Transmission*

Network Service Providers providing *prescribed transmission services* within the relevant *region*.

- (d) The *Co-ordinating Network Service Provider* is responsible for making the allocation referred to in paragraph (a), in accordance with its *pricing methodology*, in relation to *Transmission Network Users'* and *Transmission Network Service Providers'* *transmission network connection points* located within the *region* and an appointing provider is not required to address the matters specified in rule 6A.24.1(b)(1) when preparing its *pricing methodology*.
- (e) Each *Transmission Network Service Provider* within a *region* must promptly provide information reasonably requested by the *Co-ordinating Network Service Provider* for that *region* to enable the proper performance of the co-ordination function.
- (f) The *Co-ordinating Network Service Provider* must provide sufficient information to an appointing provider to enable that provider:
 - (1) to understand the basis for the allocation referred to in paragraphs (a) and (d); and
 - (2) to prepare its *pricing methodology* and replicate the pricing allocation.

6A.29.2 Single Transmission Network Service Provider within a region

If *prescribed transmission services* within a *region* are provided by only one *Transmission Network Service Provider*, that provider is responsible for allocation of the AARR within that *region* and must liaise with the *Transmission Network Service Provider* similarly responsible in any other *interconnected regions*.

6A.29.3 Allocation over several regions

- (a) The *Transmission Network Service Providers* responsible for the allocation of the AARR within a *region* may agree with one or more other such providers for *interconnected regions* to undertake the allocations of AARR as one allocation over all of those *regions*.
- (b) To make an allocation over several *regions*, the sum of the AARR of all *Transmission Network Service Providers* providing *prescribed transmission services* within those *regions* must be used.

Part K Commercial arbitration for disputes about terms and conditions of access for prescribed and negotiated transmission services

6A.30 Commercial arbitration for prescribed and negotiated transmission services

This Part K applies to any dispute which may arise between a *Transmission Network Service Provider* (a provider) and a *Service Applicant* (an applicant) as to *terms and conditions of access* as referred to in clause 6A.1.2, for the provision of *prescribed transmission services* or for the provision of *negotiated transmission services* ('a *transmission services access dispute*').

6A.30.1 Notification of transmission services dispute

- (a) A provider or an applicant may notify the *AER* in writing that a *transmission services access dispute* exists.
- (b) On receiving a notification under paragraph (a), the *AER* must give notice in writing of the dispute to the other party to the dispute.
- (c) A provider or an applicant who has given notice of a dispute under paragraph (a) may withdraw notification of the dispute at any time by written notice to the *AER* and the other party to the dispute.
- (d) If the notification of a dispute is withdrawn under paragraph (c), it is taken for the purposes of this clause 6A.30.1 to never have been given.

6A.30.2 Appointment of commercial arbitrator

- (a) On receiving a notification under clause 6A.30.1(a), the *AER* must request the provider and the applicant, by a time specified by the *AER*, to nominate to the *AER* two persons each for appointment as the *commercial arbitrator* to determine the *transmission services access dispute*. The provider and applicant may make the nominations.
- (b) As soon as practicable after the expiry of the time specified by the *AER* under paragraph (a), the *AER* must appoint:
 - (1) one of the persons (if any) nominated to the *AER* by the provider or the applicant under paragraph (a); or
 - (2) if neither the provider or the applicant nominate any such person within the time specified by the *AER* under paragraph (a) or all of the persons so nominated do not qualify for appointment under paragraph (d) or are not eligible for appointment under paragraph (e), a person determined by the *AER*,

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

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

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

6A.30.3 Procedures of commercial arbitrator

- (a) The *commercial arbitrator* may give to the parties such directions as it considers necessary:
 - (1) for the proper conduct of the proceedings, including in relation to the provision of documents and information to the other party and the making of oral and written submissions;
 - (2) relating to the use and disclosure of information obtained from the other party to the dispute (including a direction to keep information confidential); and
 - (3) in relation to the participation (if any) of legal representatives of the parties in the proceedings.
- (b) The *commercial arbitrator* must observe the rules of procedural fairness, but is not bound by the rules of evidence and may inform itself in any manner it thinks fit.

6A.30.4 Powers of commercial arbitrator in determining transmission services access disputes

- (a) In determining a *transmission services access dispute* in relation to the *terms and conditions of access* for the provision of *prescribed transmission services* the *commercial arbitrator* must apply:
 - (1) in relation to price, the *pricing methodology* of the relevant *Transmission Network Service Provider* approved by the *AER* under Part E and Part J of this Chapter 6A of the *Rules*;
 - (2) in relation to other terms and conditions, Chapters 4, 5 and this Chapter 6A of the *Rules*; and
 - (3) in relation to all *terms and conditions of access* (including price) the decision of *NEMMCO* or the *AER* where those decisions relate to those terms and conditions and are made under Chapters 4, 5 and this Chapter 6A of the *Rules*.
- (b) In determining a *transmission services access dispute* in relation to the *terms and conditions of access* for the provision of a *negotiated transmission service* the *commercial arbitrator* must apply:
 - (1) in relation to price (including *access charges*) for the provision of that service by the provider, the *Negotiated Transmission Service Criteria* that are applicable to that dispute, in accordance with the relevant *transmission determination*;
 - (2) in relation to other terms and conditions, the *Negotiated Transmission Service Criteria* that are applicable to that dispute, and Chapters 4, 5 and this Chapter 6A of the *Rules*; and
 - (3) in relation to all *terms and conditions of access* (including price) the decision of *NEMMCO* or the *AER* where those decisions relate to those terms and conditions and are made under Chapters 4, 5 and this Chapter 6A of the *Rules*.

and must have regard:

 - (4) to the relevant *negotiating framework* prepared by the *Transmission Network Service Provider* under clause 6A.9.5 and approved by the *AER*.
- (c) In determining a *transmission services access dispute* in relation to the *terms and conditions of access* for the provision of *negotiated transmission services* a *commercial arbitrator* may:
 - (1) have regard to other matters which the *commercial arbitrator* considers relevant.

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

6A.30.5 Determination of transmission services access disputes

- (a) Subject to paragraph (c), the *commercial arbitrator* must determine the dispute as quickly as possible, and in any case it must do so within 30 *business days* after the dispute is referred to the *commercial arbitrator*.
- (b) The determination of the *commercial arbitrator*:
 - (1) may direct the provision of *prescribed transmissions services* and *negotiated transmission services* in accordance with Chapters 4, 5 and this Chapter 6A of the *Rules*;
 - (2) may specify, for a *negotiated transmission service*, a price or charge in such a way that it is or is to be adjusted over time.

Note: An adjustment as referred to in subparagraph (2) may, for example, be appropriate where the cost of providing the negotiated transmission service to a Service Applicant changes because the assets used to provide that service are subsequently used to provide a service to another person and the payment for the service by that other person enables the Transmission Network Service Provider to recoup some of those costs from that other person.
- (c) The *commercial arbitrator* may extend the period referred to in paragraph (a) if the provider and the applicant so agree in writing.
- (d) The *commercial arbitrator* may at any time terminate the proceedings without making a decision if it considers that:
 - (1) the dispute is misconceived or lacking in substance;
 - (2) the notification of the dispute to the *AER* under clause 6A.30.1(a) was vexatious; or
 - (3) the party who notified the dispute to the *AER* under clause 6A.30.1(a) has not negotiated in good faith or has notified the dispute prematurely or unreasonably.

- (e) The *commercial arbitrator* must terminate the proceedings without making a decision if at any time, whether on application by the provider or the applicant or otherwise, the arbitrator determines that the *transmission service* is capable of being provided on a genuinely competitive basis by a person other than the *Transmission Network Service Provider* or an entity which is associated with the provider.

6A.30.5 Costs of dispute

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

6A.30.6 Enforcement of agreement or determination and requirement for reasons

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

6A.30.7 Miscellaneous

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

Schedule 6A.1 - Contents of Revenue Proposals

S6A.1.1 Information and matters relating to capital expenditure

A *Revenue Proposal* must contain at least the following information and matters relating to capital expenditure:

- (1) a forecast of the required capital expenditure that complies with the requirements of clause 6A.6.7 of the *Rules* and identifies the forecast capital expenditure by reference to well accepted categories such as:
 - (i) asset class (eg. *transmission lines*, *substations* etc); or
 - (ii) category driver (eg. *regulatory obligations or requirements*, replacement, *reliability*, net market benefit, business support etc),and identifies, in respect of proposed material assets:
 - (iii) the location of the proposed asset;
 - (iv) the anticipated or known cost of the proposed asset; and
 - (v) the categories of *transmission services* which are to be provided by the proposed asset;
- (2) the methodology used for developing the capital expenditure forecast;
- (3) the forecasts of load growth relied upon to derive the capital expenditure forecasts and the methodology used for developing those forecasts of load growth;
- (4) the key assumptions that underlie the capital expenditure forecast;

- (5) a certification of the reasonableness of the key assumptions by the directors of the *Transmission Network Service Provider*;
- (6) capital expenditure for each of the first three *regulatory years* of the current *regulatory control period*, and the expected capital expenditure for each of the last two *regulatory years* of that *regulatory control period*, categorised in the same way as for the capital expenditure forecast; and
- (7) an explanation of any significant variations in the forecast capital expenditure from historical capital expenditure.

S6A.1.2 Information and matters relating to operating expenditure

A *Revenue Proposal* must contain at least the following information and matters relating to operating expenditure:

- (1) a forecast of the required operating expenditure that complies with the requirements of clause 6A.6.6 of the *Rules* and identifies the forecast operating expenditure by reference to well accepted categories such as:
 - (i) particular programs; or
 - (ii) types of operating expenditure (eg. maintenance, payroll, materials etc),and identifies in respect of each such category:
 - (iii) to what extent that forecast expenditure is on costs that are fixed and to what extent it is on costs that are variable; and
 - (iv) the categories of *transmission services* to which that forecast expenditure relates;
- (2) the methodology used for developing the operating expenditure forecast;
- (3) the forecasts of key variables relied upon to derive the operating expenditure forecast and the methodology used for developing those forecasts of key variables;
- (4) the methodology used for determining the cost associated with planned maintenance programs designed to improve the performance of the relevant *transmission system* for the purposes of any *service target performance incentive scheme* that is to apply to the *Transmission Network Service Provider* in respect of the relevant *regulatory control period*;
- (5) the key assumptions that underlie the operating expenditure forecast;

- (6) a certification of the reasonableness of the key assumptions by the directors of the *Transmission Network Service Provider*;
- (7) operating expenditure for each of the first three *regulatory years* of the current *regulatory control period*, and the expected operating expenditure for each of the last two *regulatory years* of that *regulatory control period*, categorised in the same way as for the operating expenditure forecast; and
- (8) an explanation of any significant variations in the forecast operating expenditure from historical operating expenditure.

S6A.1.3 Additional information and matters

A *Revenue Proposal* must contain at least the following additional information and matters:

- (1) an identification and explanation of any significant interactions between the forecast capital expenditure and forecast operating expenditure programs;
- (2) the values that the *Transmission Network Service Provider* proposes are to be attributed to the *performance incentive scheme parameters* for the purposes of the application to the provider of the *service target performance incentive scheme* that applies in respect of the relevant *regulatory control period*, and an explanation of how the values proposed to be attributed to those parameters comply with any requirements relating to them set out in that scheme;
- (3) the values that the provider proposes are to be attributed to the *efficiency benefit sharing scheme parameters* for the purposes of the application to the provider of the *efficiency benefit sharing scheme* that applies in respect of the relevant *regulatory control period*, and an explanation of how the values proposed to be attributed to those parameters comply with any relevant requirements set out in that scheme;
- (4) the provider's calculation of:
 - (i) the estimated *total revenue cap* for it for the relevant *regulatory control period*; and
 - (ii) the *maximum allowed revenue* for it for each *regulatory year* of the relevant *regulatory control period*,

using the *post-tax revenue model* referred to in rule 6A.5 of the *Rules*, together with:

- (iii) details of all amounts, values and other inputs used by the provider for that purpose;
 - (iv) a demonstration that any such amounts, values and other inputs comply with the relevant requirements of Part C of Chapter 6A of the *Rules*; and
 - (v) an explanation of the calculation of the amounts referred to in subparagraphs (i) and (ii) and of the amounts, values and inputs referred to in subparagraph (iii);
- (5) the provider's calculation of the regulatory asset base for the relevant *transmission system* for each *regulatory year* of the relevant *regulatory control period* using the *roll forward model* referred to in clause 6A.6.1 of the *Rules*, together with:
 - (i) details of all amounts, values and other inputs used by the provider for that purpose;
 - (ii) a demonstration that any such amounts, values and other inputs comply with the relevant requirements of Part C of Chapter 6A of the *Rules*; and
 - (iii) an explanation of the calculation of the regulatory asset base for each *regulatory year* of the relevant *regulatory control period* and of the amounts, values and inputs referred to in subparagraph (i);
- (6) the commencement and length of the period nominated by the *Transmission Network Service Provider* for the purposes of clause 6A.6.2(c)(2) of the *Rules*;
- (7) the depreciation schedules nominated by the *Transmission Network Service Provider* for the purposes of clause 6A.6.3 of the *Rules*, which categorise the relevant assets for these purposes by reference to well accepted categories such as:
 - (i) asset class (eg *transmission lines* and *substations*); or
 - (ii) category driver (eg *regulatory obligations or requirements*, replacement, *reliability*, net market benefit, and business support),

and also by location, together with:

- (iii) details of all amounts, values and other inputs used by the provider to compile those depreciation schedules;

- (iv) a demonstration that those depreciation schedules conform with the requirements set out in clause 6A.6.3(b) of the *Rules*; and
 - (v) an explanation of the calculation of the amounts, values and inputs referred to in subparagraph (iii);
- (8) the X factors nominated by the provider for each *regulatory year* of the relevant *regulatory control period* for the purposes of clause 6A.6.8(a) of the *Rules*, together with a demonstration that those X factors comply with the requirements set out in clause 6A.6.8(b) of the *Rules*;
- (9) the commencement and length of the *regulatory control period* proposed by the *Transmission Network Service Provider*; and
- (10) if the *Transmission Network Service Provider* is seeking a determination by the AER that a *proposed contingent project* is a *contingent project* for the purposes of the relevant *revenue determination*:
 - (i) a description of the *proposed contingent project*, including reasons why the provider considers the project should be accepted as a *contingent project* for the *regulatory control period*;
 - (ii) a forecast of the capital expenditure which the provider considers is reasonably required for the purpose of undertaking the *proposed contingent project*;
 - (iii) the methodology used for developing that forecast and the key assumptions that underlie it;
 - (iv) information that demonstrates that the undertaking of the *proposed contingent project* is reasonably required in order to achieve one or more of the *capital expenditure objectives*;
 - (v) information that demonstrates that the *proposed contingent capital expenditure* for the *proposed contingent project* complies with the requirements set out in clause 6A.8.1(b)(2) of the *Rules*; and
 - (vi) the *trigger events* which are proposed in relation to the *proposed contingent project* and an explanation of how each of those conditions or events addresses the matters referred to in clause 6A.8.1(c) of the *Rules*.

Schedule 6A.2 - Regulatory Asset Base

S6A.2.1 Establishment of opening regulatory asset base for a regulatory control period

(a) Application of this clause

This clause S6A.2.1:

- (1) applies to the establishment of the value of the regulatory asset base for a *transmission system* as at the beginning of a *regulatory control period* on the roll forward of the regulatory asset base to that *regulatory control period* from the previous *regulatory control period*; and
- (2) also applies to the establishment of the value of the regulatory asset base for a *transmission system* as at the beginning of a *regulatory control period* where the *transmission system* was not immediately before that time the subject of a *revenue determination*.

(b) Roll forward model to comply with this clause

The *roll forward model* referred to in clause 6A.6.1 of the *Rules* must provide for those values to be established in accordance with the requirements of clauses S6A.2.1, S6A.2.2 and S6A.2.3.

(c) Transmission systems of specific providers

- (1) In the case of a *transmission system* owned, controlled or operated by one of the following *Transmission Network Service Providers* as at 16 February 2006, the value of the regulatory asset base for that *transmission system* as at the beginning of that first *regulatory year* must be determined by rolling forward the regulatory asset base for that *transmission system*, as set out in the table below, in accordance with this schedule:

Transmission Network Service Provider	Regulatory Asset Base (\$m)
EnergyAustralia	635.6 (as at 1 July 2004)
TransGrid	3,012.76 (as at 1 July 2004)
Powerlink	As per transitional revenue determination in accordance with clause 11.6.12
ElectraNet	823.75 (as at 1 January 2003)
Transend	603.6 (as at 31 December 2003)
SP AusNet	1,835.60 (as at 1 January 2003)
Murraylink Transmission Company	102.96 (as at 1 October 2003)
Directlink	116.68 (as at 1 July 2005)

- (2) The values in the table above are to be adjusted for the difference between:
 - (i) any estimated capital expenditure that is included in those values for any part of a previous *regulatory control period*; and
 - (ii) the actual capital expenditure for that part of the previous *regulatory control period*.

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

(d) Other transmission systems

- (1) This paragraph (d) applies to a *transmission system* not referred to in paragraphs (c) or (e), when *prescribed transmission services* that are provided by means of, or in connection with, that system are to be regulated under a *revenue determination*.
- (2) The value of the regulatory asset base for that *transmission system* as at the beginning of the first *regulatory year* of the first *regulatory control period* for the relevant *Transmission Network Service Provider* is the prudent and efficient value of the assets that are used by the provider to provide those *prescribed transmission services* (but only to the extent that they are used to provide such services), as determined by the *AER*. In determining this value, the *AER* must have regard to the matters referred to in clause S6A.2.2.
- (3) The value of the regulatory asset base for that *transmission system* as at the beginning of the first *regulatory year* of any subsequent *regulatory control period* must be determined by rolling forward the value of the regulatory asset base for that *transmission system* as at the beginning of the first *regulatory year* of the first *regulatory control period* in accordance with this schedule.

(e) Former Market Network Services

- (1) This paragraph (e) applies to a *transmission system* where any services provided by means of, or in connection with, that *transmission system* are determined to be *prescribed transmission services* under clause 2.5.2(c).
- (2) The value of the regulatory asset base for that *transmission system*, as at the beginning of the first *regulatory year* of the first *regulatory control period* for which those services are to be regulated under a *revenue determination*, is the amount that is determined by the *AER* as the lesser of:

- (i) the prudent and efficient value of the assets that are used by the relevant *Transmission Network Service Provider* to provide those prescribed services (but only to the extent they are used to provide such services), such value being determined by the *AER* having regard to the matters referred to in clause S6A.2.2; and
- (ii) the sum of:
 - (A) the net present value of the revenue that it is expected would be earned by the provider from the provision of those services, over the remaining life of the assets that are used by the provider to provide those services, if those services had not been determined to be *prescribed transmission services*; and
 - (B) to the extent that such market benefit is not included in the expected revenue referred to in clause S6A.2.1(e)(2)(ii)(A), the net present value of the market benefit to *Registered Participants* of the services being determined to be *prescribed transmission services* compared to being continued to be treated as services that are not *prescribed transmission services*,

reduced by the net present value of the total operating expenditure over the remaining life of the *transmission system* which the *AER* considers to be reasonably required in order to achieve the *operating expenditure objectives*.

For the purposes of clause S6A.2.1(e)(2)(ii)(B), the net present value of the market benefit is the present value of the market benefit less the present value of costs, as those terms are defined for the purposes of the *regulatory test*.

- (3) The value of the regulatory asset base for that *transmission system* as at the beginning of the first *regulatory year* of any subsequent *regulatory control period* must be determined by rolling forward the value of the regulatory asset base for that *transmission system* as at the beginning of the first *regulatory year* of the first *regulatory control period* in accordance with this schedule.

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

Except as otherwise provided in paragraph (c), (d) or (e), the value of the regulatory asset base for a *transmission system* as at the beginning of the first *regulatory year* of a *regulatory control period* must be calculated by adjusting the value (the '**previous value**') of the regulatory asset base for that *transmission system* as at the beginning of the first *regulatory year* of

the immediately preceding *regulatory control period* (the ‘**previous control period**’) as follows:

- (1) The previous value of the regulatory asset base must be increased by the amount of all capital expenditure incurred during the previous control period, including any capital expenditure determined for that period under clause 6A.8.2(e)(1)(i) in relation to *contingent projects* where the *revenue determination* has been amended by the AER in accordance with clause 6A.8.2(h) (regardless of whether such capital expenditure is above or below the forecast capital expenditure for the period that is adopted for the purposes of the *transmission determination* (if any) for that period).
- (2) The previous value of the regulatory asset base must be increased by the amount of the estimated capital expenditure approved by the AER for any part of the previous control period for which actual capital expenditure is not available, including any capital expenditure in relation to *contingent projects* where the *total revenue cap* has been amended by the AER in accordance with clause 6A.8.2(h).
- (3) The previous value of the regulatory asset base must be adjusted for the difference between:
 - (i) the estimated capital expenditure for any part of a previous *regulatory control period* where that estimated capital expenditure has been included in that value; and
 - (ii) the actual capital expenditure for that part of the previous *regulatory control period*.

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

- (4) The previous value of the regulatory asset base must only be increased by actual or estimated capital expenditure to the extent that all such capital expenditure is properly allocated to the provision of *prescribed transmission services* in accordance with the *Cost Allocation Methodology* for the relevant *Transmission Network Service Provider*.
- (5) The previous value of the regulatory asset base must be reduced by the amount of actual depreciation of the regulatory asset base during the previous control period, calculated in accordance with the rates and methodologies allowed in the *transmission determination* (if any) for that period.

- (6) The previous value of the regulatory asset base must be reduced by the disposal value of any asset where that asset has been disposed of during the previous control period.
- (7) The previous value of the regulatory asset base must be reduced by the value of any asset where the *AER* determines that the value of that asset should be removed in accordance with clause S6A.2.3.
- (8) Without prejudice to the application of any other provision of this paragraph (f), the previous value of the regulatory asset base may be increased by the inclusion of:
 - (i) past capital expenditure that has not been included in that value because that capital expenditure was incurred in connection with the provision of services that are not *prescribed transmission services*, and in these circumstances, such capital expenditure must only be included to the extent the asset in respect of which that capital expenditure was incurred is subsequently used for the provision of *prescribed transmission services*; and
 - (ii) past capital expenditure that has not been included in that value, but only to the extent that such past capital expenditure:
 - (A) relates to an asset that is used for the provision of *prescribed transmission services*;
 - (B) is considered by the *AER* to be reasonably required in order to achieve one or more of the *capital expenditure objectives*;
 - (C) is properly allocated to *prescribed transmission services* in accordance with the principles and policies set out in the *Cost Allocation Methodology* for the relevant *Transmission Network Service Provider*; and
 - (D) has not otherwise been recovered.

S6A.2.2 Prudency and efficiency of capital expenditure

In determining the prudency or efficiency of capital expenditure under clause S6A.2.1(d)(2) or S6A.2.1(e)(2), the *AER* must have regard to:

- (1) the need to provide a reasonable opportunity for the relevant *Transmission Network Service Provider* to recover the efficient costs of complying with all applicable *regulatory obligations or requirements* associated with the provision of *prescribed transmission services*;

- (2) the need to provide effective incentives to the provider to promote economic efficiency in the provision of *prescribed transmission services*;
- (3) whether the relevant project in respect of which capital expenditure was made was evaluated against, and satisfied, the *regulatory test*;
- (4) whether the provider undertook the capital expenditure in a manner consistent with good business practice and so as to practicably achieve the lowest sustainable cost of delivering the *prescribed transmission services* to be provided as a consequence of that capital expenditure;
- (5) the desirability of minimising investment uncertainty for the provider; and
- (6) the need to provide incentives to the provider to avoid undertaking inefficient capital expenditure.

In determining the prudence or efficiency of capital expenditure the *AER* must only take into account information and analysis that the provider could reasonably be expected to have considered or undertaken at the time that it undertook the relevant capital expenditure.

S6A.2.3 Removal of assets from regulatory asset base

- (a) For the purposes of rolling forward the regulatory asset base for a *transmission system* as described in clause 6A.6.1 of the *Rules* and this schedule, the *AER* may only determine to remove, from the regulatory asset base for a *transmission system*, the value of an asset (or group of assets):
 - (1) to the extent that:
 - (i) the asset (or group of assets) is dedicated to one *Transmission Network User* (not being a *Distribution Network Service Provider*) or a small group of *Transmission Network Users*; and
 - (ii) the value of the asset (or group of assets), as included in the value of that regulatory asset base as at the beginning of the first *regulatory year* of the current *regulatory control period*, exceeds the *indexed amount*, as at the time of the *AER*'s determination, of \$10 million;
 - (2) if the *AER* determines that the asset (or group of assets) is no longer contributing to the provision of *prescribed transmission services*; and
 - (3) if the *AER* determines that the relevant *Transmission Network Service Provider* has not adequately sought to manage the risk of that asset (or

that group of assets) no longer contributing to the provision of *prescribed transmission services* by:

- (i) seeking to negotiate the payment of a lower price by the relevant *Transmission Network Users* for those *prescribed transmission services* in accordance with the *Rules*; or
- (ii) in the case of assets committed to be constructed on or after 16 February 2006, seeking to enter into arrangements which provide for a reasonable allocation of the risks of the value of that asset (or that group of assets) no longer contributing to the provision of *prescribed transmission services*.

For the purposes of clause S6A.2.3(a)(3)(ii), an asset is, and is only, to be taken to be committed to be constructed if it satisfies the criteria which a project needs to satisfy to be a "committed project" for the purposes of the *regulatory test*.

- (b) The *AER* may determine a separate amount which is to be included in the *annual building block revenue requirement* for a *Transmission Network Service Provider* for each *regulatory year* of a *regulatory control period* so as to compensate the provider for the risk of the value of assets being removed from the regulatory asset base for the relevant *transmission system*, but only if it is satisfied that:
 - (1) the risk is not otherwise addressed through another provision of the *Rules*;
 - (2) the provider has taken all the steps that a prudent *Transmission Network Service Provider* would take to manage the risk; and
 - (3) the *total revenue cap* for the provider for that *regulatory control period* does not adequately reflect risks that cannot be reasonably managed.

S6A.2.4 Roll forward of regulatory asset base within the same regulatory control period

(a) **Application of this clause**

This clause S6A.2.4 applies to the establishment of the value of the regulatory asset base for a *transmission system* as at the beginning of one *regulatory year* in a *regulatory control period* on the roll forward of the regulatory asset base to that *regulatory year* from the immediately preceding *regulatory year* (if any) in that *regulatory control period*.

(b) **Roll forward model to comply with this clause**

The *roll forward model* referred to in clause 6A.6.1 of the *Rules* must provide for that value to be established in accordance with the requirements of this clause S6A.2.4.

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

The value of the regulatory asset base for a *transmission system* as at the beginning of the second or a subsequent year ('the **later year**') in a *regulatory control period* must be calculated by adjusting the value ('the **previous value**') of the regulatory asset base for that *transmission system* as at the beginning of the immediately preceding *regulatory year* ('the **previous year**') in that *regulatory control period* as follows:

- (1) The previous value of the regulatory asset base must be increased by the amount of forecast capital expenditure accepted or substituted by the *AER* for the previous year in accordance with clause 6A.6.7(c) or clauses 6A.13.2(b)(4) and (5) (as the case may be).
- (2) The previous value of the regulatory asset base must be reduced by the amount of depreciation included in the *annual building block revenue requirement* for the previous year.
- (3) The previous value of the regulatory asset base must be reduced by the disposal value of any asset included in that value where the asset is forecast to be disposed of during the previous year.
- (4) The previous value of the regulatory asset base must be increased by an amount necessary to maintain the real value of the regulatory asset base as at the beginning of the later year by adjusting that value for inflation.

(d) **Allowance for working capital**

If the *AER* determines that it is appropriate to do so, it may include an allowance for working capital in the regulatory asset base for a *transmission system* which is rolled forward in accordance with this clause S6A.2.4.

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

S6A.3.1 Meaning of optimised replacement cost

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

S6A.3.2 CRNP methodology

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

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

S6A.3.3 Modified CRNP methodology

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

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

CHAPTER 7

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7. Metering

7.1 Introduction to the Metering Chapter

7.1.1 Purpose

- (a) The purpose of this Chapter is to set out the rights and obligations of *Registered Participants* and the rights, obligations and qualifications of *Metering Providers* associated with the measurement of electrical *energy*, and the provision of *metering data* and *B2B Data* and the performance of *B2B Communications*.
- (b) This Chapter sets out provisions relating to:
 - (1) *revenue metering installations* and *check metering installations* used for the measurement of *active energy* and, where appropriate, *reactive energy*;
 - (2) collection and provision of *metering data* and *B2B Data*;
 - (3) provision, installation and maintenance of *metering installations* and the provision and servicing of *data collection systems*;
 - (4) accuracy of *metering installations*;
 - (5) inspection, testing and audit requirements;
 - (6) security of, and rights of access to, *metering data* and *B2B Data*;
 - (7) competencies and standards of performance; and
 - (8) the *metering database*, including *metering register* requirements.
- (c) Nothing in this Chapter precludes the application of evolving technologies and processes as they become available in accordance with the *Rules*.

7.1.2 Obligations of Market Participants to establish metering installations

- (a) Before participating in the *market* in respect of a *connection point*, a *Market Participant* must ensure that:
 - (1) the *connection point* has a *metering installation* and that the *metering installation* is registered with NEMMCO;
 - (2) either:

- (i) it has become the *responsible person* under clause 7.2.2 and has advised the *Local Network Service Provider*; or
 - (ii) it has sought an offer and, if accepted, entered into an agreement under clause 7.2.3; and
- (3) prior to registration, a *NMI* has been obtained by the *responsible person* for that *metering installation*.
- (b) *NEMMCO* may refuse to permit a *Market Participant* to participate in the *market* in respect of any *connection point* in relation to which that *Market Participant* is not in compliance with its obligations under paragraph (a).

7.2 Responsibility for Metering Installation

7.2.1 Responsible person

The *responsible person* is the person responsible for the provision, installation and maintenance of a *metering installation* in accordance with:

- (1) this Chapter 7; and
- (2) the *metrology procedure*.

7.2.2 Responsibility of the Market Participant

- (a) A *Market Participant* may elect to be the *responsible person* for a *metering installation* that is a type 1, 2, 3 or 4 *metering installation*.
- (b) A *Market Participant* is the *responsible person* for a type 1, 2, 3 or 4 *metering installation* if:
 - (1) the *Market Participant* elects not to request an offer from, or does not accept the offer of, the *Local Network Service Provider* for the provision of a *metering installation* under clause 7.2.3; or
 - (2) an agreement under clause 7.2.3 is terminated due to a breach by the *Market Participant*.

7.2.3 Responsibility of the Local Network Service Provider

- (a) The *Local Network Service Provider* is the *responsible person* for:
 - (1) a type 1, 2, 3 or 4 *metering installation* connected to, or proposed to be connected to, the *Local Network Service Provider's network* where the *Market Participant* has accepted the *Local Network Service Provider's* offer in accordance with paragraphs (b) and (c); and

- (2) a type 5, 6 or 7 *metering installation* connected to, or proposed to be connected to, the *Local Network Service Provider's network* in accordance with paragraphs (d) to (i).

Types 1 - 4 metering installations

- (b) A *Market Participant* may request in writing an offer from the *Local Network Service Provider* to act as the *responsible person* where a type 1, 2, 3 or 4 *metering installation* is, or is to be, installed.
- (c) If the *Local Network Service Provider* receives a request under paragraph (b), the *Local Network Service Provider* must:
 - (1) offer to act as the *responsible person* in respect of that *metering installation*; and
 - (2) provide the *Market Participant* with the terms and conditions on which the offer is made,

no later than 15 *business days* after the *Local Network Service Provider* receives the written request from the *Market Participant*.

Types 5 -7 metering installations

- (d) The *Local Network Service Provider* may provide a *Market Participant* with a standard set of terms and conditions on which it will agree to act as the *responsible person* for a type 5, 6 or 7 *metering installation*.
- (e) Where the *Local Network Service Provider* has not provided the *Market Participant* with the standard set of terms and conditions referred to in paragraph (d), the *Market Participant* must request an offer from the *Local Network Service Provider* to act as the *responsible person* where a type 5, 6 or 7 *metering installation* is, or is to be, installed.
- (f) The *Local Network Service Provider* must, within 15 *business days* of receipt of the request under paragraph (e), make an offer to a *Market Participant* setting out the terms and conditions on which it will agree to act as the *responsible person*.
- (g) The terms and conditions of an offer made under paragraphs (d) or (f) must:
 - (1) be fair and reasonable; and
 - (2) not have the effect of unreasonably discriminating between *Market Participants*, or between the customers of a *Market Participant*.
- (h) In relation to an offer made under paragraphs (d) or (f), a *Market Participant*:

- (1) must accept the offer; or
- (2) may dispute the offer in accordance with rule 8.2.
- (i) If a *Market Participant* accepts the offer in accordance with paragraph (h), the *Local Network Service Provider*:
 - (1) becomes the *responsible person*; and
 - (2) must provide *NEMMCO* with the *NMI* for the *metering installation* within 10 *business days* of entry into a *connection agreement* under clause 5.3.7 with that *Market Participant*.

7.2.4 Joint metering installations

- (a) Where more than one *Market Participant* wishes to use a *metering installation* at a particular *connection point* for the purpose of satisfying its obligations, then each of them may separately enter into the agreements referred to in clause 7.2.3 or some or all of them may jointly enter into those agreements for the use of a shared *metering installation*.
- (b) Where more than one *Market Participant* uses a *metering installation* which is provided, installed and maintained by a person other than the *Local Network Service Provider*, they must agree and notify *NEMMCO* as to which of them is the *responsible person* for that *metering installation*.
- (c) In the absence of such agreement, *NEMMCO* may nominate one of the *Market Participants* to be the *responsible person* for that *metering installation*.

7.2.5 Role of the responsible person

Engagement of a Metering Provider

- (a) A *responsible person* must for each *metering installation* for which it is responsible:
 - (1) engage a *Metering Provider* for the provision, installation and maintenance of that installation unless the *responsible person* is the *Metering Provider*; or
 - (2) subject to the *metrology procedure*, allow another person to engage a *Metering Provider* to install that installation.
- (b) The *responsible person* must:
 - (1) enter into an agreement with a *Metering Provider*:

- (i) for the provision, installation and maintenance of the *metering installation* by the *Metering Provider*, where the *responsible person* has engaged the *Metering Provider* under paragraph (a)(1); or
 - (ii) for the maintenance of the *metering installation*, where another person has engaged the *Metering Provider* under paragraph (a)(2); and
- (2) provide *NEMMCO* with the relevant details of the *metering installation* as specified in schedule 7.5 within 10 *business days* of obtaining a *NMI* in accordance with 7.3.1(e).
- (c) The *responsible person* may elect to terminate an agreement entered into under paragraph (b)(1)(i) after the *metering installation* is installed and if such an agreement is terminated, the *responsible person* must enter into a new agreement with another *Metering Provider* for the maintenance of the *metering installation*.

Metering installations

- (d) The *responsible person* must, for each of its *metering installations*:
 - (1) ensure that the installation is provided, installed and maintained in accordance with the *metrology procedure*;
 - (2) ensure that the components, accuracy and testing of the installation complies with the requirements of the *Rules* and the *metrology procedure*;
 - (3) provide and maintain the security control of the installation in accordance with clause 7.8.2;
 - (4) ensure that a *communications link* is installed and maintained to the *telecommunications network* and includes, where required for the connection to that *telecommunications network*, a modem and isolation equipment approved under telecommunications regulations;
 - (5) provide access to a *telecommunications network* to facilitate the requirement of rules 7.7 and 7.12(aa);
 - (6) provide to *NEMMCO* (when requested), the information specified in schedule 7.5 for new or modified installations;
 - (7) not replace a device that is capable of producing *interval energy data* and is already installed in a *metering installation*, with a device that only produces *accumulated energy data* unless the *metrology procedure* permits the replacement to take place;

- (8) ensure for any type 5 *metering installation* where the annual flow of electricity through the *connection point* is greater than the *type 5 accumulation boundary*, that the *metering data* is extracted or emanates from the *data logger* as *interval energy data*; and
 - (9) allow the alteration of the installation for which that person is responsible with another installation in accordance with clause 7.3.4.
- (e) The *Market Settlements and Transfer Solution Procedures* may specify that an incoming *responsible person* is responsible for the *metering installation*:
 - (1) on the day that a *market load* transfers from one *financially responsible Market Participant* to another *financially responsible Market Participant* for the period within that day; or
 - (2) on any other day.
- (f) NEMMCO must establish guidelines, in accordance with the *Rules consultation procedures* in relation to the role of the *responsible person* consistent with this Chapter 7.

7.2.6 [Deleted]

7.2.7 Registration of metering installations

- (a) NEMMCO must establish and *publish* a registration process to facilitate the application of this Chapter 7 to *Market Participants* and *Network Service Providers* in respect of:
 - (1) new *metering installations*;
 - (2) modifications to existing *metering installations*; and
 - (3) decommissioning of *metering installations*,including the provision of information on matters such as application process, timing, relevant parties, fees and *metering installation* details.

7.2.8 Market Settlement and Transfer Solution Procedures

- (a) NEMMCO, in consultation with *Registered Participants* in accordance with the *Rules consultation procedures*, must develop and *publish Market Settlement and Transfer Solution Procedures*.
- (b) NEMMCO may from time to time amend the *Market Settlement and Transfer Solution Procedures* in consultation with *Registered Participants* in accordance with the *Rules consultation procedures*. NEMMCO must

publish any such amendment to the Market Settlement and Transfer Solution Procedures.

- (c) *The Market Settlement and Transfer Solution Procedures may include roles and responsibilities for Metering Providers.*
- (d) *All Registered Participants and Metering Providers must comply with the Market Settlement and Transfer Solution Procedures.*
- (e) *If a Registered Participant or Metering Provider breaches the requirements of the Market Settlement and Transfer Solution Procedures, NEMMCO may send to that Registered Participant or Metering Provider a notice in writing setting out the nature of the breach.*
- (f) *If the Registered Participant or Metering Provider remains in breach for more than 5 business days after receipt of the notice from NEMMCO, NEMMCO must advise:*
 - (1) *the authority responsible for administering jurisdictional electricity legislation in the participating jurisdiction in which the connection point to which the breach relates is located; and*
 - (2) *the AER.*

7.2A.1 B2B e-Hub

NEMMCO must provide and operate a B2B e-Hub. As required by B2B Procedures and subject to clause 7.2A.4(k), Local Retailers, Market Customers and Distribution Network Service Providers must use the B2B e-Hub for B2B Communications.

7.2A.2 Information Exchange Committee

- (a) *NEMMCO must establish the Information Exchange Committee in accordance with the Information Exchange Committee Election Procedures.*
- (b) *The Information Exchange Committee must only be constituted by:*
 - (1) *three Distribution Network Service Provider Members;*
 - (2) *three Local Retailer/Market Customer Members; and*
 - (3) *two Independent Members.*

Local Retailers and Market Customers together and Distribution Network Service Providers must, in relation to categories of Members in relation to which they are entitled to vote under the Information Exchange Committee Election Procedures, use their reasonable endeavours to ensure that the Information Exchange Committee is established in accordance with the Information Exchange Committee Election Procedures. Each Member must serve on the Information Exchange Committee for the term specified in the Information Exchange Committee Election Procedures and must only be

removed or replaced in accordance with the *Information Exchange Committee Election Procedures*.

- (c) *Local Retailers, Market Customers and Distribution Network Service Providers* must ensure that the *Information Exchange Committee Election Procedures* include provisions in respect of *Member* qualifications, procedures for voting for *Members*, the term of a *Member*, determination and publication of results of elections and the removal and resignation of a *Member*.
- (d) The first *Information Exchange Committee Election Procedures* must be published by the time this clause 7.2A.2 comes into operation. The *Information Exchange Committee Election Procedures* may only be amended in accordance with the procedure set out in the *Information Exchange Committee Election Procedures* and with the support of:
 - (1) not less than 75% of all *Registered Participants* registered by NEMMCO as *Distribution Network Service Providers* under clause 2.5.1; and
 - (2) not less than 75% of that class of *Registered Participants* comprising:
 - (A) *Registered Participants* who are included on the list of *Local Retailers* published by NEMMCO; and
 - (B) *Market Customers* who are not included on the list of *Local Retailers* published by NEMMCO and who are not a *related body corporate* of a *Local Retailer*.

Neither a *Registered Participant* nor NEMMCO is obliged to comply with an amendment to the *Information Exchange Committee Election Procedures* unless that amendment is made in accordance with this clause. NEMMCO must publish the current version of the *Information Exchange Committee Election Procedures*.

- (e) A *Registered Participant* must ensure that a person it nominates as a *Member* for a category satisfies the requirements for that particular category of *Member* as set out in the *Information Exchange Committee Election Procedures*.
- (f) The first *Information Exchange Committee Operating Manual* must be published by the time this clause 7.2A.2 comes into operation. The *Information Exchange Committee Operating Manual* may only be amended in accordance with the procedure set out in the *Information Exchange Committee Election Procedures* and with the support of:
 - (1) not less than 75% of all *Registered Participants* registered by NEMMCO as *Distribution Network Service Providers* under clause 2.5.1; and
 - (2) not less than 75% of that class of *Registered Participants* comprising:

- (A) *Registered Participants* who are included on the list of *Local Retailers* published by NEMMCO; and
- (B) *Market Customers* who are not included on the list of *Local Retailers* published by NEMMCO and who are not a *related body corporate* of a *Local Retailer*.

Neither a *Registered Participant* nor NEMMCO is obliged to comply with an amendment to the *Information Exchange Committee Operating Manual* unless that amendment is made in accordance with this clause. NEMMCO must *publish* the current version of the *Information Exchange Committee Operating Manual*.

- (g) The functions and powers of the *Information Exchange Committee* include:
 - (1) developing, consulting on and making an *Information Exchange Committee Recommendation*;
 - (2) managing the ongoing development of the *B2B Procedures* and any *changes* to them;
 - (3) establishing the *Information Exchange Committee Working Groups*;
 - (4) developing, consulting on and approving the *Information Exchange Committee Works Programme*;
 - (5) reviewing and considering work completed by the *Information Exchange Committee Working Groups*;
 - (6) developing proposed amendments to the *Information Exchange Committee Election Procedures*; and
 - (7) developing proposed amendments to the *Information Exchange Committee Operating Manual*.
- (h) The *Information Exchange Committee* must provide to NEMMCO the current version of the *B2B Procedures* and the *Information Exchange Committee Works Programme*.
- (i) NEMMCO must *publish* the *B2B Procedures* and the *Information Exchange Committee Works Programme* provided to it by the *Information Exchange Committee*.
- (j) The *Information Exchange Committee*, NEMMCO, *Local Retailers*, *Market Customers* and *Distribution Network Service Providers* must comply with the *Information Exchange Committee Election Procedures* and the *Information Exchange Committee Operating Manual*.
- (k) The *Information Exchange Committee* must meet at least once every three months.

- (l) The quorum for a meeting of the *Information Exchange Committee* is five *Members* comprising two *Distribution Network Service Provider Members*, two *Local Retailer/Market Customer Members* and one *Independent Member*.
- (m) A decision of the *Information Exchange Committee* is not valid and enforceable unless it is made as follows:
 - (1) an *Information Exchange Committee Recommendation* requires the support of six or more *Members*;
 - (2) any decision that a proposal under clause 7.2A.3(a) should not be considered further after initial consideration under clause 7.2A.3(b), and any decision to not recommend *B2B Procedures* or a *change* to the *B2B Procedures* for approval by *NEMMCO* requires the support of six or more *Members*;
 - (3) any decision to approve the *Information Exchange Committee Works Programme* requires the support of six or more *Members*; and
 - (4) any other decision by the *Information Exchange Committee* requires the support of five or more *Members*.
- (n) Each *Member* in performing his or her duties or in exercising any right, power or discretion must have regard to the *B2B Objective* and the *B2B Principles* and must:
 - (1) at all times act honestly;
 - (2) exercise the degree of care and diligence that a reasonable person in a like position would exercise;
 - (3) not make improper use of information acquired by virtue of his or her position to gain, directly or indirectly, an advantage for himself or herself, or the *Registered Participants* by which he or she is employed and/or which nominated him or her to be a *Member*; and
 - (4) not make improper use of his or her position to gain, directly or indirectly, an advantage for himself or herself or the *Registered Participants* by which he or she is employed and/or which nominated him or her to be a *Member*.
- (o) Subject to clause 7.2A.2(n), a *Distribution Network Service Provider Member* may take into account the interests of *Distribution Network Service Providers* in performing his or her duties or in exercising any right, power or discretion.
- (p) Subject to clause 7.2A.2(n), a *Local Retailer/Market Customer Member* may take into account the interests of *Local Retailers* and *Market Customers*

in performing his or her duties or in exercising any right, power or discretion.

- (q) The *Information Exchange Committee* must prepare the *Information Exchange Committee Annual Report* for the period ended 31 December in the first calendar year following the establishment of the *Information Exchange Committee* and the year ended 31 December in each year thereafter. The *Information Exchange Committee* must provide the *Information Exchange Committee Annual Report* to NEMMCO by the following 31 March and NEMMCO must publish that *Information Exchange Committee Annual Report*.
- (r) The *Information Exchange Committee Annual Report* must contain the information required by the *Information Exchange Committee Operating Manual*.
- (s) By 28 February each year the *Information Exchange Committee* must prepare a draft budget for the following *financial year* in a form which is consistent with the budget procedures of NEMMCO. Following discussion with NEMMCO the *Information Exchange Committee* must prepare a budget by 31 March and provide that budget to NEMMCO. When NEMMCO publishes its budget pursuant to clause 2.11.3, NEMMCO must advise the *Information Exchange Committee* of the final budget for the *Information Exchange Committee* for that *financial year*.

7.2A.3 Method of making and changing B2B Procedures

- (a) NEMMCO, a *Local Retailer*, a *Market Customer* or a *Distribution Network Service Provider* may propose *B2B Procedures*, or a *change* to the *B2B Procedures*, to the *Information Exchange Committee*. The proposal must be submitted in writing to the *Information Exchange Committee* and must provide details of the proposal and supporting information, including reasons for any *change* or *B2B Procedure*.
- (b) Within 25 *business days* of receipt by the *Information Exchange Committee* of a proposal under clause 7.2A.3(a), the *Information Exchange Committee* must meet to determine whether on a *prima facie* basis making new *B2B Procedures* and/or *changing* the *B2B Procedures* is warranted having regard to the *B2B Objective* and the *B2B Principles*.
- (c) If, after its consideration under clause 7.2A.3(b), the *Information Exchange Committee* decides that the proposal made under clause 7.2A.3(a) should not be considered further, the *Information Exchange Committee* must within five *business days* provide written reasons for that decision to whichever of NEMMCO, the *Local Retailer*, *Market Customer* or *Distribution Network Service Provider* who made the proposal.

- (d) If, after its consideration under clause 7.2A.3(b), the *Information Exchange Committee* decides that the proposal made under clause 7.2A.3(a) should be considered further, the *Information Exchange Committee* must develop the proposal into a *B2B Proposal* (which may differ from the proposal originally made) and an accompanying *B2B Procedures Change Pack* for consultation. The *Information Exchange Committee* must seek NEMMCO's advice on whether a conflict with the *Market Settlement and Transfer Solution Procedures* arises from the *B2B Proposal* and include any such advice in the *B2B Procedures Change Pack*.
- (e) The *Information Exchange Committee* must comply with the *Rules consultation procedures* in relation to the *B2B Proposal*. For the purposes of rule 8.9(b), the nominated persons to whom notice must be given are *Local Retailers*, *Market Customers*, *Distribution Network Service Providers* and NEMMCO. For the purposes of the notice, the particulars of the matters under consultation must include a copy of the *B2B Procedures Change Pack*.
- (f) NEMMCO must *publish* the notice of consultation within 3 *business days* of its receipt and must notify all *Local Retailers*, *Market Customers* and *Distribution Network Service Providers* of the consultation.
- (g) In addition to the matters which rule 8.9(g) requires be included in the draft report, the draft report must contain details of the *Information Exchange Committee's* consideration of the *B2B Objective* and each of the *B2B Principles* and how the *Information Exchange Committee* has considered each submission made having regard to the *B2B Objective* and the *B2B Principles*.
- (h) In addition to the matters which rule 8.9(k) requires be included in the final report, the final report must contain details of the *Information Exchange Committee's* consideration of the *B2B Objective* and each of the *B2B Principles* and how the *Information Exchange Committee* has considered each submission having regard to the *B2B Objective* and the *B2B Principles*.
- (i) The *Information Exchange Committee* can conclude not to recommend the proposed *B2B Procedures* be made or not to recommend a *change* to the *B2B Procedures*. Alternatively, the *Information Exchange Committee* may make an *Information Exchange Committee Recommendation* and in doing so may recommend a different *B2B Procedure* or *change* to the *B2B Procedures* from that originally proposed under clause 7.2A.3(a). A conclusion not to recommend the proposed *B2B Procedures* be made or not to recommend a *change* to the *B2B Procedures*, or the making of an *Information Exchange Committee Recommendation*, must be included in the final report required under rule 8.9(k).
- (j) In coming to a conclusion not to recommend the proposed *B2B Procedures* or not to recommend a *change* to the *B2B Procedures*, or in making an

Information Exchange Committee Recommendation, the *Information Exchange Committee* must seek to achieve the *B2B Objective* and, in seeking to achieve the *B2B Objective*, must have regard to the *B2B Principles*. To the extent of any conflict between the *B2B Principles*, the *Information Exchange Committee* may determine the manner in which those principles can best be reconciled or which of them should prevail.

- (k) If the *Information Exchange Committee* recommends not to make the proposed *B2B Procedures* or not to *change* the *B2B Procedures*, NEMMCO must take no further action in respect of the proposal. If the *Information Exchange Committee* makes an *Information Exchange Committee Recommendation*, NEMMCO must consider the *Information Exchange Committee Recommendation* and must approve that *Information Exchange Committee Recommendation*, unless it concludes that:
 - (1) the *Information Exchange Committee* has failed to have regard to the *B2B Objective* and/or the *B2B Principles*;
 - (2) the *Information Exchange Committee Recommendation* would conflict with the *Market Settlement and Transfer Solution Procedures*; or
 - (3) the *Information Exchange Committee* has not followed the *Rules consultation procedures* (as supplemented by this clause 7.2A.3).
- (l) In considering an *Information Exchange Committee Recommendation*, NEMMCO must not consider:
 - (1) the manner in which the *Information Exchange Committee* considered the *B2B Objective* and the *B2B Principles* or the weight given by the *Information Exchange Committee* to the different *B2B Principles* or the balancing between them; or
 - (2) the merits of the *Information Exchange Committee Recommendation*.
- (m) NEMMCO must not amend the *Information Exchange Committee Recommendation* and must not conduct any further consultation on the *Information Exchange Committee Recommendation* prior to making its *B2B Decision*.
- (n) NEMMCO must *publish* and make available on its website its *B2B Decision*, with reasons, within 10 *business days* of receiving an *Information Exchange Committee Recommendation* from the *Information Exchange Committee*.
- (o) If NEMMCO decides not to approve an *Information Exchange Committee Recommendation*, the reasons for the *B2B Decision* which are to be *published* and made available in accordance with clause 7.2A.3(n) must include an explanation of the following, where applicable:

- (1) to which of the *B2B Objective* and/or the *B2B Principles NEMMCO* considers the *Information Exchange Committee* failed to have regard;
- (2) how the *Information Exchange Committee Recommendation* would give rise to a conflict with the *Market Settlement and Transfer Solution Procedures*; or
- (3) how the *Information Exchange Committee* did not follow the *Rules consultation procedures* (as supplemented by this clause 7.2A.3).

7.2A.4 Content of the B2B Procedures

- (a) The *B2B Procedures* may provide for *B2B Communications*.
- (b) For each *B2B Communication*, the *B2B Procedures* must contain:
 - (1) the required *B2B Data* inputs and *B2B Data* outputs;
 - (2) the required business process flows and related timing requirements;
 - (3) the required content and format;
 - (4) the required delivery method; and
 - (5) the back-up delivery method to be used where the required delivery method cannot be used.
- (c) The *B2B Procedures* may include obligations in relation to the information to be maintained and provided to support *B2B Communications*.
- (d) For each *B2B Communication* the *B2B Procedures* may also include:
 - (1) details for testing and certification;
 - (2) provisions relating to contingency arrangements;
 - (3) examples of how a *B2B Communication* may operate in practice; and
 - (4) the method for dealing with a dispute (which may include provisions deferring the use of the dispute resolution procedures in the *Rules* and access to the courts).
- (e) The *B2B Procedures* or a *change* to the *B2B Procedures* must also include a date for the commencement of the *B2B Procedures* or the *change*. That date must be not less than 10 *business days* after the related *B2B Decision* is *published*. The *Information Exchange Committee* may extend that date following consultation with *NEMMCO* and affected *Registered Participants*. If the date is extended by the *Information Exchange*

Committee, the *Information Exchange Committee* must provide *NEMMCO* with that date and *NEMMCO* must *publish* that date.

- (f) A *change* to the *B2B Procedures* may also include provisions relating to a date for the end of a process related to a *B2B Communication*. That date may be after the date of commencement of the *change* and may be left to the discretion of the *Information Exchange Committee*. If the date is set by the *Information Exchange Committee*, the *Information Exchange Committee* must provide *NEMMCO* with that date and *NEMMCO* must *publish* that date.
- (g) The *B2B Procedures* may be constituted by one or more separate documents.
- (h) The *B2B Procedures* may include roles and responsibilities for *Metering Providers*.
- (i) Subject to the *Information Exchange Committee* following the requirements placed upon it in the *Rules* in relation to the *B2B Procedures*, *Local Retailers*, *Market Customers*, *Distribution Network Service Providers*, *NEMMCO* and *Metering Providers* must comply with the *B2B Procedures*.
- (k) *Local Retailers*, *Market Customers* and *Distribution Network Service Providers* may, on such terms and conditions as agreed between them, communicate a *B2B Communication* on a basis other than as set out in the *B2B Procedures*, in which case the parties to the agreement need not comply with the *B2B Procedures* to the extent that the terms and conditions agreed between them are inconsistent with the *B2B Procedures*.
- (l) *B2B Data* is *confidential information* and may only be disclosed as permitted by the *Rules*.
- (m) If a *change* to the *B2B Procedures* is of a minor or procedural nature or is necessary to correct a manifest error in the *B2B Procedures*, the *Information Exchange Committee* may recommend the *change* to *NEMMCO* and need not consult on the *change* in accordance with the *Rules consultation procedures*. Clauses 7.2A.3(i) to (o) (inclusive) and clauses 7.2A.4(e) and (f) apply to such a *change* (with any necessary modifications). In addition to *publishing* its *B2B Decision* in relation to such a *change*, *NEMMCO* must notify all *Local Retailers*, *Market Customers* and *Distribution Network Service Providers* of the *change*.

7.2A.5 Transition of B2B Communications from the Market Settlement and Transfer Solution Procedures

- (a) At 9.00am (EST), on the day immediately following the day on which the *Information Exchange Committee* is established pursuant to clause 7.2A.2(a) ("**transition day**");

- (1) those *Market Settlement and Transfer Solution Procedures* entitled “MSATS Procedures: B2B Procedures” are deemed to have been the subject of an *Information Exchange Committee Recommendation* under clause 7.2A.3(i) and to have been approved by NEMMCO in accordance with clause 7.2A.3(k), and are deemed to be *B2B Procedures*. Such a deemed *Information Exchange Committee Recommendation* and deemed *B2B Decision* are not within the scope of clauses 8.2.5(d1) to (d4) (see clause 8.2A.2(i)); and
 - (2) any proposed new *Market Settlement and Transfer Solution Procedures* entitled “MSATS Procedures: B2B Procedures”, or a change to any *Market Settlement and Transfer Solution Procedures* entitled “MSATS Procedures: B2B Procedures”, which is the subject of consultation by NEMMCO in accordance with the *Rules consultation procedures* on the transition day is deemed to be a valid *B2B Proposal* and, to the extent the *Rules consultation procedures* have been complied with by NEMMCO, is deemed to comply with the consultation requirements detailed in clause 7.2A.3(e).
- (b) All things done in relation to a *B2B Communication* the subject of those *Market Settlement and Transfer Solution Procedures* entitled “MSATS Procedures: B2B Procedures” immediately before the transition day must under the *B2B Procedures* continue to have the same status, operation and effect as they would have under the *Market Settlement and Transfer Solution Procedures* entitled “MSATS Procedures: B2B Procedures”. In particular, this clause 7.2A.5 does not disturb the status, operation or effect of any *B2B Communication* or any proceeding, liability, rights or other matter or thing made, done, effected, obtained, given, accrued, incurred, acquired, existing or continuing before the transition day.

7.2A.6 Cost Recovery

- (a) The costs of the development of the *B2B Procedures*, the costs of the establishment and operation of the *Information Exchange Committee* (including the engagement costs of specialist advisers, and the remuneration and payment of the reasonable expenses of the *Independent Members*), all of which must be set out in the budget prepared by the *Information Exchange Committee* pursuant to clause 7.2A.2(s) and the *Information Exchange Committee Annual Report*, and the operational costs associated with any service provided by NEMMCO to facilitate *B2B Communications* (including providing and operating a *B2B e-Hub*) must be paid by NEMMCO in the first instance and recouped by NEMMCO as *Participant fees*.
- (b) Subject to clause 7.2A.6(a), the cost of any *Member* (other than an *Independent Member*) and involvement of individuals in the *Information Exchange Committee Working Groups* is not to be borne by NEMMCO.

- (c) The cost to a *Local Retailer*, *Market Customer* and *Distribution Network Service Provider* of implementing and maintaining the necessary systems and processes to ensure compliance with *B2B Procedures* must be met by that *Local Retailer*, *Market Customer* or *Distribution Network Service Provider*.

7.3 Metering Installation Arrangements

7.3.1A Metering Installation Requirements

- (a) Each *connection point* must have a *metering installation*.
- (b) *Energy data* is to be based on units of watthour (*active energy*) and where required varhour (*reactive energy*).

7.3.1 Metering installation components

- (a) A *metering installation* must:
 - (1) either contain a device that has a visible or an equivalently accessible display of the cumulative total *energy* measured by that *metering installation* (at a minimum) or, be classified as an *unmetered connection point* in accordance with schedule 7.2 and in which case such a device is not required;
 - (2) be accurate in accordance with clause 7.3.4;
 - (3) have *electronic data transfer* facilities from the *metering installation* to the *metering database* in accordance with clause 7.3.5;
 - (4) contain a *communications link* in accordance with clause 7.2.5(d)(4);
 - (5) be secure in accordance with rule 7.8;
 - (6) have electronic data recording facilities such that *active energy* can be collated in accordance with clause 7.9.3;

[**Note:** For the avoidance of doubt, clause 7.3.1(a)(6) relates to a metering installation and not a meter.]

- (7) be capable of separately registering and recording flows in each direction where bi-directional *active energy* flows occur;
- (8) if a device is used in accordance with subparagraph (1), have a *measurement element* for *active energy* and if required in accordance with schedule 7.2 a *measurement element* for *reactive energy*, both of which have an internal or external *data logger*;

- (9) be capable of delivering data from the site of the *metering installation* to the *metering database*;
 - (10) include facilities on site for storing the *interval energy data* for a period of at least 35 days if the *communications link* has a capability for actual *metering data* as required by clause 7.11.1(b) from the site of the *metering point* and the *metering installation* includes the *measurement element(s)* and the *data logger* at the same site;
 - (11) include facilities on site for storing the *interval energy data* for a period of at least 200 days or such other period as specified in the *metrology procedure* if the *communications link* does not have a capability for actual *metering data* as required by clauses 7.11.1(c) or (d) and the *metering installation* includes the *measurement element(s)* and the *data logger* at the same site;
 - (12) include *metering installation* database facilities for storing *energy data* for a period of at least 35 days where the *metering installation* provides for a remote *data logger*;
 - (13) include *metering installation* database facilities for storing *energy data* for a period of at least 35 days where *metering data* is determined for an *unmetered connection point*; and
 - (14) if a type 6 *metering installation*, include facilities capable of continuously recording by a visible display, the total accumulated *energy* supplied through it over a period of at least 12 months, in accordance with subparagraph (1).
- (b) A *metering installation* may consist of combinations of:
- (1) a *current transformer*;
 - (2) a *voltage transformer*;
 - (3) secure and protected wiring from the *current transformer* and the *voltage transformer* to the *meter*;
 - (4) an appropriately constructed panel on which the *meter* and the *data logger* are mounted;
 - (5) a *meter* and a *data logger* which may be either internal or external to the *meter* where a *data logger* may be located at a site remote from the site of a *meter* and a *data logger* may consist of a *metering installation* database that is under the control of the *Metering Provider*;

- (6) communication interface equipment such as a modem, isolation requirements, telephone service, radio transmitter and data link equipment;
 - (7) one or more *communications links* which facilitate the collection of *energy data* from a *data logger* or a *measurement element* so as to enable a remote interface to the *telecommunications network* to be established;
 - (8) data processing facilities, including algorithms for the preparation of a load pattern(s), for the conversion of *accumulated energy data* or *estimated energy data* into *metering data*;
 - (9) techniques for the estimation of *market loads* in accordance with schedule 7.2;
 - (10) auxiliary electricity supply to the *meter*;
 - (11) an alarm circuit and monitoring facility;
 - (12) a facility to keep the *metering installation* secure from interference;
 - (13) test links and fusing;
 - (14) summation equipment; or
 - (15) several *metering points* to derive the *metering data* for a *connection point*.
- (c) Either a *Local Network Service Provider* or a *Market Participant* may, with the agreement of the *responsible person* (which cannot be unreasonably withheld), arrange for a *metering installation* to contain features in addition to, or which enhance, the features specified in paragraph (b).
- (d) The *responsible person* for a *metering installation* must apply to the *Local Network Service Provider* for a National Metering Identifier ('*NMI*').
- (e) The *Local Network Service Provider* must issue for each *metering installation* a unique *NMI*.
- (f) The *responsible person* must register the *NMI* with *NEMMCO* in accordance with procedures from time to time specified by *NEMMCO*.
- (g) Where a *metering installation* is used for purposes in addition to the provision of *metering data* to *NEMMCO* then:
- (1) that use must not cause an infringement of the requirements of the *Rules*;

- (2) the *responsible person* must co-ordinate with the persons who use the *metering installation* for such other purposes; and
 - (3) the *metering installation* must comply with the requirements for operational *metering* as detailed in Chapter 4 of the *Rules*.
- (h) A *Metering Provider* is entitled to physical access to the site of a *metering installation* in accordance with clause 5.3.7(g) and schedule 5.6.

Requirements for metering installations for non-market generating units

- (i) In addition to the requirements in paragraphs (a) to (g), a *metering installation* for a *non-market generating unit* must:
- (1) be capable of separately registering and recording flows in each direction where bi-directional *active energy* flows occur;
 - (2) where payments for the purchase of electricity *generated* by that unit are based on different rates according to the time of the *day*, be capable of recording *interval energy data*;
 - (3) where a *current transformer*, a *voltage transformer* or a *measurement element* for *reactive energy*, is installed, meet the requirements in schedule 7.2 for the type of *metering installation* appropriate to that *connection point*;
 - (4) for units with a *nameplate rating* greater than 1 MW, meet:
 - (i) the accuracy requirements specified in schedule 7.2; and
 - (ii) the measurement requirements in paragraph (a)(8);
 - (5) in relation to new accumulation *metering equipment* for units with a *nameplate rating* equal to or less than 1 MW, meet the minimum standards for *active energy* class 1.0 watt-hour or 2.0 watt-hour *meters* in accordance with clause S7.2.6.1(f);
 - (6) for units with a *nameplate rating* of equal to or less than 1 MW that are capable of recording *interval energy*, meet the minimum standards of accuracy for the *active energy meter* in accordance with schedule 7.2 for a type 3 or 4 *metering installation* which is based on projected sent out annual *energy volumes*; and
 - (7) if reasonably required by the *Distribution Network Service Provider* (where such a request must be in writing and with reasons), after taking into account the size of the *generating unit*, its proposed role and its location in the *network*, have the *active energy* and *reactive energy* measured where the unit has a *nameplate rating* of less than 1 MW.

7.3.2 Connection and metering point

- (a) The *responsible person* must ensure that:
 - (1) the *revenue metering point* is located as close as practicable to the *connection point*; and
 - (2) any *instrument transformers* required for a *check metering installation* are located in a position which achieves a mathematical correlation with the *revenue metering data*.
- (b) The *Market Participant*, the *Local Network Service Provider* and *NEMMCO* must use their best endeavours to agree to adjust the *metering data* which is recorded in the *metering database* to allow for physical losses between the *metering point* and the relevant *connection point* where a *meter* is used to measure the flow of electricity in a power conductor.
- (c) Where a *Market Network Service Provider* installs a *two-terminal link* between two *connection points*, *NEMMCO* in its absolute discretion may require a *metering installation* to be installed in the facility at each end of the *two-terminal link*. Each of these *metering installations* must be separately assessed to determine the requirement for *check metering* in accordance with schedule 7.2.

7.3.3 Use of metering data

- (a) *Revenue metering data* must be used by *NEMMCO* as the primary source of *metering data* for billing purposes.
- (b) *Check metering data*, where available, must be used by *NEMMCO* for:
 - (1) validation;
 - (2) substitution; and
 - (3) account estimation,of *revenue metering data* as required by clause 7.9.4.

7.3.4 Metering installation types and accuracy

- (a) The type of *metering installation* and the accuracy requirements for a *metering installation* which must be installed in respect of each *connection point* are to be determined in accordance with schedule 7.2.
- (b) A *check metering installation* is not required to have the degree of accuracy required of a *revenue metering installation* but must have a mathematical correlation with the *revenue metering installation*, and be consistent with the requirements of schedule 7.2.

- (c) *Metering installations* in use at *market commencement* must conform with the provisions of Chapter 9.
- (d) The accuracy of a type 6 *metering installation* must be in accordance with regulations issued under the *National Measurement Act* or, in the absence of any such regulations, with the *metrology procedure*.
- (e) Subject to the *metrology procedure* and this clause 7.3.4, a *financially responsible Market Participant* or a *Local Network Service Provider* may make arrangements with the *responsible person* to alter any type 5, 6 or 7 *metering installation*.
- (f) A *Local Network Service Provider* may alter a *metering installation* in accordance with paragraph (e) to make it capable of *remote acquisition* where the *Local Network Service Provider* decides that operational difficulties reasonably require the *metering installation* to be capable of *remote acquisition*.
- (g) An alteration of a *metering installation* by a *Local Network Service Provider* in accordance with paragraph (f), does not alter the classification of that installation to a type 4 *metering installation*.
- (h) For the purposes of paragraph (f), operational difficulties may include locational difficulties where the *metering installation* is:
 - (1) at a site where access is difficult; or
 - (2) on a remote rural property.
- (i) A type 5, 6 or 7 *metering installation* must not be altered by the *financially responsible Market Participant* under paragraph (e) until the transfer of the relevant *market load* has been effected by NEMMCO in accordance with the *Market Settlement and Transfer Solution Procedures*.
- (j) NEMMCO must develop and *publish* in accordance with the *Rules consultation procedures*, guidelines for the *financially responsible Market Participant* to consider in managing the alteration of a metering installation where one or more devices are to be replaced (**'meter churn guidelines'**).
- (k) NEMMCO may from time to time and in accordance with the *Rules consultation procedures*, amend or replace the meter churn guidelines referred to in paragraph (j).
- (l) NEMMCO must develop and *publish* the first meter churn guidelines under paragraph (j) by 1 January 2008 and there must be such guidelines available at all times after that date.
- (m) A *financially responsible Market Participant* who is not the *responsible person* for a *metering installation* that is altered under paragraph (e), must:

- (1) consider and manage meter churn consistently with the meter churn guidelines developed by *NEMMCO* under paragraph (j); and
- (2) advise the *responsible person* of the proposed date of alteration:
 - (i) prior to that alteration being made; and
 - (ii) in accordance with any time specified in the *Market Settlement and Transfer Solution Procedures*.

7.3.5 Data collection system

- (a) **[Deleted]**
- (b) *NEMMCO* must establish processes for the collection of *metering data* for the *metering database* from each *metering installation* in accordance with the requirements of rule 7.9.
- (c) *NEMMCO* may use *agency data collection systems* to collect *metering data*, process *metering data* into *settlements ready data* and to transfer *metering data* to the *metering database*.
- (d) *NEMMCO* may obtain *metering data* directly from a *metering installation* for the *settlements* process.
- (e) Rules and protocols in respect of use of a *data collection system* and its connection to a *metering system* must be approved by *NEMMCO* and *NEMMCO* must not unreasonably withhold such approval.
- (f) Data formats used in respect of a *data collection system* must allow access to *metering data* at a *metering installation* and from the *metering database*.

7.3.6 Payment for metering

- (a) Subject to paragraph (b), the financially responsible Market Participant is responsible for payment of all costs associated with the provision, installation, maintenance, routine testing and inspection of the metering installation and includes:
 - (1) the cost of providing *metering data* and *settlements ready data* to the *Local Network Service Provider* and to the *Local Retailer* to enable these parties to fulfill their obligations under the *Rules*;
 - (2) the cost of providing *metering data* to *NEMMCO*;
 - (3) the cost of preparing *settlements ready data* where such costs will not be recovered by *NEMMCO* in accordance with paragraph (c); and

- (4) the cost of additions and enhancements to *metering installations* undertaken in accordance with clause 7.3.1(c).
- (b) If a *responsible person* allows another person to engage a *Metering Provider* to install a *metering installation* in accordance with clause 7.2.5(a)(2), the *financially responsible Market Participant* is not responsible for the payment of the costs of installation of the relevant *metering installation* under paragraph (a).
- (c) When *NEMMCO* is required to undertake functions associated with a *metering installation* in accordance with the requirements of the *metrology procedure* (which could include the preparation and application of a profile), *NEMMCO's* cost is to be recovered through *Participant fees* in accordance with a budget prepared under clause 2.11.3(b)(3) unless the *metrology procedure* specifies an alternative method of cost recovery, in which case *NEMMCO* must not recover the costs through *Participant fees*.
- (d) Subject to paragraph (a), any costs incurred in gaining access to *metering data* must be paid by the party who obtained the *metering data*.
- (e) The cost of requisition testing and audits must be paid by the party requesting the test or audit, except where the *metering installation* is shown not to comply with this Chapter 7, in which case the *responsible person* in relation to that *metering installation* must bear the cost.
- (f) Paragraph (a) does not apply to the recovery of costs by a *Local Network Service Provider* that are associated with the provision, installation, maintenance, routine testing and inspection of type 5, 6 or 7 *metering installations*, to the extent that these costs can be recovered by the *Local Network Service Provider* in accordance with a determination made by the *AER*.
- (g) Where:
 - (1) a *financially responsible Market Participant* alters a type 5, 6 or 7 *metering installation* under clause 7.3.4 that leads to a change in the classification of that *metering installation*; and
 - (2) the *Local Network Service Provider* is no longer the *responsible person* for that *metering installation*,

the parties must negotiate in good faith to ensure the *Local Network Service Provider* is reasonably compensated for the alteration to the *metering installation*.

7.4 Metering Providers

7.4.1 Responsibility

- (a) Installation and maintenance of *metering installations* must be carried out only by a *Metering Provider*.
- (b) A *Metering Provider* is responsible for providing and maintaining the security controls of a *metering installation* in accordance with clause 7.8.2.

7.4.2 Qualifications and registration of Metering Providers

- (a) A *Metering Provider* is a person who:
 - (1) meets the requirements set out in schedule 7.4; and
 - (2) is accredited by and registered by *NEMMCO* in that capacity in accordance with the qualification process established under clause S7.4.1(b).
- (b) Any person may apply to *NEMMCO* for accreditation and registration as a *Metering Provider*.
- (ba) *NEMMCO* must, in accordance with *Rules consultation procedures*, prepare and *publish* guidelines in respect of the accreditation of *Metering Providers*. The adoption of the guidelines by *Metering Providers* is to be included in the qualification process in accordance with clause S7.4.1(b). The guidelines must include a dispute resolution process.
- (bb) A *Metering Provider* must comply with the provisions of the *Rules* and of procedures authorised under the *Rules*, and with any requirements established by *NEMMCO* under clause 7.4.2(bc), that are expressed to apply to *Metering Providers*.
- (bc) The requirements referred to in clause 7.4.2(bb):
 - (1) must include the service level requirements with which the different categories of *Metering Providers* referred to in schedule 7.4 must comply; and
 - (2) may include, among other things, requirements relating to cooperation with *NEMMCO* and any person engaged by *NEMMCO* to operate any relevant *agency metering database*, the confidentiality of information collected by *Metering Providers*, the resolution of disputes between *NEMMCO* and *Metering Providers*, the access of *NEMMCO* to and inspection by *NEMMCO* of any equipment or database maintained by *Metering Providers*, the insurance which must be taken out by or on behalf of *Metering Providers*, subcontracting by *Metering Providers*, the software and systems that are used by *Metering Providers*, the

ownership of intellectual property that is developed or used by *Metering Providers*, and the delivery up to *NEMMCO* of data, works, material and other property in the event of the deregistration of a *Metering Provider*.

As at the date the *Rules* commence operation, the requirements referred to in clause 7.4.2(bb) that apply in respect of a category of *Metering Providers* referred to in schedule 7.4 must be the same as those that applied in respect of that category of *Metering Providers* immediately prior to that date, but *NEMMCO* may from time to time amend such requirements in accordance with the *Rules consultation procedures*.

- (c) *Network Service Providers* must either register as a *Metering Provider* or enter into agreements with *Metering Providers* for the provision of *metering services*.
- (ca) A *Network Service Provider* must allow a person other than a *Market Participant* to engage a *Metering Provider* to install a *metering installation* where the person does so in accordance with the *metrology procedure*.
- (d) Subject to clause 7.4.2(e), a *Market Generator* or *Market Customer* which is involved in the trading of *energy* must not be registered as a *Metering Provider* for *connection points* in respect of which the *metering data* relates to its own use of *energy*.
- (e) If a *Market Participant* is a *Market Customer* and also a *Network Service Provider* then the *Market Participant* may be registered as a *Metering Provider* for that *connection point* as specified in clause 7.4.2(d), providing that at the *connection points* on the *transmission network*, the *Market Participant* must regard the *Transmission Network Service Provider* with which it has entered into a *connection agreement* as the *Local Network Service Provider*.

7.4.3 Deregistration of Metering Providers

- (a) If a *Metering Provider* materially breaches the requirements of clause 7.4.2(bb), *NEMMCO* must send to that *Metering Provider* notice in writing setting out the nature of the breach and, if the *Metering Provider* remains in breach for a period of more than 7 days after notice from *NEMMCO*, *NEMMCO* may deregister the *Metering Provider*.
- (aa) If *NEMMCO* reasonably determines that a *Metering Provider* may have breached the requirements of clause 7.4.2(bb), it must conduct a review of the *Metering Provider's* capability to install and maintain a *metering installation*. The outcome of the review may be deregistration, suspension of some categories of registration or continued operation under constraints agreed with *NEMMCO*.

- (b) If, in the reasonable opinion of *NEMMCO*, a *Metering Provider* has acted in any way which is unethical, *NEMMCO* may deregister that *Metering Provider*.
- (c) This clause 7.4.3 sets out the only action that can be taken against a *Metering Provider*:
 - (1) for a breach by that *Metering Provider* of provisions of the *Rules* or of procedures authorised under the *Rules*, or of any requirements established by *NEMMCO* under clause 7.4.2(bc), that are expressed to apply to *Metering Providers*; or
 - (2) by *NEMMCO* as a result of that *Metering Provider* acting in a way which is unethical.

7.5 Register of Metering Information

7.5.1 Metering register

- (a) As part of the *metering database*, *NEMMCO* must maintain a *metering register* of all *revenue metering installations* and *check metering installations* which provide *metering data* used for *NEMMCO* account statements.
- (b) The *metering register* referred to in clause 7.5.1(a) must contain the information specified in schedule 7.5.

7.5.2 Metering register discrepancy

- (a) If the information in the *metering register* indicates that the *revenue metering installation* or the *check metering installation* does not comply with the requirements of the *Rules*, *NEMMCO* must advise affected *Registered Participants* of the discrepancy.
- (b) If a discrepancy under clause 7.5.2(a) occurs, then the *responsible person* must arrange for the discrepancy to be corrected within 2 *business days* unless exempted by *NEMMCO*.

7.6 Inspection, Testing and Audit of Metering Installations

7.6.1 Responsibility for testing

- (a) Testing of a *metering installation* carried out under this clause 7.6.1 must be carried out in accordance with:
 - (1) this clause 7.6.1; and

- (2) the relevant inspection and testing requirements set out in schedule 7.3.
- (b) A *Registered Participant* may request that the *responsible person* make arrangements for the testing of a *metering installation* and if the request is reasonable, the *responsible person* must:
 - (1) not refuse the request; and
 - (2) make arrangements for the testing.
- (c) Where the *responsible person* does not undertake the testing requested under paragraph (b), the *responsible person* must advise *NEMMCO* that the requested testing has not been undertaken and *NEMMCO* must make the arrangements for the testing where, in *NEMMCO*'s reasonable opinion, it is practicable for *NEMMCO* to do so.
- (d) The *Registered Participant* who requested the tests under paragraph (b) may make a request to the *responsible person* to witness the tests.
- (e) The *responsible person* must not refuse a request received under paragraph (d) and must no later than 5 *business days* prior to the testing, advise:
 - (1) the party making the request; and
 - (2) where the *Local Network Service Provider* is the *responsible person*, the *financially responsible Market Participant*,of:
 - (3) the location and time of the tests; and
 - (4) the method of testing to be undertaken.
- (f) The *responsible person* and *NEMMCO* must co-operate for the purpose of making arrangements for *NEMMCO* to inspect or test the *metering installation* where:
 - (1) the *responsible person* must give *NEMMCO* access to the *metering installation*; and
 - (2) *NEMMCO* must:
 - (i) no later than seven *business days* prior to the testing or inspection, give the *responsible person* notice of:
 - (A) its intention to access the *metering installation* for the purpose of inspection or testing;

- (B) the name of the *representative* who will be conducting the test or inspection on behalf of *NEMMCO*; and
 - (C) the *time* when the test or inspection will commence and the expected *time* when the test or inspection will conclude; and
- (ii) where reasonable, comply with the security and safety requirements of the *responsible person*.
- (g) Where *NEMMCO* or the *responsible person* has undertaken testing of a *metering installation* under this clause 7.6.1, *NEMMCO* or the *responsible person* (as the case may be) must make the test results available in accordance with paragraphs (h) and (i).
- (h) If the test results referred to in paragraph (g) indicate deviation from the technical requirements for that *metering installation*, the results must be made available as soon as practicable to the persons who are entitled to that *metering data* under rules 7.7(a)(1) to (7).
- (i) If the test results referred to in paragraph (g) indicate compliance with the technical requirements for that *metering installation*, the test results must be made available as soon as practicable:
 - (1) in circumstances where the tests were requested by a *Registered Participant*, to the *Registered Participant* and persons who are entitled to that *metering data* under rules 7.7(a)(1) to (7); or
 - (2) to a *Registered Participant* if requested by that *Registered Participant*, where the tests are not the result of a request for testing.
- (j) *NEMMCO* must check test results recorded in the *metering register* by arranging for sufficient audits annually of *metering installations* and to satisfy itself that the accuracy of each *metering installation* complies with the requirements of this Chapter 7.
- (k) The *responsible person* must store the test results in accordance with clause 7.6.4 and provide a copy to *NEMMCO* upon request or as part of an audit.

7.6.2 Actions in event of non-compliance

- (a) If the accuracy of the *metering installation* does not comply with the requirements of the *Rules*, the *responsible person* must:
 - (1) advise *NEMMCO* as soon as practicable of the errors detected and the possible duration of the existence of the errors; and
 - (2) arrange for the accuracy of the *metering installation* to be restored in a time frame agreed with *NEMMCO*.

- (b) *NEMMCO* may make appropriate corrections to the *metering data* to take account of errors referred to in clause 7.6.2(a) and to minimise adjustments to the final *settlements* account.

7.6.3 Audits of metering data

- (aa) *NEMMCO* is responsible for auditing *metering installations*.
- (a) A *Registered Participant* may request *NEMMCO* to conduct an audit to determine the consistency between the data held in the *metering database* and the data held in the *Registered Participant's metering installation*.
- (b) If there are inconsistencies between data held in a *metering installation* and data held in the *metering database* the affected *Registered Participants* must liaise together to determine the most appropriate way to resolve the discrepancy.
- (c) If there is an inconsistency between the data held in a *metering installation* and the data held in the *metering database*, the data in the *metering installation* is to be taken as *prima facie* evidence of the *connection point's energy data*.
- (d) *NEMMCO* must carry out periodic random audits of *metering installations* to confirm compliance with the *Rules* and must be given unrestrained access by *Registered Participants* to *metering installations* for the purpose of carrying out such random audits where *NEMMCO* agrees to comply with the *Registered Participant's* reasonable security and safety requirements and has first given the *Registered Participant* at least two *business days'* notice of its intention to carry out an audit, which notice must include:
 - (1) the name of the *representative* who will be conducting the audit on behalf of *NEMMCO*; and
 - (2) the *time* when the audit will commence and the expected *time* when the audit will conclude.

7.6.4 Retention of test records and documents

- (a) All records and documentation of tests prepared under this Chapter 7 or for the purposes of this Chapter 7 must be retained in accordance with this clause 7.6.4.
- (b) The *responsible person* must ensure records and documentation are retained as follows:
 - (1) for a period of at least 7 years:

- (i) sample testing of *meters* while the *meters* of the relevant style remain in service;
 - (ii) the most recent sample test results of the *meters* referred to in subparagraph (i) after the *meters* are no longer in service;
 - (iii) non-sample testing of *meters* while the *meters* remain in service;
 - (iv) the most recent non-sample test results after the *meters* are no longer in service;
 - (v) the most recent sample test results of *instrument transformers* after *instrument transformers* of the relevant type are no longer in service;
 - (vi) the most recent non-sample test results of *instrument transformers* after they are no longer in service;
 - (vii) tests of new *metering* equipment of the relevant style while the equipment remains in service; and
 - (viii) tests of new *metering* equipment of the relevant style after the equipment is no longer in service; and
- (2) for a period of at least 10 years:
 - (i) sample testing of *instrument transformers* while *instrument transformers* of the relevant type remain in service; and
 - (ii) non-sample testing of *instrument transformers* while they remain in service.
- (c) The *responsible person* must ensure records of type tests and pattern approvals carried out or obtained in accordance with clause S7.2.6.1(f) are retained while *metering* equipment of the relevant type remains in service and for at least 7 years after it is no longer in service.

7.7 Entitlement to metering data

- (a) The only persons entitled to receive *metering data*, *NMI Standing Data* or data from the *metering register* for a *metering installation* are:
 - (1) *Registered Participants* with a financial interest in the *metering installation* or the *energy* measured by that *metering installation*;
 - (2) *Metering Providers* who have an agreement to service the *metering installation*, in which case the entitlement to access is restricted to allow authorised work only;

- (3) *financially responsible Market Participants* in accordance with the *meter churn guidelines* developed under clause 7.3.4(j);
 - (4) the *Network Service Provider* or providers associated with the *connection point*;
 - (5) *NEMMCO* and its authorised agents;
 - (6) an Ombudsman in accordance with paragraphs (d), (e) and (f);
 - (7) a *financially responsible Market Participant's* customer upon request by that customer to the *financially responsible Market Participant* for information relating to that customer's *metering installation*; and
 - (8) the *AER* or *Jurisdictional Regulators* upon request to *NEMMCO*.
- (b) Electronic access to *metering data* from a *metering installation* must only be provided where passwords in accordance with clause 7.8.2 are allocated, otherwise access to *metering data* shall be from the *metering database*.
 - (c) The *responsible person* must ensure that access to *metering data* from the *metering installation* by persons referred to in rule 7.7(a) is scheduled appropriately to ensure that congestion does not occur.
 - (d) Despite anything to the contrary in this rule 7.7 and subject to clause 8.6, *NEMMCO* may provide *metering data* relating to a *Registered Participant* from a *metering installation*, the *metering database* or the *metering register* to an Ombudsman acting under a duly constituted industry dispute resolution ombudsman scheme of which the *Registered Participant* is a participant, if the Ombudsman has requested the data for the purpose of carrying out a function of that scheme in respect of a complaint made by a customer of the *Registered Participant* against that *Registered Participant* under that scheme.
 - (e) *NEMMCO* must notify the relevant *Registered Participant* of any information requested by an Ombudsman under rule 7.7(d) and, if it is requested by that *Registered Participant*, supply the *Registered Participant* with a copy of any information provided to the Ombudsman.
 - (f) *NEMMCO* must, acting jointly with industry Ombudsmen, develop procedures for the efficient management of timely access to data by Ombudsmen in consultation with *Registered Participants* in accordance with the *Rules consultation procedures*.

7.8 Security of Metering Installations and Data

7.8.1 Security of metering installations

- (a) The *responsible person* must ensure that a *metering installation* is secure and that associated links, circuits and information storage and processing systems are protected by security mechanisms acceptable to *NEMMCO*.
- (b) *NEMMCO* may override any of the security mechanisms fitted to a *metering installation* with prior notice to the *responsible person*.
- (c) If a *Local Network Service Provider*, *financially responsible Market Participant*, or *Metering Provider* becomes aware that a seal protecting *metering* equipment has been broken, it must notify the *responsible person* within 5 business days.
- (d) If a broken seal has not been replaced by the person who notified the *responsible person* under paragraph (c), the *responsible person* must replace the broken seal no later than:
 - (1) the first occasion on which the *metering* equipment is visited to take a reading; or
 - (2) 100 days,after receipt of notification that the seal has been broken.
- (e) The costs of replacing broken seals as required by paragraph (d) are to be borne by:
 - (1) the *financially responsible Market Participant* if the seal was broken by its customer;
 - (2) a *Registered Participant* if the seal was broken by the *Registered Participant*; or
 - (3) by the *Metering Provider* if the seal was broken by the *Metering Provider*,and otherwise by the *responsible person*.
- (f) If it appears that as a result of, or in connection with, the breaking of a seal referred to in paragraph (c) that the relevant *metering* equipment may no longer meet the relevant minimum standard, the *responsible person* must ensure that the *metering* equipment is tested.

7.8.2 Security controls

- (a) The *responsible person* must ensure that *metering data* held in the *metering installation* is protected from direct local or remote electronic access by suitable password and security controls in accordance with clause 7.8.2(c).
- (b) The *Metering Provider* must keep records of electronic access passwords secure.
- (c) The *Metering Provider* must allocate 'read-only' passwords to *Market Participants*, *Local Network Service Providers* and *NEMMCO*, except where separate 'read-only' and 'write' passwords are not available, in which case the *Metering Provider* must allocate a password to *NEMMCO* only.
- (d) The *Metering Provider* must hold 'read-only' and 'write' passwords.
- (e) The *Metering Provider* must forward a copy of the passwords held under clause 7.8.2(d) to *NEMMCO*.
- (f) Subject to rule 7.12(aa), *NEMMCO* must hold a copy of the passwords referred to in clause 7.8.2(e) for the sole purpose of revealing them to a *Metering Provider* in the event that the passwords cannot be obtained by the *Metering Provider* by any other means.
- (g) Subject to the authorisation of the *responsible person*, if a customer of a *financially responsible Market Participant* requests a 'read-only' password, the *financially responsible Market Participant* must:
 - (1) obtain a 'read-only' password from the *Metering Provider*; and
 - (2) provide a 'read-only' password to the customer within 10 *business days*,in accordance with paragraph (c).
- (h) The *responsible person* referred to in paragraph (g) must not unreasonably withhold the authorisation required by the *financially responsible Market Participant*.

7.8.3 Changes to metering equipment, parameters and settings

Changes to parameters or settings within a *metering installation* must be:

- (a) authorised by *NEMMCO* prior to the alteration being made;
- (b) implemented by a *Metering Provider*;
- (c) confirmed by the *responsible person* within 2 *business days* after the alteration has been made; and

- (d) recorded by *NEMMCO* in the *metering register*.

7.8.4 Changes to metering data

- (a) The original stored *energy data* in a *meter* must not be altered except when the *meter* is reset to zero as part of a repair or reprogramming.
- (b) If an on-site test of a *metering installation* requires the injection of current, the *responsible person* must ensure that:
 - (1) the *energy data* stored in the *metering installation* is inspected; and
 - (2) if necessary following the inspection under subparagraph (1), alterations are made to the *metering data* in accordance with paragraph (c),

to ensure that the *metering data* in the *metering database* is not materially different from the energy volumes flowing through the *connection point* during the period of the test.

- (c) If a *responsible person* considers alterations are necessary under paragraph (b)(2), the *responsible person* must:
 - (1) for a type 1, 2, 3 or 4 *metering installation*, advise *NEMMCO* of the variation and *NEMMCO* must arrange for the *metering database* to be altered in accordance with the validation, substitution and estimation procedures in the *metrology procedure*; or
 - (2) for a type 5, 6 or 7 *metering installation*, alter the *energy data* in accordance with the validation, substitution and estimation procedures in the *metrology procedure* and submit the altered data to *NEMMCO*.
- (d) If a test referred to in paragraph (b) is based on actual *connection point* loads, no adjustment is required.

7.9 Processing of Metering Data for Settlements Purposes

7.9.1 Metering databases

- (a) *NEMMCO* must create, maintain and administer a *metering database* (either directly or under a contract for provision of the database) containing information for each *metering installation* registered with *NEMMCO*.
- (b) *NEMMCO* may use *agency metering databases* to form part of the *metering database*.
- (b1) A person engaged by *NEMMCO* to provide *agency data collection systems* and *agency metering databases* must meet and comply with the service level

requirements and any other criteria that *NEMMCO* establishes from time to time in relation to those functions, including accreditation requirements.

- (c) The *metering database* must have the capacity for electronic access by relevant *Market Participants* and *Network Service Providers*.
- (d) The *metering database* must include original *energy* readings and, where relevant, *metering data* and *settlements ready data*.
- (e) Rights of access to data held within the *metering database* are set out in rule 7.7.
- (f) The person who is required under this Chapter 7 to collect the *metering data* from the *metering installation* for the purpose of *settlements* must ensure that:
 - (1) the data is stored separately from the *metering database* and retained for a period of 7 years in the form in which it was collected; and
 - (2) a record of each adjustment or substitution to the *metering data* in respect of a *metering installation* is stored separately from the *metering database* and retained for a period of 7 years.
- (g) For all types of *metering installations*, the *metering database* must contain *metering data* that is retained:
 - (1) online for 13 months in an accessible format; and
 - (2) following the retention under subparagraph (1), in archive in a form that is accessible independently of the format in which the data is stored for a period of 5 years and 11 months.

7.9.2 Remote acquisition of data

- (a) *NEMMCO* is responsible for the *remote acquisition* of the *metering data* and for storing this data as *settlements ready data* in the *metering database*. Such data may be used:
 - (1) by *NEMMCO* for *settlements* purposes in accordance with clause 7.9.1; or
 - (2) by *Distribution Network Service Providers* for the purpose of determining *distribution service* charges in accordance with clause 6.20.1.
- (b) If *remote acquisition* becomes unavailable, *NEMMCO* must arrange with the *responsible person* to obtain the relevant *metering data*.

7.9.3 Periodic energy metering

- (a) Where a device is used as a *data logger* (for types 1 to 5 *metering installations*), *metering data* relating to:
 - (1) the amount of *active energy*; and
 - (2) *reactive energy* (where relevant) passing through a *connection point*,

must be collated in *trading intervals* within a *metering installation* unless it has been agreed between *NEMMCO*, the *Local Network Service Provider* and the *Market Participant* that *metering data* may be recorded in sub-multiples of a *trading interval*.
- (b) Where a *metering installation* database is used as a *data logger* (*metering installation* types 6 and 7), the *metering data* relating to the amount of *active energy* passing through a *connection point* must be collated or determined in *trading intervals* within a *metering installation* unless it is specified in the *metrology procedure* that the data may be converted into *trading interval* data in the *NEMMCO* substitution process referred to in clause 7.9.4(a), in which case the *metrology procedure* must specify:
 - (1) the parameters to be used in preparing the *trading interval* data for each *market load*, including the algorithms;
 - (2) the first-tier *energy data* that is to be used in the conversion process;
 - (3) the quality and timeliness of the first-tier *metering data*;
 - (4) the party responsible for providing the first-tier *metering data*; and
 - (5) if required, the method of cost recovery in accordance with clause 7.3.6(c).

7.9.4 Data validation, substitution and estimation

- (a) *NEMMCO* is responsible for the validation and substitution of *metering data* for a type 1, 2, 3 and 4 *metering installation* in accordance with the *metrology procedure*.
- (b) The *responsible person* is responsible for the validation, substitution and estimation of *metering data* for a type 5, 6 and 7 *metering installation* in accordance with the *metrology procedure*.
- (c) *Check metering data*, where available, must be used by *NEMMCO* to validate *metering data* provided that the *check metering data* has been appropriately adjusted for differences in *metering installation* accuracy.

- (d) If *check metering data* is not available or *metering data* cannot be recovered from the *check metering installation* within the time required for *settlements*, then a substitute value is to be prepared by *NEMMCO* using a method agreed with the *Market Participant* and the *Local Network Service Provider*.
- (e) If *NEMMCO* detects a loss of *metering data* or incorrect *metering data* from a *metering installation*, it must notify the *Market Participant* and *Local Network Service Provider* within 24 hours of detection.

7.9.5 Errors found in metering tests, inspections or audits

- (a) If a *metering installation* test, inspection or audit, carried out in accordance with rule 7.6, demonstrates errors in excess of those prescribed in schedule 7.2 and *NEMMCO* is not aware of the time at which that error arose, the error is to be deemed to have occurred at a time half way between the time of the most recent test or inspection which demonstrated that the *metering installation* complied with the relevant accuracy requirement and the time when the error was detected.
- (b) If a test or audit of a *metering installation* demonstrates an error of measurement of less than 1.5 times the error permitted by schedule 7.2, no substitution of readings is required unless in *NEMMCO's* reasonable opinion a particular party would be significantly affected if no substitution were made.
- (c) If any substitution is required under clause 7.9.5(b), then *NEMMCO* must provide substitute readings to effect a correction for that error in respect of the period since the error was deemed to have occurred.

7.10 Confidentiality

Metering data and passwords are confidential data and are to be treated as *confidential information* in accordance with the *Rules*.

7.11 Performance of Metering Installation

7.11.1 Metering data

- (a) Subject to paragraphs (b) and (c), *metering data* is required for all *trading intervals* where the *metering installation* has the capability for *remote acquisition* of actual *metering data*.
- (b) Where *NEMMCO* requires actual *metering data* to ensure compliance with Chapter 3, the *metering data* required under paragraph (a) must be:
 - (1) at the level of accuracy prescribed in schedule 7.2;

- (2) within the timeframe required for *settlements* and *prudential requirements* specified in the *metrology procedure*, and at a level of availability of at least 99% per annum for *instrument transformers* and other components of the *metering installations*, not including the *communication link*;
- (3) within the timeframe required for *settlements* and *prudential requirements* specified in the procedures established in the *metrology procedure*, and at a level of availability of at least 95% per annum for the *communication link*, and
- (4) actual or substituted in accordance with the procedures established by *NEMMCO* under clause 7.14.1(c)(6);

or as otherwise agreed between *NEMMCO* and the *responsible person*.

- (c) Where *NEMMCO* does not require actual *metering data* to ensure compliance with Chapter 3, the *metering data* required under paragraph (a) must be:
 - (1) at the level of accuracy prescribed in schedule 7.2;
 - (2) within the timeframe required for *settlements* specified in the *metrology procedure*;
 - (3) actual, substituted or estimated in accordance with the procedures established by *NEMMCO* under clause 7.14.1(c)(6); and
 - (4) in accordance with the performance standards specified in the *metrology procedure*.
- (d) Where the *metering installation* does not have the capability for *remote acquisition* of actual *metering data*, *metering data* is required:
 - (1) at the level of accuracy prescribed in schedule 7.2;
 - (2) within the timeframe required for *settlements* specified in the *metrology procedure*;
 - (3) as actual, substituted or estimated in accordance with the procedures established by *NEMMCO* under clause 7.14.1(c)(6); and
 - (4) in accordance with the performance standards specified in the *metrology procedure*.

7.11.2 Metering installation malfunctions

- (a) Unless an exemption is obtained from *NEMMCO* under this clause 7.11.2, in respect of a *connection point* with:

- (1) a type 1, 2 and 3 *metering installation*, if a malfunction occurs to the installation, repairs must be made to it as soon as practicable but no later than 2 *business days* after the malfunction was detected or should reasonably have been detected; or
- (2) a *metering installation* other than the installations referred to subparagraph (1), if a malfunction occurs to the installation, repairs must be made to it as soon as practicable but no later than 10 *business days* after the malfunction was detected or ought reasonably to have been detected.
- (b) *NEMMCO* must establish and *publish* a procedure applicable to the provision of exemptions for the purpose of paragraph (a) and *NEMMCO* may revise the procedure from time to time.
- (c) If an exemption is provided by *NEMMCO* under this clause 7.11.2 then the *Metering Provider* must provide *NEMMCO* with a plan for the rectification of the *metering installation*.
- (d) A *Registered Participant* who becomes aware of an *outage* or malfunction of a *metering installation* must advise *NEMMCO* as soon as practicable.

7.12 Time settings

- (a) The *responsible person* must ensure that all *metering installations* and *data logger* clocks are referenced to *Eastern Standard Time* and maintained to a standard of accuracy in accordance with schedule 7.2 relevant to the *load* through the *metering point*.
- (b) In relation to a type 1, 2, 3 and 4 *metering installation*, the *responsible person* must provide to *NEMMCO* suitable remote data access to set the time function of the installation.
- (c) In relation to a type 5, 6 and 7 *metering installation*, the *responsible person* must set the time function of the *metering installation*.
- (d) *NEMMCO* must ensure that the *metering database* clock is maintained within -1 second and +1 second of *Eastern Standard Time* for a type 1, 2, 3 and 4 *metering installation*.
- (e) The *responsible person* must ensure that the *metering installation* database clock is maintained within - 1 second and + 1 second of *Eastern Standard Time* for types 5, 6 and 7 *metering installations*.

7.13 Evolving Technologies and Processes and Development of the Market

- (a) Evolving technologies or processes that:

- (1) meet or improve the performance and functional requirements of this Chapter; or
- (2) facilitate the development of the *market*,

may be used if agreed between the relevant *Market Participant(s)*, the *Local Network Service Provider* and *NEMMCO*, and the agreement of the *Local Network Service Provider* and *NEMMCO* must not be unreasonably withheld.

- (b) No agreement contemplated by rule 7.13(a) can be entered into if it materially and adversely affects the interests of persons other than the *Market Participant(s)* and the *Local Network Service Provider* who are parties to the agreement.
- (c) *NEMMCO* must, at least annually, *publish* a report on the application of evolving technologies and processes.
- (d) *NEMMCO* must, at least annually, submit a written report to the *AEMC* on the extent to which this Chapter 7 may need to be amended in order to accommodate the evolving technologies and processes or the development of the *market*.
- (e) *NEMMCO* must, at least annually, prepare and *publish* a report on the impact of the introduction of retail competition on the wholesale market, including:
 - (1) the scope for improvement in the operation of wholesale *market settlements*;
 - (2) developments in metering technology suited to more timely operation of the *market*; and
 - (3) the effectiveness of the provisions of this Chapter 7.
- (f) Having regard to the need to remove barriers to the adoption of economically efficient metering solutions and other economically efficient technology ('**efficient solutions**'), *NEMMCO* must:
 - (1) monitor developments in the Australian metering standards; and
 - (2) consult with the *participating jurisdictions* and other interested parties on any changes proposed to be made to the Australian metering standards that may have the potential to create such barriers,and include any relevant findings in its report under paragraph (c).

- (g) The *Ministers of participating jurisdictions* must, by 30 June 2009, conduct and complete a review of type 5 and 6 *metering installations* and the *metrology procedure*.
- (h) In undertaking the review referred to in paragraph (g), the *Ministers of the participating jurisdictions* may:
 - (1) review the outcomes from the Joint Jurisdictional Review of Metrology Procedures: Final Report of October 2004 ('the **JJR report**') and identify any outstanding issues from the JJR report;
 - (2) make recommendations to resolve any outstanding issues from the JJR report;
 - (3) identify any additional barriers to the adoption of efficient solutions and make recommendations to reduce those barriers; and
 - (4) have regard to the need to maintain the regulatory certainty, in recognition that regulatory uncertainty is itself a major barrier to the adoption of efficient solutions.

7.14 Metrology procedure

7.14.1 Requirements of the metrology procedure

- (a) *NEMMCO* must develop and *publish* the *metrology procedure* that will apply to *metering installations* in accordance with this rule 7.14 and this Chapter 7.
- (b) The *metrology procedure* must be prepared, revised and *published* by *NEMMCO* in accordance with the *Rules consultation procedures* and must include a minimum period of 3 months between the date when the *metrology procedure* is *published* and the date the *metrology procedure* commences unless the change is made under clause 7.14.4(e) in which case the effective date may be the same date as the date of publication.
- (c) The *metrology procedure* must include:
 - (1) information on the devices and processes that are to be used to:
 - (i) measure, or determine by means other than a device, the flow of electricity in a power conductor;
 - (ii) convey the measured or determined data under subparagraph (i) to other devices using *communication link(s)*;
 - (iii) prepare the data using devices or algorithms to form *metering data*; and

- (iv) provide access to the *metering data* from a *telecommunications network*;
- (2) the requirements for the provision, installation and maintenance of *metering installations*;
- (3) the obligations of *responsible persons* and *Metering Providers*;
- (4) details on:
 - (i) the parameters that determine the circumstances when *metering data* must be delivered to *NEMMCO* for the purposes of Chapter 3 and such parameters must include, but are not limited to, the volume limit per annum below which *NEMMCO* will not require *metering data* for those purposes;
 - (ii) the timeframe obligations for the extraction or delivery of *metering data* from a *metering installation* for the purpose of *settlements*; and
 - (iii) the performance standards for *metering data* required for the purpose of *settlements*;
- (5) subject to clause 7.14.2(d)(2), zero MWh as the specification for the *type 5 accumulation boundary*;
- (6) procedures for the preparation of *settlements ready data* on the following matters:
 - (i) data validation and substitution in accordance with clause 7.9.4;
 - (ii) data estimation for the purposes of clause 7.11.1; and
 - (iii) in relation to the matters specified in clause 7.9.3, the method:
 - (A) by which accumulated *metering data* is to be converted into *trading interval* data; and
 - (B) of managing the *first-tier load energy data* that is necessary to enable the conversion referred to in subparagraph (1) to take place; and
- (7) other matters in the *Rules* required to be included in the *metrology procedure*.

7.14.2 Jurisdictional metrology material in metrology procedure

- (a) Subject to this clause 7.14.2, *NEMMCO* may include in the *metrology procedure* other metrology material that is in the nature of a guideline,

specification or other standard for a *participating jurisdiction* in relation to type 5, 6 and 7 *metering installations* which alters the application of the *metrology procedure* for that jurisdiction (*'jurisdictional metrology material'*).

- (b) *Jurisdictional metrology material* may only be submitted to NEMMCO for inclusion in the *metrology procedure* by the *Ministers of the MCE*.

[**Note:** For the period until 1 January 2009, a *Minister of a participating jurisdiction*, on behalf of a particular participating jurisdiction, may provide to NEMMCO jurisdictional metrology material in accordance with clause 11.5.5]

- (c) *Jurisdictional metrology material* submitted to NEMMCO under paragraph (b) must:

- (1) be in writing;
- (2) be provided to NEMMCO within sufficient time for NEMMCO to meet its obligations under this clause 7.14.2;
- (3) be consistent with the matters contained in clauses 7.14.1 and 7.14.3;
- (4) contain a date by which the *Ministers of the MCE* will undertake a review in relation to harmonising the *jurisdictional metrology material* with the *metrology procedure* (the '**review date**'); and
- (5) be accompanied by written reasons as to why the *jurisdictional metrology material* is required instead of the *metrology procedure*.

- (d) *Jurisdictional metrology material* may address the following matters:

- (1) guidelines for the replacement of a device capable of producing *interval energy data* with a device that only produces *accumulated energy data*; and
- (2) the specification of the *type 5 accumulation boundary*.

- (e) On receiving *jurisdictional metrology material* from the *Ministers of the MCE*, NEMMCO must undertake the *Rules consultation procedures* in relation to that material, including in that consultation the reasons referred to paragraph (c)(5).

- (f) At the conclusion of the *Rules consultation procedures* under paragraph (e), NEMMCO must provide a final report to the *Ministers of the MCE* in accordance with rule 8.9(k) of the outcome of that procedure and:

- (1) in the case where the *Ministers of the MCE* do not advise NEMMCO of any amendments to the *jurisdictional metrology material*,

NEMMCO must incorporate that material into a separate part of the *metrology procedure*; or

- (2) in the case where the *Ministers of the MCE* advise *NEMMCO* of amendments to the *jurisdictional metrology material*, *NEMMCO* must incorporate the amended material into a separate part of the *metrology procedure*.
- (g) The *jurisdictional metrology material*, as included in the *metrology procedure* by *NEMMCO*, expires on the review date unless the *Ministers of the MCE* submit to *NEMMCO* new *jurisdictional metrology material* in accordance with this clause 7.14.2.
- (h) The *jurisdictional metrology material* must not prevent the *metering data* from being extracted or emanating from a *data logger* as *interval energy data* if required by the *financially responsible Market Participant* or a *Local Network Service Provider* for any purpose other than for *settlements*.

7.14.3 Additional matters

- (a) The *metrology procedure* may:
 - (1) clarify the operation of the *Rules* in relation to:
 - (i) *load* profiling;
 - (ii) the provision and maintenance of *meters*;
 - (iii) the provision of *energy data services*;
 - (iv) metrology for a *market load* connected to a *network* where the owner or operator of that *network* is not a *Registered Participant*;
 - (v) the accreditation of *Metering Providers*; and
 - (vi) the obligations of *responsible persons*, *NEMMCO*, and *Metering Providers*;
 - (2) specify in greater detail:
 - (i) the accuracy of *metering installations*;
 - (ii) *data logger* standards;
 - (iii) inspection and testing standards;
 - (iv) *Metering Provider* accreditation standards;

- (v) the technical requirements for the database of the *metering installation*; and
 - (vi) the technical standards for *metering* of a *market load* that is connected to a *network* where the operator or owner of that *network* is not a *Registered Participant*;
 - (3) provide information on the application of the *Rules*, subject to a statement in the procedure that where any inconsistency arises between the *Rules* and the *metrology procedure*, the *Rules* prevail to the extent of that inconsistency;
 - (4) in relation to type 5 and 6 *metering installations*, contain requirements:
 - (i) for the engagement and payment of *Metering Providers*; and
 - (ii) for the provision of relevant details of the *metering installation* to the *responsible person*, where applicable;
 - (5) in relation to type 5, 6 and 7 *metering installations* specify in what circumstances *energy data* held in *metering installations* within the relevant *participating jurisdiction*, can be used by *Distribution Network Service Providers* to calculate charges for *distribution services* for the purposes of clause 6.20.1(e); and
 - (6) contain information to ensure consistency in practice between the *metrology procedure* and other instruments developed and published by *NEMMCO*, including the practices adopted in the *Market Settlement and Transfer Solution Procedures*.
- (b) The *metrology procedure* may not include information relating to consumer protection.

7.14.4 Amendment of the metrology procedure

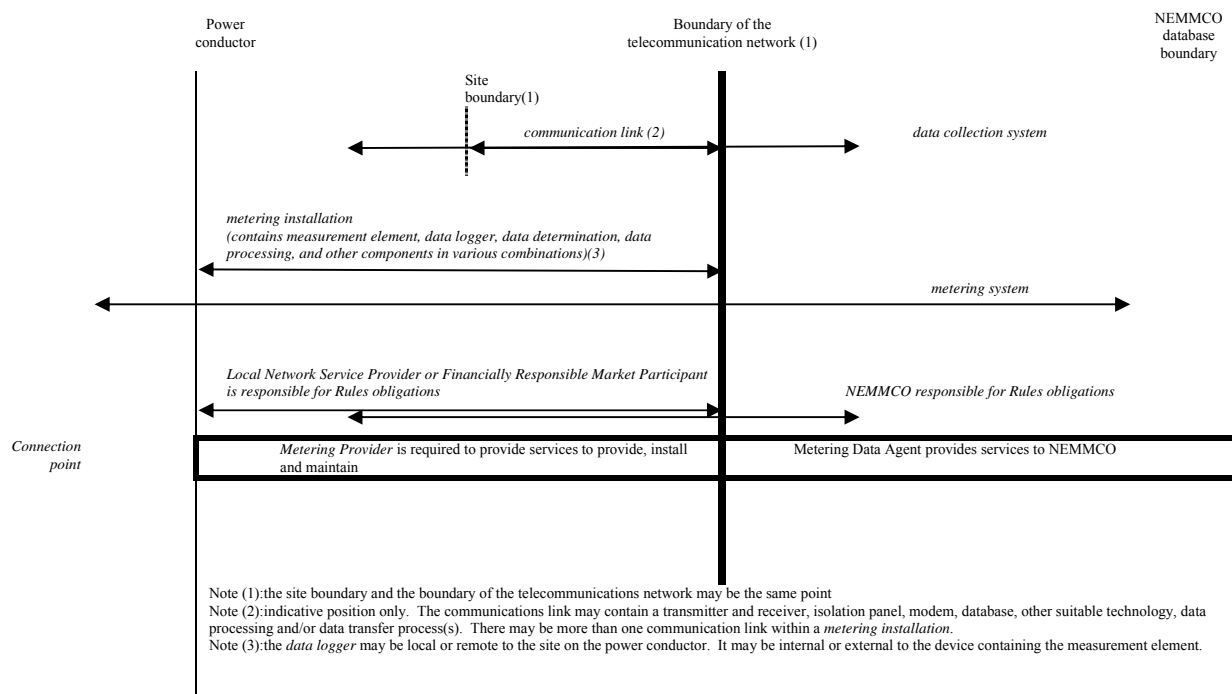
- (a) Any person ('the **proponent**') may submit to *NEMMCO* a proposal to amend the *metrology procedure* except in relation to the *jurisdictional metrology material* ('the **proposal**'), and must include reasons for the proposed change.
- (b) For proposals submitted under paragraph (a), *NEMMCO* must:
 - (1) give notice of receipt of the proposal to the proponent; and
 - (2) advise the proponent of the action that *NEMMCO* proposes to undertake under paragraphs (c) or (e).
- (c) Where *NEMMCO*:

- (1) accepts the proposal, *NEMMCO* must conduct the *Rules consultation procedures* in relation to that proposal;
 - (2) requests further information from the proponent in relation to a proposal, on receiving that information *NEMMCO* must either accept, or reject the proposal; or
 - (3) rejects a proposal, *NEMMCO* must advise the proponent of its decision and reasons for the decision in writing.
- (d) *NEMMCO* may at the conclusion of the *Rules consultation procedures* amend the *metrology procedure* (if necessary).
- (e) Where in *NEMMCO*'s reasonable opinion, a proposal referred to in paragraph (a) relates to amendments that are of a minor or administrative nature, *NEMMCO* is not required to undertake the *Rules consultation procedures* but must:
- (1) *publish* the proposal including the accompanying reasons;
 - (2) issue a notice to *Registered Participants*, *Metering Providers*, *Ministers* and the *AER* advising that the amendment to the *metrology procedure* has been *published*;
 - (3) invite submissions on the proposal;
 - (4) allow 10 *business days* for the receipt of submissions;
 - (5) allow a reasonable extension of time for submissions if requested in writing by a *Registered Participant* or *Metering Provider*;
 - (6) *publish* submissions as soon as practicable after submissions have been received;
 - (7) consider the submissions; and
 - (8) *publish*, on or before the day of *publication* of the *metrology procedure*, reasons for the amendments to the *metrology procedure*.

7.15 Miscellaneous

- (a) *NEMMCO* in consultation with the *National Measurement Institute* must establish guidelines that clarify the application of the requirements of the *National Measurement Act* to *metering installations*.
- (b) For the avoidance of doubt, to the extent that there is an inconsistency between the *Rules* and the *National Measurement Act*, the Act prevails to the extent of that inconsistency.

Schedule 7.1 - Responsibility for Metering



Schedule 7.2 - Types and Accuracy of Metering Installations

S7.2.1 General requirements

- (a) The following are the minimum requirements for *metering installations*.
- (b) A *Registered Participant* may install a *metering installation* with a higher level of accuracy, with the full costs of this work being met by that *Registered Participant*.

S7.2.2 Metering installations commissioned prior to 13 December 1998

- (aa) This clause provides conditions that are to apply to *metering installations* that were commissioned prior to 13 December 1998.
- (a) The use of *metering class current transformers* and *voltage transformers* that are not in accordance with Table S7.2.3.1 are permitted provided that where necessary to achieve the overall accuracy requirements:
 - (1) *meters* of a higher class accuracy are installed; and/or
 - (2) calibration factors are applied within the *meter* to compensate for *current transformer* and *voltage transformer* errors.
- (b) Protection *current transformers* are acceptable where there are no suitable *metering class current transformers* available and the overall accuracy and performance levels can be met.
- (c) Where the requirements of clauses S7.2.2(a) and S7.2.2(b) cannot be achieved then the *responsible person* is required to comply with transitional arrangements or obtain an exemption from *NEMMCO* or upgrade the *metering installation* to comply with this schedule 7.2.
- (d) The arrangements referred to in clause S7.2.2(c) may remain in force while the required accuracy and performance can be maintained within the requirements of the *Rules*.
- (e) The purchase of new *current transformers* and *voltage transformers* must comply with the *Rules*.

S7.2.3 Accuracy requirements for metering installations

Table S7.2.3.1 Overall Accuracy Requirements of Metering Installation Components (Item 1)

Type	Volume limit per annum per connection point	Maximum allowable overall error ($\pm\%$) (refer Tables 2 - 6) at full load		Minimum acceptable class or standard of components	Metering installation or data logger Clock Error (Seconds) in reference to EST
		active	reactive		
1	greater than 1000 GWh	0.5	1.0	0.2 CT/VT/Meter Wh 0.5 Meter varh	± 5
2	100 to – 1000 GWh	1.0	2.0	0.5 CT/VT/ Meter Wh 1.0 Meter varh	± 7
3	0.75 to less than 100 GWh	1.5	3.0	0.5 CT/VT 1.0 Meter Wh 2.0 Meter varh	± 10
4	less than 750 MWh (Item 2)	1.5	n/a	Either 0.5 CT and 1.0 Meter Wh; or whole current connected <i>General Purpose meter MWh</i> : <ul style="list-style-type: none"> with a <i>data logger</i>; and meets the requirements of clauses 7.11.1(a) and (b) or 7.11.1(a) or (c). 	± 20 (Item 2a)
5	Less than x MWh (Item 3)	1.5 (Item 3b)	n/a	Either 0.5CT and 1.0 <i>meter Wh</i> ; or whole current connected <i>General Purpose meter Wh</i> ; <ul style="list-style-type: none"> with a <i>data logger</i>; and meets the requirements of clause 7.11.1(d) 	± 20 (Item 3a)

Type	Volume limit per annum per connection point	Maximum allowable overall error ($\pm\%$) (refer Tables 2 - 6) at full load		Minimum acceptable class or standard of components	Metering installation or data logger Clock Error (Seconds) in reference to EST
		active	reactive		
6	Less than y MWh (Item 4)	2.0 (Item 4b)	n/a	CT or whole-current connected <i>General Purpose meter</i> Wh with data processing used to convert <i>accumulated energy data</i> into <i>metering data</i> and to provide <i>estimated energy data</i> where necessary.	(Item 4a)
7	Volume limit not specified (Item 5)	(Item 6)	n/a	No <i>meter</i> Techniques for determination of <i>estimated energy data</i> to be included in the <i>metrology procedure</i> .	n/a

- Item 1: (a) For a type 3, 4, 5 and 6 *metering installation*, direct connected *meters* may be used if the *meters* meet the requirements of the relevant *Australian Standards* and International Standards which must be identified in the *metrology procedure*.
- (b) The *metering installation* types referred to in paragraph (a) must comply with any applicable specifications or guidelines (including any transitional arrangements) specified by the National Measurement Institute under the *National Measurement Act*.
- Item 2: *High Voltage* customers that require a *VT* and whose annual consumption is below 750MWh, must meet the relevant accuracy requirements of Type 3 *metering* for *active energy* only.
- Item 2a: For the purpose of clarification, the clock for a type 4 *metering installation* may be relaxed in the *metrology procedure* to accommodate evolving whole-current technologies that are acceptable in accordance with rule 7.13(a).
- Item 3: The following requirements apply in relation to a type 5 *metering installation*:

- (1) the installation must comply with the *metrology procedure* when converting *active energy* into *metering data*;
- (2) the value of “x” must be determined by each *Minister of a participating jurisdiction* and must be provided to *NEMMCO* for inclusion in the *metrology procedure*;
- (3) the maximum acceptable value of “x” determined under subparagraph (2) must be 750 MWh per annum;
- (4) the installation may provide delays in transferring the *interval energy data* to a remote location where access to a *telecommunications network* has been established;
- (5) delays under subparagraph (4) must be approved by the relevant *Minister of the participating jurisdiction* and the approval provided to *NEMMCO* for inclusion in the *metrology procedure*; and
- (6) the *metrology procedure* must record the value of “x” for each *participating jurisdiction*, and indicate how *interval energy data* will be established for a type 5 *metering installation* in that *participating jurisdiction* during the period of delay.

Item 3a: For the purpose of clarification, the clock error for a type 5 *metering installation* may be relaxed in the *metrology procedure* to accommodate evolving whole-current technologies that are acceptable in accordance with rule 7.13(a).

Item 3b: The maximum allowable error of a type 5 *metering installation* may be relaxed in the *metrology procedure* to accommodate evolving technologies providing that such relaxation is consistent with any regulations published under the *National Measurement Act*.

Item 4: The following requirements apply in relation to a type 6 *metering installation*:

- (1) a *metrology procedure* must include a procedure relating to converting *active energy* into *metering data*;
- (2) the value of “y” must be determined by each *Minister of a participating jurisdiction* and be provided to *NEMMCO* for inclusion in the *metrology procedure*;
- (3) the maximum acceptable value of “y” determined under subparagraph (2) must be 750 MWh per annum;
- (4) *accumulated energy data* can be transferred to a remote location where access to a *telecommunication network* has been established;
- (5) the *metrology procedure* must:

- (i) record the value of “y” for each *participating jurisdiction*;
 - (ii) identify the method by which *accumulated energy data* is to be converted into *trading interval* data in accordance with clause 7.9.3(b), and
 - (iii) the method by which *estimated energy data* is to be prepared during the period when the *accumulated energy data* is not available; and
- (6) devices within the installation may provide *accumulated energy data* in pre-determined daily time periods where such time periods are contained in the *metrology procedure*.

Item 4a: Any relevant clock errors for a type 6 *metering installation* are to be established in the *metrology procedure*.

Item 4b: The maximum allowable error of a type 6 *metering installation* may be relaxed in the *metrology procedure* providing that such relaxation is consistent with any regulations published under the *National Measurement Act*.

- Item 5:
- (a) A type 7 *metering installation* classification applies where a *metering installation* does not require a *meter* to measure the flow of electricity in a power conductor and accordingly there is a requirement to determine by other means the *energy data* that is deemed to flow in the power conductor.
 - (b) The condition referred to in paragraph (a) will only be allowed for *connection points* where NEMMCO in consultation with the *Local Network Service Provider* determines:
 - (1) the load pattern is predictable;
 - (2) for the purposes of *settlements*, the load pattern can be reasonably calculated by a relevant method set out in the *metrology procedure*; and
 - (3) it would not be cost effective to meter the *connection point* taking into account:
 - (i) the small magnitude of the *load*;
 - (ii) the *connection* arrangements; and
 - (iii) the geographical and physical location.
 - (c) The *metrology procedure* must include arrangements for type 7 *metering installations* that have been classified as *market loads*.

- (d) A *connection point* that meets the condition for classification as a type 7 *metering installation* does not limit that *connection point* from being metered in the future.

Item 6: The accuracy of the calculated *energy data* is to be in accordance with approved techniques for determining the flow of electricity in power conductors. The techniques, including algorithms, are to be included in the *metrology procedure*.

Table S7.2.3.2 Type 1 Installation – Annual Energy Throughput greater than 1,000 GWh

% Rated Load	Power Factor					
	Unity	0.866 lagging		0.5 lagging		Zero
	active	active	reactive	active	reactive	reactive
10	1.0%	1.0%	2.0%	n/a	n/a	1.4%
50	0.5%	0.5%	1.0%	0.7%	1.4%	1.0%
100	0.5%	0.5%	1.0%	n/a	n/a	1.0%

Table S7.2.3.3 Type 2 Installation – Annual Energy Throughput between 100 and 1,000 GWh

% Rated Load	Power Factor					
	Unity	0.866 lagging		0.5 lagging		Zero
	active	active	reactive	active	reactive	reactive
10	2.0%	2.0%	4.0%	n/a	n/a	2.8%
50	1.0%	1.0%	2.0%	1.5%	3.0%	2.0%
100	1.0%	1.0%	2.0%	n/a	n/a	2.0%

Table S7.2.3.4 Type 3 Installation – Annual Energy Throughput from 0.75 GWh to less than 100 GWh

% Rated Load	Power Factor					
	Unity	0.866 lagging		0.5 lagging		Zero
	active	active	reactive	active	reactive	reactive
10	2.5%	2.5%	5.0%	n/a	n/a	4.0%

50	1.5%	1.5%	3.0%	2.5%	5.0%	3.0%
100	1.5%	1.5%	3.0%	n/a	n/a	3.0%

Table S7.2.3.5 Type 4 or 5 Installation – Annual Energy Throughput less than 0.75 GWh

% Rated Load	Power Factor		
	Unity	0.866 lagging	0.5 lagging
	active	active	active
10	2.5%	2.5%	n/a
50	1.5%	1.5%	2.5%
100	1.5%	1.5%	n/a

Table S7.2.3.6 Type 6 Installation – Annual Energy Throughput less than 0.75 GWh

% Rated Load	Power Factor		
	Unity	0.866 lagging	0.5 lagging
	active	active	active
10	3.0%	n/a	n/a
50	2.0%	n/a	3.0%
100	2.0%	n/a	n/a

(NOTE: All measurements in Tables S7.2.3.2 – S7.2.3.6 are to be referred to 25 degrees Celsius).

- (a) The method for calculating the overall error is the vector sum of the errors of each component part (that is, $a + b + c$) where:

a = the error of the *voltage transformer* and wiring;

b = the error of the *current transformer* and wiring; and

c = the error of the *meter*.

- (b) If compensation is carried out then the resultant *metering system* error shall be as close as practicable to zero.

S7.2.4. Check metering

(a) *Check metering* is to be applied in accordance with the following Table:

Type	Energy (GWh pa) per metering point	Check Metering Requirements
1	greater than 1000	<i>Check metering installation</i>
2	100 to 1000	Partial <i>check metering</i>
3	0.75 to less than 100	No requirement
4, 5 and 6	Less than 0.75	No requirement

(b) A *check metering installation* involves either:

- (1) the provision of a separate *metering installation* using separate *current transformer* cores and separately fused *voltage transformer* secondary circuits, preferably from separate secondary windings: or
- (2) if in *NEMMCO's* absolute discretion it is considered appropriate, in the case of a *metering installation* located at the facility at one end of the *two-terminal link*, a *metering installation* located at the facility at the other end of a *two-terminal link*.

- (c) Where the *check metering installation* duplicates the *revenue metering installation* and accuracy level, the average of the two validated data sets will be used to determine the *energy* measurement.
- (d) Partial *check metering* involves the use of other *metering data* or operational data available to *NEMMCO* in 30 min electronic format as part of a validation process in accordance with clause 7.9.4.
- (e) The physical arrangement of partial *check metering* shall be agreed between the *responsible person* and *NEMMCO*.
- (f) *Check metering installations* may be supplied from secondary circuits used for other purposes and may have a lower level of accuracy than the *revenue metering installation*, but must not exceed twice the level prescribed for the *revenue metering installation*.

S7.2.5. Resolution and accuracy of displayed or captured data

Programmable settings available within a *metering installation*, *data logger* or any peripheral device, which may affect the resolution of displayed or stored data, must:

- (a) meet the requirements of the relevant *Australian Standards* and *International Standards* which must be identified in the *metrology procedure*; and
- (b) comply with any applicable specifications or guidelines (including any transitional arrangements) specified by the National Measurement Institute under the *National Measurement Act*.

S7.2.6. General design standards

S7.2.6.1 Design requirements

Without limiting the scope of detailed design, the following requirements must be incorporated in the design of each *metering installation*:

- (a) For *metering installations* greater than 1000 GWh pa per *metering point*, the *current transformer* core and secondary wiring associated with the *revenue meter* shall not be used for any other purpose unless otherwise agreed by NEMMCO.
- (b) For *metering installations* less than 1000 GWh pa per *metering point* the *current transformer* core and secondary wiring associated with the *revenue meter* may be used for other purposes (e.g. local *metering* or protection) provided the *responsible person* demonstrates to the satisfaction of NEMMCO that the accuracy of the *metering installation* is not compromised and suitable procedures/measures are in place to protect the security of the *metering installation*.
- (c) Where a *voltage transformer* is required, if separate secondary windings are not provided, then the *voltage* supply to each *metering installation* must be separately fused and located in an accessible position as near as practical to the *voltage transformer* secondary winding.
- (d) Secondary wiring must be by the most direct route and the number of terminations and links must be kept to a minimum.
- (e) The incidence and magnitude of burden changes on any secondary winding supplying the *metering installation* must be kept to a minimum.
- (f) *Meters* must:
 - (1) meet the requirements of relevant *Australian Standards* and *International Standards* which must be identified in the *metrology procedure*; and
 - (2) have a valid pattern approval issued under the authority of the National Measurement Institute or, until relevant pattern approvals exist, a valid type test certificate.

- (g) New *instrument transformers* must:
 - (1) meet the requirements of relevant *Australian Standards* and *International Standards* which must be identified in the *metrology procedure*; and
 - (2) have a valid pattern approval issued under the authority of the National Measurement Institute or, until relevant pattern approvals exist, a valid type test certificate.
- (h) Suitable *isolation* facilities are to be provided to facilitate testing and calibration of the *metering installation*.
- (i) Suitable drawings and supporting information, detailing the *metering installation*, must be available for maintenance and auditing purposes.

S7.2.6.2 Design guidelines

In addition to the above Design Requirements, the following guidelines should be considered for each *metering installation*:

- (a) The provision of separate secondary windings for each *metering installation* where a *voltage transformer* is required.
- (b) A *voltage* changeover scheme where more than one *voltage transformer* is available.

Schedule 7.3 - Inspection and Testing Requirements

S7.3.1. General

- (a) The *responsible person* must ensure that equipment comprised in a purchased *metering installation* has been tested to the required class accuracy with less than the uncertainties set out in Table S7.3.1.
- (b) The *responsible person* must ensure appropriate test certificates of the tests referred to in paragraph (a) are retained.
- (c) The *responsible person* (or any other person arranging for testing) must ensure that testing of the *metering installation* is carried out:
 - (1) in accordance with clause 7.6.1 and this schedule 7.3; or
 - (2) in accordance with an asset management strategy that defines an alternative testing practice (other than time-based) determined by the *responsible person* and approved by *NEMMCO*,
 and:
 - (3) in accordance with a test plan which has been registered with *NEMMCO*;
 - (4) to the same requirements as for new equipment where equipment is to be recycled for use in another site; and
 - (5) so as to include all data storage and processing components included in the *metrology procedure*, including algorithms used to prepare agreed load patterns.
- (d) *NEMMCO* must review the prescribed testing requirements in this schedule 7.3 every 5 years in accordance with equipment performance and industry standards.
- (e) The testing intervals may be increased if the equipment type/experience proves favourable.
- (f) The maximum allowable level of testing uncertainty (\pm) for all *metering* equipment must be in accordance with Table S7.3.1.

Table S7.3.1 Maximum Allowable Level of Testing Uncertainty (\pm)

Description	Metering Equipment Class
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		Metering Equipment Class				
		Class 0.2	Class 0.5	Class 1.0	General Purpose	Class 2.0
In Laboratory	CTs ratio phase	0.05% 0.07 crad	0.1% 0.15 crad	n/a	n/a	n/a
	VTs ratio Phase	0.05% 0.05 crad	0.1% 0.1 crad	n/a	n/a	n/a
	Meters Wh	0.05/cosφ%	0.1/cosφ%	0.2/cosφ%	0.2/cosφ%	n/a
	Meters varh	n/a	0.2/sinφ%	0.3/sinφ%	n/a	0.4/sinφ%
In Field	CTs ratio Phase	0.1% 0.15 crad	0.2% 0.3 crad	n/a	n/a	n/a
	VTs ratio Phase	0.1% 0.1 crad	0.2% 0.2 crad	n/a	n/a	n/a
	Meters Wh	0.1/cosφ%	0.2/cosφ%	0.3/cosφ%	0.3/cosφ%	n/a
	Meters varh	n/a	0.3/sinφ%	0.4/sinφ%	n/a	0.5/sinφ%

Where cosφ is the power factor at the test point under evaluation.

Table S7.3.2 Maximum Period Between Tests

Unless the *responsible person* has developed an asset management strategy that defines practices that meet the intent of this schedule 7.3 and is approved by NEMMCO, the maximum period between tests must be in accordance with this Table S7.3.2.

Description	Metering Installation Type				
	Type 1	Type 2	Type 3	Type 4	Types 5 & 6
CT	10 years	10 years	10 years	10 years	10 years
VT	10 years	10 years	10 years		n/a
Burden tests	When <i>meters</i> are tested or when changes are made				
CT connected Meter (electronic)	5 years	5 years	5 years	5 years	5 years

CT connected Meter (induction)	2.5 years	2.5 years	5 years	5 years	5 years
Whole-current (Direct Connected Meter)	The testing and inspection requirements must be in accordance with an asset management strategy. Guidelines for the development of the asset management strategy must be recorded in the <i>metrology procedure</i> .				

Table S7.3.3 Period Between Inspections

Unless the *responsible person* has developed an asset management strategy that meets the intent of this schedule 7.3 and is approved by *NEMMCO*, the period between inspections must be in accordance with this Table S7.3.3.

Description	Metering Installation Type			
	Type 1	Type 2	Type 3	Type 4, 5 & 6
<i>Metering installation equipment inspection</i>	2.5 years Note: increased inspection period allowed because of <i>check metering installation</i> requirements.	12 months (2.5 years if <i>check metering</i> installed)	> 10 GWh: 2 years 2 ≤ ≤10 GWh: 3 years <2 GWh: when meter is tested.	When meter is tested.

S7.3.2. Technical Guidelines

- (a) *Current transformer* and *voltage transformer* tests are primary injection tests or other testing procedures as approved by *NEMMCO*.
- (b) The calculations of accuracy based on test results are to include all reference standard errors.
- (c) An "estimate of testing uncertainties" must be calculated in accordance with the ISO "Guide to the Expression of Uncertainty for Measurement".
- (d) Where operational *metering* is associated with *settlements metering* then a shorter period between inspections is recommended.
- (e) For $\sin\phi$ and $\cos\phi$ refer to the ISO "Guide to the Expression of Uncertainty in Measurement", where $\cos\phi$ is the *power factor*.
- (f) A typical inspection may include:
 - (1) check the seals;
 - (2) compare the pulse counts;

- (3) compare the direct readings of *meters*;
- (4) verify *meter* parameters and physical connections; and
- (5) *current transformer* ratios by comparison.

Schedule 7.4 - Metering Provider

S7.4.1 General

- (a) A *Metering Provider* must be accredited by and registered by *NEMMCO*. *NEMMCO* must accredit and register a *Metering Provider* only for the type of work the *Metering Provider* is qualified to provide.
- (b) *NEMMCO* must establish a qualification process for *Metering Providers* that enables registration to be achieved in accordance with the requirements of this schedule 7.4.
- (c) **[Deleted]**
- (d) A *Metering Provider* must have the necessary licenses in accordance with appropriate State and Territory requirements.
- (e) A *Metering Provider* must ensure that any *metering* equipment it installs is suitable for the range of operating conditions to which it will be exposed (e.g. temperature; impulse levels), and operates within the defined limits for that equipment.
- (f) A *Metering Provider* must ensure that the *metering installation* is installed and maintained in accordance with the *metrology procedure*.

S7.4.2 Categories of registration

- (a) Registrations, in relation to *metering installation* types 1, 2, 3 and 4, must be categorised in accordance with Tables S7.4.1, S7.4.2 and S7.4.3 or other procedures approved by *NEMMCO*.
- (b) In relation to *metering installation* types 5, 6 and 7, *NEMMCO* must establish categories of registration which are consistent with the service requirements established in the *metrology procedure*.
- (c) *NEMMCO* may establish *Accredited Service Provider categories* of registration for a *Metering Provider* in accordance with clause S7.4.5.

Table S7.4.1 Categories of registration for accreditation

Category	Competency
1C	Class 0.2 CTs with < 0.1% uncertainty.
1V	Class 0.2 VTs with < 0.1% uncertainty.
1M	Class 0.2 Wh meters with < 0.1/cos ϕ % uncertainty and class 0.5 varh meters with < 0.3/sin ϕ % uncertainty.
1A	Class 0.2 CTs, VTs, Wh meters; class 0.5 varh meters; the total installation to 0.5%.

Category	Competency
	Wh with < 0.2% uncertainty at unity <i>power factor</i> ; 1.0% for varh with <0.4% uncertainty at zero <i>power factor</i> .
2C	Class 0.5 CTs with < 0.2% uncertainty.
2V	Class 0.5 VTs with < 0.2% uncertainty.
2M	Class 0.5 Wh meters with < 0.2/cos ϕ % uncertainty and class 1.0 varh meters with <0.4/sin ϕ % uncertainty.
2A	Class 0.5 CTs, VTs, Wh meters; class 1.0 varh meters; the total installation to 1.0%. Wh with < 0.4% uncertainty at unity <i>power factor</i> ; 2.0% for varh with <0.5% uncertainty at zero <i>power factor</i> .

Table S7.4.2 Categories of registration for accreditation

Category	Competency
3M	Class 1.0 Wh meters with < 0.3/cos ϕ % uncertainty and class 2.0 varh meters with <0.5/sin ϕ % uncertainty.
3A	Class 0.5 CTs, VTs; class 1.0 Wh meters; class 2.0% varh meters; the total installation to 1.5%. Wh with < 0.5% uncertainty at unity <i>power factor</i> ; 3.0% for varh with <0.6% uncertainty at zero <i>power factor</i> .
4M	Class 1.0 Wh meters and class 1.5 Wh meters with <0.3/cos ϕ % uncertainty

Table S7.4.3 Categories of registration for accreditation

Category	Competency
L	Approved Communication Link Installer

S7.4.3 Capabilities of Metering Providers for metering installations types 1, 2, 3 and 4

Category 1A, 2A, 3A and 4M *Metering Providers* must be able to exhibit the following capabilities to the reasonable satisfaction of *NEMMCO*:

- (a) Detailed design and specification of *metering* schemes, including:
 - (1) knowledge and understanding of this Chapter 7;
 - (2) knowledge of equipment (*meters, current transformers* and where applicable *voltage transformers*);
 - (3) design experience including knowledge of *current transformers* and where applicable *voltage transformers* and the effect of burdens on performance;

- (4) ability to calculate summation scheme values, multipliers, etc; and
 - (5) ability to produce documentation, such as single line diagrams, panel layouts and wiring diagrams.
- (b) Programming and certification requirements for *metering installations* to the required accuracy, including:
 - (1) licensed access to *metering* software applicable to all equipment being installed by the *Metering Provider*;
 - (2) ability to program requirements by setting variables in *meters*, summators, modems, etc;
 - (3) management of the testing of all equipment to the accuracy requirements specified in this Chapter 7;
 - (4) certifications that all calibration and other *meter* parameters have been set, verified and recorded prior to *meters*, *data loggers*, etc., being released for installation;
 - (5) all reference/calibration equipment for the purpose of meeting test or inspection obligations must be tested to ensure full traceability to test certificates issued by a NATA accredited body or a body recognised by NATA under the International Laboratory Accreditation Corporation ('ILAC') mutual recognition scheme and documentation of the traceability must be provided to NEMMCO on request; and
 - (6) compliance with ISO/IEC Guide 25 "General Requirements for the Competence of Calibration and Testing Laboratories" with regard to the calculation of uncertainties and accuracy.
- (c) Installation and commissioning of *metering installations* including the remote accessing of data, including:
 - (1) the use of calibrated test equipment to perform primary injection tests and field accuracy tests;
 - (2) the availability of trained and competent staff to install and test *metering installations* to determine that installation is correct; and
 - (3) the use of test procedures to confirm that the *metering installation* is correct and that *metering* constants are recorded and/or programmed correctly.
- (d) Inspection and maintenance of *metering installations* and equipment, including:

- (1) regular readings of the measurement device where external *data loggers* or recorders to be used (6 monthly) and verification with *NEMMCO* records;
 - (2) approved test and inspection procedures to perform appropriate tests as detailed in this Chapter 7;
 - (3) calibrated field test equipment for primary injection and *meter* testing to the required levels of uncertainty; and
 - (4) secure documentation system to maintain *metering* records for all work performed on a *metering installation*, including details of the security method used.
- (e) Verification of *revenue metering data* and *check metering data*, as follows:
- (1) on commissioning *metering data*, verification of all readings, constraints (adjustments) and multipliers to be used for converting raw data to consumption data; and
 - (2) on inspection, testing and/or maintenance, verification that readings, constants and multipliers are correct by direct conversion of *meter readings* and check against the *metering database*.
- (f) Quality System as AS 9000 series standards, including:
- (1) a quality system to AS/NZ ISO 9000 series applicable to the work to be performed:
 - Type 1 - full implementation of AS/NZ ISO 9002;
 - Type 2 - full implementation of AS/NZ ISO 9002;
 - Type 3 - implementation of AS/NZ ISO 9002 to a level agreed with *NEMMCO*;
 - Type 4 - implementation of AS/NZ ISO 9002 to a level agreed with *NEMMCO*;
 - (2) the calculations of accuracy based on test results are to include all reference standard errors;
 - (3) an estimate of Testing Uncertainties which must be calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement"; and
 - (4) a knowledge and understanding of the appropriate standards and guides, including those in the *Rules*.

S7.4.4 Capabilities of Metering Providers for metering installations types 5, 6 and 7

Metering Providers, who apply for categories of *Metering Provider* accreditation of *metering installations* types 5, 6 and / or 7, must be able to exhibit, to the reasonable satisfaction of *NEMMCO*:

- (a) all of the capabilities relevant to that type of *metering installation* which are included in clause S7.4.3;
- (b) any relevant capabilities required for data processing specified in the *metrology procedure*; and
- (a) an acceptable standard of performance, determined by reference to the *metrology procedure*, for each of the processes and devices identified in the *metrology procedure*.

S7.4.5 Capabilities of the Accredited Service Provider category

- (a) The *Accredited Service Providers categories* established by *NEMMCO* under clause S7.4.2(c) may perform work relating to the installation of any types 1, 2, 3, 4, 5 or 6 *metering installations*.
- (b) *NEMMCO* must include *Accredited Service Provider categories* in the accreditation guidelines prepared and *published* under clause 7.4.2(ba).
- (c) *NEMMCO* may determine:
 - (1) the competencies of a *Metering Provider* registered in each *Accredited Service Provider category* provided that those competencies are consistent with any service requirements established in the *metrology procedure* in respect of the work performed under paragraph (a); and
 - (2) different competencies for each *Accredited Service Provider category* for each *participating jurisdiction*.

Schedule 7.5 - Metering Register

S7.5.1. General

- (a) The *metering register* forms part of the *metering database* and holds static *metering* information associated with *metering installations* defined by the *Rules* that determines the validity and accuracy of *metering data*.
- (b) The purpose of the *metering register* is to facilitate:
 - (1) the registration of *connection points*, *metering points* and affected *Registered Participants*;
 - (2) the verification of compliance with the *Rules*; and
 - (3) the auditable control of changes to the registered information.
- (c) The data in the *metering register* is to be regarded as confidential and would only be released to the appropriate party in accordance with rule 7.7.

S7.5.2. Metering register information

Metering information to be contained in the *metering register* should include, but is not limited to the following:

- (a) *Connection* and *metering point* reference details, including:
 - (1) agreed locations and reference details (eg drawing numbers);
 - (2) loss compensation calculation details;
 - (3) site identification names;
 - (4) details of *Market Participants* and *Local Network Service Providers* associated with the *connection point*;
 - (5) nomination of the *responsible person*; and
 - (6) transfer date for *Second-Tier Customer* and *Non-Registered Second-Tier Customer metering data* (i.e. to another *Market Customer*).
- (b) The identity and characteristics of *metering* equipment (ie *instrument transformers*, *revenue metering installation* and *check metering installation*), including:
 - (1) serial numbers;
 - (2) *metering installation* identification name;

- (3) *metering installation* types and models;
 - (4) *instrument transformer* ratios (available and connected);
 - (5) current test and calibration programme details, test results and references to test certificates;
 - (6) asset management plan and testing schedule;
 - (7) calibration tables, where applied to achieve *metering installation* accuracy;
 - (8) *Metering Provider(s)* details;
 - (9) summation scheme values and multipliers; and
 - (10) data register coding details.
- (c) Data communication details, including:
- (1) telephone number(s) for access to data;
 - (2) communication equipment type and serial numbers;
 - (3) communication protocol details or references;
 - (4) data conversion details;
 - (5) user identifications and access rights; and
 - (6) 'write' password (to be contained in a hidden or protected field).
- (d) Data validation, substitution and estimation processes agreed between affected parties, including:
- (1) algorithms;
 - (2) data comparison techniques;
 - (3) processing and alarms (eg *voltage* source limits; phase-angle limits);
 - (4) *check metering* compensation details; and
 - (5) alternate data sources.
- (e) Data processing prior to the *settlement* process, including algorithms for:
- (1) *generation* half-hourly 'sent-out' calculation;
 - (2) customer half-hourly *load* calculation; and

(3) *Local Retailer net load* calculation.

CHAPTER 8

8. Administrative Functions

8.1 Administrative functions

8.1.1 [Deleted]

8.1.2 [Deleted]

8.1.3 Purpose

This Chapter describes some of the key processes associated with the administration of the *Rules*, being the following:

- (a) the procedures for resolving certain disputes;
- (b) **[Deleted]**
- (c) **[Deleted]**
- (d) **[Deleted]**
- (e) confidentiality provisions governing *Registered Participants* and *NEMMCO*;
- (f) monitoring and reporting requirements; and
- (g) the structure and responsibilities of the *Reliability Panel*.

8.2 Dispute Resolution

8.2.1 Application and guiding principles

- (a) This rule 8.2 applies to any dispute which may arise between two or more *Registered Participants* about:
 - (1) the application or interpretation of the *Rules*;
 - (2) the failure of any *Registered Participants* to reach agreement on a matter where the *Rules* require agreement or require the *Registered Participants* to negotiate in good faith with a view to reaching agreement;
 - (3) **[Deleted]**
 - (4) the proposed access arrangements or *connection agreements* of an *Intending Participant* or a *Connection Applicant*;

- (5) the payment of moneys under or concerning any obligation under the *Rules*;
- (6) any other matter relating to or arising out of the *Rules* to which a contract between two or more *Registered Participants* provides that the dispute resolution procedures under the *Rules* are to apply;
- (7) any other matter relating to or arising out of the *Rules* in respect of which two or more *Registered Participants* have agreed in writing that this rule 8.2 should apply; or
- (8) any other matter that the *Rules* provide may or must be dealt with under this rule 8.2,

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

- (a1) For the purposes of this rule 8.2 only, "*Registered Participant*" is deemed to include not just *Registered Participants* but also *NEMMCO* and *Connection Applicants* who are not otherwise *Registered Participants*, except that this will not be the case where the term "*Registered Participant*":

- (1) is used in clauses 8.2.2(b)(4), 8.2.2(d), 8.2.3(a), 8.2.3(b)(5) and 8.2.5(e);
- (2) first occurs in clauses 8.2.3(b), (b)(3), (b)(4) or (c); or
- (3) last occurs in clauses 8.2.4(a) or 8.2.9(c).

- (b) **[Deleted]**

- (c) **[Deleted]**

- (d) The dispute resolution regime in this rule 8.2 provides procedures to resolve disputes between parties, not sanctions for breach of the *Rules*. The dispute resolution processes may indicate that a breach of the *Rules* has occurred and the resolution or determination of the dispute may take account of the damage thereby caused to a party. Any action for breach of the *Rules* may only be taken by the *AER* acting in accordance with the *National Electricity Law*.

- (e) It is intended that the dispute resolution regime set out in or implemented in compliance with the *Rules* and described in detail in this rule 8.2 should to the extent possible:

- (1) be guided by the *national electricity objective*;
- (2) be simple, quick and inexpensive;
- (3) preserve or enhance the relationship between the parties to the dispute;

- (4) take account of the skills and knowledge that are required for the relevant procedure;
 - (5) observe the rules of natural justice;
 - (6) place emphasis on conflict avoidance; and
 - (7) encourage resolution of disputes without formal legal representation or reliance on legal procedures.
- (f) Except as provided in the *National Electricity Law* and clause 8.2.1(g), where any dispute of a kind set out in clause 8.2.1(a) arises, the parties concerned must comply with the procedures set out in clauses 8.2.4 to 8.2.10 and 8.2.12 and, where the dispute is referred to a *DRP*, a determination of the *DRP* is final and binding on the parties.
- (g) Notwithstanding clause 8.2.1(f), a party may seek an urgent interlocutory injunction from a court of competent jurisdiction.
- (h) Rule 8.2 does not apply to:
 - (1) a decision by *NEMMCO* regarding an exemption under clause 2.2.1(c);
 - (2) a decision by *NEMMCO* under clause 2.2.2 not to approve the classification of a *generating unit* as a *scheduled generating unit*;
 - (3) a decision by *NEMMCO* under clause 2.2.3 not to approve the classification of a *generating unit* as a *non-scheduled generating unit*;
 - (4) a decision by *NEMMCO* under clause 2.9.2(c);
 - (5) a decision by *NEMMCO* to reject a notice from a *Market Customer* under clause 2.10.1(d);
 - (6) a determination by *NEMMCO* under clause 3.3.8 of the *maximum credit limit* for a *Market Participant*;
 - (7) a decision by *NEMMCO* under clause 3.8.3 to refuse an application for aggregation;
 - (8) a decision by *NEMMCO* under clause 3.15.11 to reject a *reallocation request*;
 - (9) a decision by *NEMMCO* to issue a notice under clause 4.11.1(d);
 - (10) a decision by *NEMMCO* under clause 7.1.2(b) to refuse to permit a *Market Participant* to participate in the *market* in respect of a *connection point*;

- (11) a decision by *NEMMCO* whether or not to deregister a *Metering Provider* under clause 7.4.3(a), (aa) or (b), to suspend a *Metering Provider* from a category of registration under clause 7.4.3(aa) or to impose agreed constraints on the continued operation of a *Metering Provider*;
- (12) A dispute concerning the price of a *SRAS* agreement or a tender conducted by *NEMMCO* for the acquisition of *system restart ancillary services* under clause 3.11.5;
- (13) a dispute of a kind referred to in clause 5.6.6;
- (14) a *transmission services access dispute* to which Part K of Chapter 6A applies;
- (15) a *distribution services access dispute* to which Part L of Chapter 6 applies; or
- (16) a decision by *NEMMCO* under clause 2.2.7 not to approve the classification of a *semi-scheduled generating unit*.

8.2.2 The Dispute Resolution Adviser

- (a) The *AER* must appoint a person or persons from time to time to perform the functions of the Dispute Resolution Adviser (the "*Adviser*"), on such terms and conditions as the *AER* may determine.
- (b) The *Adviser* must:
 - (1) have a detailed understanding and experience of dispute resolution practice and procedures which do not involve litigation (alternative dispute resolution);
 - (2) have the capacity to determine the most appropriate alternative dispute resolution procedures in particular circumstances;
 - (3) have an understanding of the electricity industry or the capacity to quickly acquire such an understanding; and
 - (4) not be a *Registered Participant* or *NEMMCO* or be associated, directly or indirectly, with a *Registered Participant*, *NEMMCO* or the *AER*.
- (c) The primary function of the *Adviser* is to attend to any matters necessary to ensure the effective operation of:
 - (1) the Stage 1 dispute resolution process set out in clause 8.2.4; and

- (2) the Stage 2 dispute resolution process set out in clauses 8.2.5 and 8.2.6A to 8.2.6D.
- (d) The *Adviser* must take reasonable steps to keep *Registered Participants* and *NEMMCO* informed, and in any case must report at least quarterly to *Registered Participants* and *NEMMCO*, about the operation of the dispute resolution processes established under the *Rules*.
- (e) The *Adviser* must establish and maintain a pool of persons from which members of a *dispute resolution panel* (“*DRP*”) may be selected in accordance with clause 8.2.6A.
- (f) In selecting persons for the pool, the *Adviser* must have regard to:
 - (1) the need for members of a *DRP* to have an appropriate range of skills; and
 - (2) the need for persons in the pool to be drawn from all *participating jurisdictions*.
- (g) The *Adviser* must review the composition of the pool at least every two years.
- (h) The *Adviser* may issue guidance notes relating to:
 - (1) the form and content of a *dispute management system* (“*DMS*”); and
 - (2) the use and conduct of mediation in the Stage 1 dispute resolution process.

8.2.3 Dispute management systems of Registered Participants and NEMMCO

- (a) Each *Registered Participant* and *NEMMCO* must adopt and implement a *DMS*.
- (b) The *DMS* of a *Registered Participant* or *NEMMCO* must:
 - (1) be consistent with guidance notes of the *Adviser* relating to the form and content of a *DMS*;
 - (2) nominate a *DMS Contact* to be the first point of contact for the notification of disputes;

- (3) provide that the *Registered Participant* or *NEMMCO* (as the case may be) must respond to a request for information (being information that is relevant to any of the matters set out in clause 8.2.1(a)) from another *Registered Participant* within 5 *business days* of receiving the request;
 - (4) set out the procedures of the *Registered Participant* or *NEMMCO* (as the case may be) for responding to requests for information from other *Registered Participants*; and
 - (5) set out any requirements and procedures necessary to ensure that the *Registered Participant* or *NEMMCO* (as the case may be) is able to comply with the requirements and time limits set out in clause 8.2.4.
- (c) A *Registered Participant* or *NEMMCO* must provide a copy of its *DMS* upon being requested to do so by another *Registered Participant* or the *Adviser*.

8.2.4 Stage 1 - dispute resolution through Registered Participants' DMS

- (a) A *Registered Participant* may activate the dispute resolution mechanisms in this clause by serving a *DMS referral notice* on the *DMS Contact* of one or more other *Registered Participants* or *NEMMCO* (as the case may be).
- (b) Except where the *Rules* provides for another time period to apply, and subject to clause 8.2.4(k), a *DMS referral notice* must be served no later than 60 *business days* after the date on which the making of a disputed decision or the occurrence of disputed conduct could reasonably have become known to a *Registered Participant* affected by it.
- (c) A *DMS referral notice*:
 - (1) must be in a form approved and *published* by the *Adviser*;
 - (2) must contain a statement setting out the circumstances giving rise to the dispute; and
 - (3) may request the person on whom it is to be served to provide information that is relevant to any of the matters set out in clause 8.2.1(a).
- (d) Within 5 *business days* of service of a *DMS referral notice*, representatives of:
 - (1) the *Registered Participant* that served the notice; and
 - (2) every person on whom the notice was served,must meet to determine, by agreement, the further conduct of the dispute.

- (e) A meeting of *Registered Participants'* representatives:
 - (1) may be conducted in person, by telephone, video-conference or like method of real time communication;
 - (2) may agree that the dispute should be conducted by any consensual means, including by direct discussions between *Registered Participants* or by mediation; and
 - (3) must consider whether any other *Registered Participant* should be served with a *DMS referral notice*.
- (f) Subject to clause 8.2.4(g), a meeting of *Registered Participants'* representatives may agree to keep confidential:
 - (1) the fact that a dispute exists between them; and
 - (2) any information exchanged between them for the purposes of attempting to resolve the dispute.
- (g) *NEMMCO* must immediately notify the *Adviser* if:
 - (1) it serves a *DMS referral notice* on the *DMS Contact* of another *Registered Participant*, or
 - (2) it is served with a *DMS referral notice* by another *Registered Participant*.

The notification to the *Adviser* must include a list setting out each *Registered Participant* that *NEMMCO* considers may have an interest in the dispute, together with an indication as to whether *NEMMCO* has served a *DMS referral notice* in relation to the dispute on that *Registered Participant*, or has otherwise made the *Registered Participant* aware of the dispute.

- (h) If *Registered Participants'* representatives, meeting in accordance with clauses 8.2.4(d) and (e), all agree that a *Registered Participant* that was not previously a party to the dispute should be served with a *DMS referral notice*, any one or more of them may serve a *DMS referral notice* on that other *Registered Participant*. Where a *Registered Participant* is served with such a notice, that *Registered Participant* must meet with the other parties to the dispute to determine the further conduct of the dispute in accordance with clauses 8.2.4(d), (e) and (f).
- (i) If:
 - (1) a *Registered Participant* on whom a *DMS referral notice* is served does not agree to become a party to the dispute; or

- (2) the dispute is not resolved within 20 *business days* (or such lesser period as is agreed by all the parties) after the day on which a *DMS referral notice* was last served on a *Registered Participant*,

any *Registered Participant* that has served a *DMS referral notice* in relation to the dispute or that has agreed to become a party to the dispute may, no later than 60 *business days* after the day on which a *DMS referral notice* was last served on a *Registered Participant*, refer the matter to the *Adviser* in accordance with clause 8.2.5.

- (j) If the dispute has not been referred to the *Adviser* within 60 *business days* after the day on which a *DMS referral notice* was last served on a *Registered Participant*, any obligations or requirements arising under this clause 8.2.4 in relation to that dispute cease to have effect.
- (k) Despite clauses 8.2.4(b) and 8.2.4(i) and any other provision of the *Rules* that specifies a time limit for the raising of a dispute, where:
 - (1) a *DMS referral notice* has not been served within the period specified in clause 8.2.4(b);
 - (2) a dispute has not been referred to the *Adviser* within the time specified in clause 8.2.4(i); or
 - (3) any other dispute to which rule 8.2 applies has not been raised within the time limit specified in the *Rules* for the raising of such a dispute,

the dispute may be referred to the *Adviser*, and a *DRP* may determine the dispute if, in the opinion of the *DRP*, any prejudice suffered by any *Registered Participant* as a result of the dispute being referred outside the specified period would not, having regard to the circumstances giving rise to the failure to refer the dispute within the specified period, be unreasonable.

8.2.5 Stage 2 - dispute resolution process

- (a) A dispute may be referred to the *Adviser* by serving on the *Adviser* an *Adviser referral notice* in accordance with this clause 8.2.5. An *Adviser referral notice* must:
 - (1) be in a form approved and published by the *Adviser*;
 - (2) contain the names of all the parties to the dispute; and
 - (3) if the *Registered Participant* serving the *Adviser referral notice* does not agree to the *Adviser* attempting to resolve the dispute in accordance with clause 8.2.5(c)(1) and requires the *Adviser* to refer the dispute to a *DRP* for determination, must contain a statement to that effect.

- (b) Where a dispute is referred to the *Adviser*, the *Adviser* must immediately notify each *Registered Participant* that is party to the dispute of that fact. Each *Registered Participant* must, within 5 *business days* of being so notified, provide to the *Adviser* a statement setting out:
 - (1) a brief history of the dispute and the circumstances giving rise to it; and
 - (2) a statement of its issues in relation to the dispute.
- (c) The *Adviser* must, within 10 *business days* of being served with the *Adviser referral notice*, either:
 - (1) if the parties so agree, attempt to resolve the dispute by any means the *Adviser*, having regard to the principles set out in clause 8.2.1(e), considers appropriate; or
 - (2) if the parties do not agree to the *Adviser* attempting to resolve the dispute in accordance with clause 8.2.5(c)(1), refer the dispute to a *DRP* for determination in accordance with clauses 8.2.6A to 8.2.6D.
- (d) If the *Adviser*, having attempted to resolve the dispute in accordance with clause 8.2.5(c)(1), considers that such attempt is unlikely to result in resolution of the dispute within a reasonable time, the *Adviser* may, at any time, refer the dispute to a *DRP* for determination in accordance with clauses 8.2.6A to 8.2.6D.
- (e) Where the *Adviser* refers a dispute to a *DRP*, the *Adviser* must promptly *publish* to all *Registered Participants*, as well as promptly notify *NEMMCO*, the *AER* and the *AEMC* of, the fact that the referral has been made.

8.2.6A Establishment of Dispute Resolution Panel

- (a) Where the *Adviser* decides to refer a dispute for resolution by a *DRP*, the *Adviser* must establish the *DRP* to determine the dispute.
- (b) **[Deleted]**
- (c) The *Adviser* must consult with the parties to the Stage 1 dispute resolution process on the composition of the *DRP*. For the avoidance of doubt, the requirement to consult on the composition of the *DRP* does not apply with respect to a party that is later joined as, or that later opts to become, a party to the dispute.
- (d) Despite the requirement to consult set out in clause 8.2.6A(c), a decision of the *Adviser* as to the composition of the *DRP* is final and binding upon all parties to the dispute.

- (e) A *DRP* must comprise three members or, if the parties agree that the circumstances and nature of the dispute warrant a panel comprised of one or two members, the number so agreed.
- (f) The *Adviser* may appoint as a member of the *DRP* any person who is a member of the pool established under clause 8.2.2(e) and who in the reasonable opinion of the *Adviser* is either:
 - (1) expert in the field to which the dispute relates; or
 - (2) experienced or trained in dispute resolution techniques.
- (g) A person, whether a member of the pool established under clause 8.2.2(e) or not, is not eligible for appointment to a *DRP* if that person has any interest which may conflict with, or which may be seen to conflict with, the impartial resolution of the dispute. Where a person becomes aware of such a conflict after the *DRP* commences the determination of a dispute, the person must advise the parties to that effect.
- (h) Where:
 - (1) a *Registered Participant* who is a party to the dispute believes that a person appointed to a *DRP* has an interest which may conflict with the impartial resolution of the dispute; or
 - (2) a person appointed to a *DRP* discloses the existence of such an interest:

the person must not continue as a member of the *DRP*, except with the written consent of all parties to the dispute.
- (i) The *Adviser* may, if in his or her reasonable opinion no member of the pool established under clause 8.2.2(e) is:
 - (1) eligible for appointment to a *DRP*; or
 - (2) sufficiently skilled and experienced to resolve the dispute,

appoint to the *DRP* another person whom he or she considers to be eligible and sufficiently skilled and experienced, but who is not a member of the pool. A person so appointed is deemed to be a member of the pool on and from his or her appointment to the *DRP*.
- (j) Any person who has previously been a member of a *DRP* is eligible for appointment to another *DRP*.
- (k) The *Adviser* must nominate one of the *DRP* members to be the chairperson.

8.2.6B Parties to DRP Proceedings

- (a) The following persons are parties to the dispute before a *DRP*:
 - (1) the parties to the Stage 1 dispute resolution process referred by the *Adviser* to the *DRP*;
 - (2) any other *Registered Participant* that the *DRP* directs to become a party to the dispute in accordance with clause 8.2.6B(b); and
 - (3) any other *Registered Participant* that has opted to become a party to the dispute in accordance with clause 8.2.6B(c).
- (b) If the *DRP* considers that a *Registered Participant* should become a party to the dispute, it may direct the *Registered Participant* to become a party by giving that *Registered Participant's DMS Contact* written notice setting out:
 - (1) the names of the other parties to the dispute;
 - (2) a brief history of the dispute and the circumstances giving rise to it;
 - (3) the results of any previous dispute resolution processes undertaken pursuant to the *Rules* in respect of the dispute; and
 - (4) the grounds on which the *DRP* considers the *Registered Participant* should be made a party to the dispute.
- (c) Any *Registered Participant* that has an interest in a dispute may opt to become a party to the dispute by giving notice to the *DRP* that it wishes to do so. When a *Registered Participant* opts to become a party to the dispute in accordance with this clause 8.2.6B(c), the *DRP* must give that *Registered Participant's DMS Contact* written notice setting out:
 - (1) the names of the other parties to the dispute;
 - (2) a brief history of the dispute and the circumstances giving rise to it; and
 - (3) the results of any previous dispute resolution processes undertaken pursuant to the *Rules* in respect of the dispute.

8.2.6C Proceedings of the DRP

- (a) The *DRP* may give to the parties such directions as it considers necessary for the proper conduct of the proceedings, including, without limitation, a direction:
 - (1) that the proceedings be conducted at a specified venue or venues (including the premises of a party) at a specified time or times;

- (2) requiring the parties to prepare and exchange written submissions;
 - (3) requiring the parties to exchange documents; and
 - (4) limiting or prohibiting the cross examination of witnesses.
- (b) The *DRP* may direct the parties that the proceedings, or part of the proceedings, are to be conducted solely on the basis of documentary evidence and written submissions.
 - (c) The *DRP* may give to the parties such directions relating to the use and disclosure of information obtained from other parties to the dispute (including a direction to keep information confidential) as it considers necessary in the circumstances.
 - (d) At any time before it determines a dispute, the *DRP* may, with the consent of all parties, refer the dispute for mediation.
 - (e) The *DRP* must observe the rules of natural justice.
 - (f) Subject to clause 8.2.6C(e), the *DRP* is not bound by the rules of evidence and may inform itself in any manner it thinks fit.

8.2.6D Decisions of the *DRP*

- (a) A decision of a *DRP* on any matter may be made by a majority of the members comprising the *DRP*. Where a *DRP* comprising two members is unable to reach a unanimous decision, the decision of the chairperson will be the decision of the *DRP*.
- (b) Subject to clause 8.2.6D(c), a *DRP* must determine a dispute as quickly as possible, and in any case must do so:
 - (1) in the case of disputes involving two parties, within 30 *business days* after the dispute is referred to the *DRP*; and
 - (2) in the case of disputes involving more than two parties, within 70 *business days* after the dispute is referred to the *DRP*.
- (c) A *DRP* may extend either of the periods specified in clause 8.2.6D(b) for determination of a dispute if:
 - (1) all parties to the dispute agree in writing;
 - (2) the *AER* agrees in writing; or
 - (3) the dispute is referred to mediation under clause 8.2.6C(d).

- (d) A determination of the *DRP* may, without limitation of the *DRP*'s power, require a party to do any or all of the following in such manner and within such time or times as is specified in the determination:
 - (1) take specified action;
 - (2) refrain from taking specified action; or
 - (3) pay a monetary amount to another party.
- (e) Each party to a dispute that is required by a determination of the *DRP* to take specified action, to refrain from taking specified action or to pay a monetary amount must:
 - (1) do so within such period after being notified of the determination as is specified in the determination; and
 - (2) report to the *Adviser* as soon as practicable after doing so.

8.2.6 [Deleted]

8.2.7 Legal representation

- (a) In any meeting, negotiation or mediation forming part of the Stage 1 dispute resolution process, a party is entitled to be legally represented, but must not use a legal representative as its primary advocate except with the agreement of all other parties.
- (b) A *DRP* may give any direction it considers appropriate in relation to the role the parties' legal representatives may take in the proceedings.

8.2.8 Cost of dispute resolution

- (a) The costs of any dispute resolution processes (other than legal costs of one or more parties), including the costs incurred by the *Adviser* in performing functions of the *Adviser* under clauses 8.2.5, 8.2.6A, 8.2.6B, 8.2.6C or 8.2.6D and the costs of the *DRP* and its members, are to be borne equally by the parties to the dispute unless:
 - (1) clause 8.2.8(b) applies; or
 - (2) otherwise agreed between the parties.
- (b) Costs of the dispute resolution processes (including legal costs of one or more parties) may be allocated by the *DRP* for payment by one or more parties as part of any determination. Subject to clause 8.2.8(c), in deciding to allocate costs against one or more parties to a dispute, the *DRP* may have regard to any relevant matters, including (but not limited to) whether the

conduct of that party or those parties unreasonably prolonged or escalated the dispute or otherwise increased the costs of the *DRP* proceedings.

- (c) A party that disagrees with another party about the number of persons comprising a *DRP* is not to be taken, by reason only of that disagreement, to have unreasonably prolonged or escalated a dispute or otherwise increased the costs of the *DRP* proceedings.

8.2.9 Effect of resolution

- (a) Where the parties to a dispute reach agreement (whether or not the matter is before a *DRP*), the parties may execute a written agreement recording that a party has or parties have agreed:
 - (1) to take certain action;
 - (2) not to take certain action; or
 - (3) to make a monetary payment.
- (b) An agreement that is recorded in accordance with clause 8.2.9(a) and a determination of the *DRP* are binding on the parties to the dispute.
- (c) A requirement that a *Registered Participant* pay moneys, imposed on the *Registered Participant* under:
 - (1) a determination of the *DRP*; or
 - (2) an agreement that is recorded in accordance with clause 8.2.9(a),is an obligation under the *Rules* to pay such amounts. A *Registered Participant* or *NEMMCO* entitled to such amount may recover the amount in accordance with section 72 of the *National Electricity Law*.
- (d) A *Registered Participant* must comply with a requirement or determination of the *DRP* and any agreement that is recorded in accordance with clause 8.2.9(a). Failure to do so is a breach of the *Rules* in respect of which the *AER* may take action in accordance with the *National Electricity Law*.

8.2.10 Recording and publication

- (a) Where a *DRP* makes a determination, a copy of the determination must be forwarded to the *Adviser*.
- (b) The *DRP* must provide a copy of its determination (save to the extent that it contains confidential information), to the *AER* for publication.
- (c) The *AER* must, in accordance with the *Rules consultation procedures*, develop and issue guidelines relating to the confidentiality of information

obtained, used or disclosed for the purposes of resolving a dispute to which rule 8.2 applies.

8.2.11 Appeals on questions of law

A party to a dispute may appeal on a question of law against a decision or determination of a *DRP* in accordance with section 71 of the *National Electricity Law*.

8.2.12 Limitation of Liability

(a) To the extent permitted by law, none of:

- (1) the *Adviser*;
- (2) **[Deleted]**
- (3) a person serving as a member of a *DRP*; or
- (4) a person to whom a dispute is referred for mediation or other form of resolution under a provision of rule 8.2,

is liable for any loss, damage or liability suffered or incurred by a *Registered Participant* or any other person as a consequence of any act or omission of those persons which was done in good faith in connection with the dispute.

(b) Each of the *Adviser*, a person serving as a member of a *DRP* and a person to whom a dispute is referred for mediation or other form of resolution may, before acting in relation to the dispute, require the parties to the dispute (or any one of them) to execute a release and indemnity in relation to any loss, damage or liability that that person would, but for the release or indemnity, suffer or incur as a consequence of any act or omission done in good faith in connection with the dispute.

8.2A B2B Determination Disputes

8.2A.1 Application of rule 8.2

Rule 8.2 applies to *B2B Determination Disputes* but with the modifications set out in clause 8.2A.2.

8.2A.2 How rule 8.2 applies

For the purposes of its application to a *B2B Determination Dispute*, rule 8.2 is modified as follows:

(a) For clause 8.2.1(a) substitute:

- "(a) This clause 8.2 applies to a *B2B Determination Dispute*."
- (b) In clause 8.2.1(a1) delete "and *Connection Applicants* who are otherwise *Registered Participants*" and substitute "clause 8.2.9(c)" for "clauses 8.2.4(a) or 8.2.9(c)".
- (c) For clause 8.2.1(e)(1) substitute:
- “(1) be guided by the *B2B Objective* and the *B2B Principles*”.
- (d) In clause 8.2.1(f):
- (i) after “clause 8.12” insert “(as modified by clause 8.2A.2)”; and
- (ii) insert a new sentence at the end of the clause as follows:
- “The subject matter of a *B2B Determination Dispute* which has been determined by the *DRP* cannot be the subject of further review.”
- (e) For the avoidance of doubt, clause 8.2.3 does not apply to the *Information Exchange Committee*.
- (f) The contact for the *Information Exchange Committee* in relation to disputes will be the *DMS Contact* for *NEMMCO*.
- (g) Clause 8.2.4 does not apply.
- (h) Clauses 8.2.5(a), (b), (c) and (d) do not apply.
- (i) Insert new clauses 8.2.5(d1) to (d4) as follows:
- “(d1) A *Market Customer*, *Local Retailer* or *Distribution Network Service Provider* adversely affected by an *Information Exchange Committee Recommendation* or a *B2B Decision* may apply to the *Adviser* for review of that *Information Exchange Committee Recommendation* or that *B2B Decision*. The application must be made within 10 *business days* of publication of the *Information Exchange Committee Recommendation* or the *B2B Decision*, state grounds for the review and give full particulars of where the applicant believes the *Information Exchange Committee Recommendation* or *B2B Decision* is in error.
- (d2) Where an application for review of an *Information Exchange Committee Recommendation* is made, *NEMMCO* must not take any further action in relation to that *Information Exchange Committee Recommendation* until the *DRP* has made its decision in relation to the dispute.
- (d3) An application for review of a *B2B Decision* stays the *B2B Decision*.

- (d4) On receiving the application the *Adviser* must refer the dispute to a *DRP* for determination in accordance with clauses 8.2.6A to 8.2.6D.”.
- (j) In clause 8.2.6A(a), for “decides to refer” substitute “refers”.
- (k) In clause 8.2.6A(c), for “the parties to the Stage 1 dispute resolution process” substitute “the parties to the dispute”.
- (l) In clause 8.2.6A(h)(1) before “a *Registered Participant*” insert “the *Information Exchange Committee* or”.
- (m) For clause 8.2.6B(a)(1) substitute:
 - “(1) the *Registered Participant* making application for a review of the *Information Exchange Committee Recommendation* or the *B2B Decision*, a *Registered Participant* affected by the *Information Exchange Committee Recommendation* or the *B2B Decision* the subject of the application for review and the *Information Exchange Committee* or, if the *Information Exchange Committee* is unable to act as a party, any other *Registered Participant* wishing to support the position of the *Information Exchange Committee*,”.
- (n) At the end of clause 8.2.6B(a) insert:

“*NEMMCO* is a party to an application for review of a *B2B Decision* and may be a party, in accordance with clauses 8.2.6B(b) and 8.6.2(B)(c), to an application for review of an *Information Exchange Committee Recommendation*. In addition:

 - (1) where the *Information Exchange Committee* is unable to act as a party to a *B2B Determination Dispute*, and another *Registered Participant* is a party to support the position of the *Information Exchange Committee*, the *Information Exchange Committee* must give to that party all assistance including access to both documents and *Members*. A *Registered Participant* of which a *Member* is an employee must ensure that *Member* is available to provide such assistance; and
 - (2) where *NEMMCO* is a party to a *B2B Determination Dispute*, the *Information Exchange Committee* must give *NEMMCO* all assistance including access to both documents and *Members*. A *Registered Participant* of which a *Member* is an employee must ensure that *Member* is available to provide such assistance.”.
- (o) Clause 8.2.6C(d) does not apply.
- (p) Insert a new clause 8.2.6C(g) as follows:

- “(g) In considering a *B2B Determination Dispute*, the *DRP* must conduct a full reconsideration of the *Information Exchange Committee Recommendation* or *B2B Decision* and:
- (1) can rely on any material available and is not confined to only considering material that was before the *Information Exchange Committee* in relation to an *Information Exchange Committee Recommendation* or *NEMMCO* in relation to a *B2B Decision*; and
 - (2) may exercise all powers and discretions that are conferred on the *Information Exchange Committee* in relation to an *Information Exchange Committee Recommendation* or *NEMMCO* in relation to a *B2B Decision*.”.
- (q) Insert a new clause 8.2.6D(da) as follows:
- “(da)The *DRP* must make a decision in writing:
- (1) affirming the *Information Exchange Committee Recommendation* or the *B2B Decision*;
 - (2) varying the *Information Exchange Committee Recommendation* or the *B2B Decision*; or
 - (3) setting aside the *Information Exchange Committee Recommendation* or the *B2B Decision* and substituting its own decision.”.
- (r) Clause 8.2.7(a) does not apply.
- (s) In clause 8.2.8(a) after "8.2.6D" insert "(as modified by clause 8.2A.2)".
- (t) Clauses 8.2.9(a), (b) and (c)(2) do not apply.
- (u) In clause 8.2.9(d) after "*Registered Participant*" insert "and the *Information Exchange Committee*", and delete "and any agreement that is recorded in accordance with clause 8.2.9(a)".
- (v) In clause 8.2.12(a), after "*Registered Participant*" insert "or the *Information Exchange Committee*".

8.3 [Deleted]

8.4 [Deleted]

8.5 [Deleted]

8.6 Confidentiality

8.6.1 Confidentiality

- (a) Each *Registered Participant* and *NEMMCO* (each being a "Recipient" for the purposes of this rule 8.6) must use all reasonable endeavours to keep confidential any *confidential information* which comes into the possession or control of that Recipient or of which that Recipient becomes aware.
- (b) A Recipient:
 - (1) must not disclose *confidential information* to any person except as permitted by the *Rules*;
 - (2) must only use or reproduce *confidential information* for the purpose for which it was disclosed or another purpose contemplated by the *Rules*; and
 - (3) must not permit unauthorised persons to have access to *confidential information*.
- (c) Each Recipient must use all reasonable endeavours:
 - (1) to prevent unauthorised access to *confidential information* which is in the possession or control of that Recipient; and
 - (2) to ensure that any person to whom it discloses *confidential information* observes the provisions of this rule 8.6 in relation to that information.
- (d) The officers of a *Transmission Network Service Provider* participating in *transmission service* pricing must not be involved in or associated with competitive electricity trading activities of any other *Registered Participant*.
- (e) A *Transmission Network Service Provider* participating in *transmission service* pricing must provide to any *Transmission Network Service Provider* or *Registered Participant* which supplies information for *transmission service* pricing an undertaking that the *Transmission Network Service Provider* to which that information was supplied will comply with the confidentiality requirements set out in clause 6.9.2.

8.6.2 Exceptions

This rule 8.6 does not prevent:

- (a) **(public domain)**: the disclosure, use or reproduction of information if the relevant information is at the time generally and publicly available other than as a result of breach of confidence by the Recipient who wishes to

disclose, use or reproduce the information or any person to whom the Recipient has disclosed the information;

(b) **(employees and advisers):** the disclosure of information by a Recipient or the Recipient's *Disclosees* to:

- (1) an employee or officer of the Recipient or a *related body corporate* of the Recipient; or
- (2) a legal or other professional adviser, auditor or other consultant (in this clause 8.6.2(b) called "Consultants") of the Recipient,

which require the information for the purposes of the *Rules*, or for the purpose of advising the Recipient or the Recipient's *Disclosee* in relation thereto;

(c) **(consent):** the disclosure, use or reproduction of information with the consent of the person or persons who provided the relevant information under the *Rules*;

(d) **(law):** the disclosure, use or reproduction of information to the extent required by law or by a lawful requirement of:

- (1) any government or governmental body, authority or agency having jurisdiction over a Recipient or its *related bodies corporate*; or
- (2) any stock exchange having jurisdiction over a Recipient or its *related bodies corporate*;

(d1) **(ombudsman scheme):** the disclosure, use or reproduction of information, but not end-use consumer information, if required by an Ombudsman acting under a duly constituted industry dispute resolution ombudsman scheme of which a *Registered Participant* is a participant, for the purpose of carrying out a function of that scheme in respect of a complaint made by a customer of the *Registered Participant* against a *Registered Participant* under that scheme;

(e) **(disputes):** the disclosure, use or reproduction of information if required in connection with legal proceedings, arbitration, expert determination or other dispute resolution mechanism relating to the *Rules*, or for the purpose of advising a person in relation thereto;

(f) **(trivial):** the disclosure, use or reproduction of information which is trivial in nature;

- (g) **(safety)**: the disclosure of information if required to protect the safety of personnel or equipment;
- (h) **(potential investment)**: the disclosure, use or reproduction of information by or on behalf of a Recipient to the extent reasonably required in connection with the Recipient's financing arrangements, investment in that Recipient or a disposal of that Recipient's assets;
- (i) **(regulator)**: the disclosure of information to the *AER*, the *AEMC* or the *ACCC* or any other regulatory authority having jurisdiction over a Recipient, pursuant to the *Rules* or otherwise;
- (j) **(reports)**: the disclosure, use or reproduction of information of an historical nature in connection with the preparation and giving of reports under the *Rules*;
- (k) **(aggregate sum)**: the disclosure, use or reproduction of information as an unidentifiable component of an aggregate sum;
- (l) **(profile)**: the publication of a *profile*;
- (m) **[Deleted]**
- (n) **(compliance monitoring)** the disclosure of a *performance standard* to a *Network Service Provider* for the purpose of establishing a compliance monitoring program, or if *connection* at that *performance standard*, in *NEMMCO's* opinion, affects, or is likely to affect, the performance of that *Network Service Provider's network*; or
- (o) **(region determinations)**: the disclosure, use or reproduction of information of a historical nature generated by *NEMMCO* to a *Registered Participant* (being an applicant or alternative proponent (other than *NEMMCO*) under Chapter 2A) which is necessary for the preparation of a technically competent application under clause 2A.2.4 or supplementary economic analysis under rule 2A.5 subject to:
 - (1) the information not being information that:
 - (i) has been provided to *NEMMCO* by a *Registered Participant* on a confidential basis; or
 - (ii) the *AER* or the *AEMC* has stated to be *confidential information*.
 - (2) the recipient of the information disclosed under this paragraph (o) having executed a confidentiality agreement with *NEMMCO* that requires the applicant or the alternative proponent referred to in clause 2A.4.3 (as the case may be), not to disclose, use or reproduce the information except for the purpose of preparing and providing a

technically competent application or supplementary economic analysis to the *AEMC*.

8.6.3 Conditions

In the case of a disclosure under clauses 8.6.2(b), 8.6.2(d1) or 8.6.2(h), prior to making the disclosure the Recipient who wishes to make the disclosure must inform the proposed recipient of the confidentiality of the information and must take appropriate precautions to ensure that the proposed recipient keeps the information confidential in accordance with the provisions of this rule 8.6 and does not use the information for any purpose other than that permitted under clause 8.6.1.

8.6.4 [Deleted]

8.6.5 Indemnity to AER, AEMC and NEMMCO

Each *Registered Participant* must indemnify the *AER*, the *AEMC* and *NEMMCO* against any claim, action, damage, loss, liability, expense or outgoing which the *AER*, the *AEMC* or *NEMMCO* pays, suffers, incurs or is liable for in respect of any breach by that *Registered Participant* or any officer, agent or employee of that *Registered Participant* of this rule 8.6.

8.6.6 NEMMCO information

NEMMCO must develop and, to the extent practicable, implement a policy:

- (a) to protect information which it acquires pursuant to its various functions from use or access which is contrary to the provisions of the *Rules*;
- (b) to disseminate such information in accordance with its rights, powers and obligations in a manner which promotes the orderly operation of any *market*; and
- (c) to ensure that *NEMMCO*, in undertaking any trading activity except the procurement of *ancillary services*, does not make use of such information unless the information is also available to other *Registered Participants*.

8.6.7 Information on Rules Bodies

NEMMCO must, in consultation with the *AEMC*, develop and implement policies concerning:

- (a) the protection of information which *Rules bodies* acquire pursuant to their various functions from use or access by *Registered Participants* or *Rules bodies* which is contrary to the provisions of the *Rules*; and

- (b) the dissemination of such information where appropriate to *Registered Participants*.

8.7 Monitoring and Reporting

8.7.1 Monitoring

- (a) **[Deleted]**
- (b) The *AER* must, for the purpose of performing its monitoring functions:
 - (1) determine whether *Registered Participants* and *NEMMCO* are complying with the *Rules*;
 - (2) assess whether the dispute resolution and *Rules* enforcement mechanisms are working effectively in the manner intended; and
 - (3) **[Deleted]**
 - (4) collect, analyse and disseminate information relevant and sufficient to enable it to comply with its reporting and other obligations and powers under the *Rules*.
- (c) The *AER* must ensure that, to the extent practicable in light of the matters set out in clause 8.7.1(b), the monitoring processes which it implements under this rule 8.7:
 - (1) are consistent over time;
 - (2) do not discriminate unnecessarily between *Registered Participants*;
 - (3) are cost effective to both the *AER*, all *Registered Participants* and *NEMMCO*; and
 - (4) are publicised or information relating thereto is available to any person, subject to any requirements as a result of the confidentiality obligations in rule 8.6.

8.7.2 Reporting requirements and monitoring standards for Registered Participants and NEMMCO

- (a) For the purpose of performing its monitoring functions, the *AER* must establish:
 - (1) reporting requirements which apply to all or particular categories of *Registered Participants* in relation to matters relevant to the *Rules*;
 - (2) reporting requirements for *NEMMCO* in relation to matters relevant to the *Rules*;

- (3) procedures and standards generally applicable to *Registered Participants* relating to information and data received by them in relation to matters relevant to the *Rules*;
 - (4) procedures and standards applicable to *NEMMCO* relating to information and data received by it in relation to matters relevant to the *Rules*; and
 - (5) procedures and standards applicable to the *AER* relating to information and data received by the *AER* from *Registered Participants* or *NEMMCO* in relation to matters relevant to the *Rules*.
- (b) The *AER* must:
- (1) after consultation with the *AEMC*, *NEMMCO* and *Registered Participants* in accordance with the *Rules consultation procedures*, establish the requirements and standards and procedures referred to in clause 8.7.2(a)(1), (3), (4) and (5); and
 - (2) after consultation with the *AEMC*, *NEMMCO* and such *Registered Participants* as the *AER* considers appropriate, establish the requirements referred to in clause 8.7.2(a)(2).

In formulating such requirements or procedures and standards, the *AER* must take into consideration the matters set out in clause 8.7.1(c).

- (c) Subject to clause 8.7.2(d), the *AER* must notify to *NEMMCO* and all *Registered Participants* particulars of the requirements and procedures and standards which it establishes under this clause 8.7.2.
- (d) For the purpose of performing its monitoring functions, the *AER* may establish additional or more onerous requirements or procedures and standards which do not apply to all or a particular category of *Registered Participants*. In formulating such requirements or procedures and standards, the *AER* must take into consideration the matters set out in clause 8.7.1(c) and is not required to consult in accordance with the *Rules consultation procedures* but must consult with the relevant *Registered Participants*. In such a case, and if the *AER* considers it appropriate to do so, the *AER* may choose to notify only those *Registered Participants* to whom these additional or more onerous requirements or procedures and standards apply.
- (e) Each *Registered Participant* and *NEMMCO* must comply with all requirements, procedures and standards established by the *AER* under this rule 8.7 to the extent that they are applicable to it within the time period specified for the requirement, procedure or standard or, if no such time period is specified, within a reasonable time. Each *Registered Participant*

and *NEMMCO* must bear its own costs associated with complying with these requirements, procedures and standards.

- (f) In complying with its obligations or pursuing its rights under the *Rules*, neither a *Registered Participant* nor *NEMMCO* must recklessly or knowingly provide, or permit any other person to provide on behalf of that *Registered Participant* or *NEMMCO* (as the case may be), misleading or deceptive data or information to any other person (including the *AER*).
- (g) Any *Registered Participant* or *NEMMCO* may ask the *AER* to impose additional or more onerous requirements, procedures or standards under clause 8.7.2(d) on a *Registered Participant* in order to monitor or assess compliance with the *Rules* by that *Registered Participant*. When such a request is made, the *AER* may but is not required to impose the additional or more onerous requirements, procedures or standards.

If the *AER* decides to impose additional or more onerous requirements, procedures or standards on a *Registered Participant*, the *AER* may determine the allocation of costs of any additional compliance monitoring undertaken between the relevant *Registered Participants* and/or *NEMMCO* (as the case may be). The relevant *Registered Participants* and (to the extent relevant) *NEMMCO* must pay such costs as allocated. In the absence of such allocation, the *Registered Participant* which is subject to the additional or more onerous requirements, procedures or standards must bear its own costs of compliance.

- (h) The *AER* must develop and implement guidelines in accordance with the *Rules consultation procedures* governing the exercise of the powers conferred on it by clause 8.7.2(g) which guidelines must set out the matters to which the *AER* must have regard prior to deciding the allocation of costs of any additional or more onerous requirements, procedures or standards imposed pursuant to clause 8.7.2(g) between the relevant *Registered Participants* and/or *NEMMCO* (as the case may be).

8.7.3 Consultation required for making general regulatory information order (Section 28H of the NEL)

- (a) Before the *AER* makes a *general regulatory information order*, it must publish:
 - (1) the proposed order;
 - (2) an explanatory statement that sets out objectives of the proposed order; and
 - (3) an invitation for written submissions on the proposed order.

- (b) The invitation must allow no less than 30 *business days* for the making of submissions (and the *AER* is not required to consider any submission made after the period has expired).
- (c) The *AER* may *publish* such issues, consultation and discussion papers, and hold such conferences and information sessions, in relation to the proposed order as it considers appropriate.
- (d) Within 80 *business days* of *publishing* the documents referred to in paragraph (a), the *AER* must:
 - (1) consider any submissions made in response to the invitation within the period allowed in the invitation;
 - (2) make a final decision on the order; and
 - (3) *publish* the final decision including:
 - (i) a statement of the reasons for the final decision (including a summary of each material issue raised in the submissions and the *AER*'s response to it); and
 - (ii) if the final decision is to make the order (either in the terms in which it was proposed or in modified terms) – the order in its final form.
- (e) The *AER* may extend the time within which it is required to publish its final decision if:
 - (1) the consultation involves questions of unusual complexity or difficulty; or
 - (2) the extension has become necessary because of circumstances beyond the *AER*'s control.

8.7.4 Preparation of network service provider performance report (Section 28V of the NEL)

- (a) Before the *AER* embarks on the preparation of *network service provider performance reports*, the *AER* must consult with:
 - (1) *network service providers*; and
 - (2) bodies representative of the *network service providers* and *network service users*; and
 - (3) the public generally;

in order to determine appropriate priorities and objectives to be addressed through the preparation of *network service provider performance reports*.

- (b) In the course of preparing a *network service provider performance report*, the *AER*:
 - (1) must consult with the *network service provider* or *network service providers* to which the report is to relate; and
 - (2) must consult with the authority responsible for the administration of relevant *jurisdictional electricity legislation* about relevant safety and technical obligations; and
 - (3) may consult with any other persons who have, in the *AER's* opinion, a proper interest in the subject matter of the report; and
 - (4) may consult with the public.
- (c) A *network service provider* to which the report is to relate:
 - (1) must be allowed an opportunity, at least 30 business days before publication of the report, to submit information and to make submissions relevant to the subject matter of the proposed report; and
 - (2) must be allowed an opportunity to comment on material of a factual nature to be included in the report.

8.7.5 [Deleted]

8.7.6 Recovery of reporting costs

Where, under the *Rules*, *NEMMCO* is entitled or required to publish or give information, notices or reports to:

- (a) any *Registered Participant*, any court, the *ACCC* or the *AER*, unless the context otherwise requires, *NEMMCO* must not charge those persons a separate fee for providing them with a copy of the information or report and the costs in providing that service must be recovered through the *Participant fees* described in rule 2.12;
- (b) any other person, *NEMMCO* may charge that person a fee which is appropriate to cover the costs of providing that service.

8.8 Reliability Panel

8.8.1 Purpose of Reliability Panel

- (a) The functions of the *Reliability Panel* are to:

- (1) monitor, review and report on the performance of the *market* in terms of *reliability* of the *power system*;
- (1a) on the advice of *NEMMCO*, determine the *system restart standard*;
- (2) review and, on the advice of *NEMMCO*, determine the *power system security and reliability standards*;
- (2a) for the purposes of clause 4.2.6(b), develop and *publish* principles and guidelines that determine how *NEMMCO* should maintain *power system security* while taking into account the costs and benefits to the extent practicable;
- (2b) determine, and modify as necessary, and *publish* the *template for generator compliance programs*;
- (3) while *NEMMCO* has power to issue *directions* in connection with maintaining or re-establishing the *power system* in a *reliable operating state*, determine guidelines governing the exercise of that power;
- (4) while *NEMMCO* has power to enter into contracts for the provision of *reserves*, determine policies and guidelines governing *NEMMCO's* exercise of that power;
- (5) report to the *AEMC* and *participating jurisdictions* on overall *power system reliability* matters concerning the *power system* and on the matters referred to in clauses 8.8.1(a)(2) and (3), and make recommendations on *market* changes or changes to the *Rules* and any other matters which the *Reliability Panel* considers necessary;
- (6) monitor, review and *publish* a report on the *system standards* in terms of whether they appropriately and adequately describe the expected technical performance conditions of the *power system*;
- (7) monitor, review and *publish* a report on the implementation of *automatic access standards* and *minimum access standards* as *performance standards* in terms of whether:
 - (i) their application is causing, or is likely to cause, a material adverse effect on *power system security*; and
 - (ii) the *automatic access standards* and *minimum access standards* should be amended or removed;
- (8) consider requests made in accordance with clause 5.3.3(b2) and, if appropriate, determine whether an existing Australian or international standard, or a part thereof, is to be adopted as a *plant standard* for a particular class of *plant*; and

- (9) determine guidelines identifying or providing for the identification of operating incidents and other incidents that are of significance for the purposes of the definition of “Reviewable operating incident” in clause 4.8.15.
- (b) In performing its functions set out in clause 8.8.1(a)(1) the *Reliability Panel* must not monitor, review or report on the performance of the *market* in terms of *reliability* of *distribution networks*, although it may collate, consider and report information in relation to the *reliability* of *distribution networks* as measured against the relevant standards of each *participating jurisdiction* in so far as the *reliability* of those *networks* impacts on overall *power system reliability*.
- (c) The principles and guidelines *published* under clause 8.8.1(a)(2a):
 - (1) must be developed, and may only be amended, in accordance with the consultation process set out in clause 8.8.3;
 - (2) must include transitional arrangements which take into account the need to allow for the development and testing of an appropriate methodology by *NEMMCO*; and
 - (3) must take into account the results of any decision to revise *network constraints*.

8.8.2 Constitution of the Reliability Panel

- (a) The *Reliability Panel* must consist of:
 - (1) a commissioner of the *AEMC* appointed by the *AEMC* to act as chairperson for a period of up to three years;
 - (2) the chief executive officer or a delegate of *NEMMCO*; and
 - (3) at least 5 but not more than 8 other persons appointed by the *AEMC* for a period of up to three years, such persons to include:
 - (A) a person representing *Generators*;
 - (B) a person representing *Market Customers*;
 - (C) a person representing *Transmission Network Service Providers*;
 - (D) a person representing *Distribution Network Service Providers*; and
 - (E) a person representing the interests of end use customers for electricity.

- (b) Subject to clause 8.8.2(d) any person who has previously served on the *Reliability Panel* is eligible for reappointment to the *Reliability Panel* in accordance with this clause 8.8.2.
- (c) In making appointments to the *Reliability Panel* under clause 8.8.2(a)(3), the *AEMC* must, to the extent reasonably practicable and subject to clause 8.8.2(c1), give effect to the intention that the persons so appointed:
 - (1) should be broadly representative, both geographically and by reference to *Registered Participants* and *participating jurisdictions*, of those persons with direct interests in *reliability* of electricity supply under the *market* arrangements;
 - (2) may include *Registered Participants* or their *representatives* or *participating jurisdictions*;
 - (3) must be independent of *NEMMCO*; and
 - (4) must, except in the case of the person representing *Transmission Network Service Providers* appointed under clause 8.8.2(a)(3)(C), be independent of all *System Operators*,

and if at any time:

- (5) a person on the *Reliability Panel*, other than the chief executive officer or a delegate of *NEMMCO*, ceases to be independent of *NEMMCO*; or
- (6) a person on the *Reliability Panel*, other than the person representing *Transmission Network Service Providers* appointed under clause 8.8.2(a)(3)(C), ceases to be independent of any *System Operator*,

the *AEMC* must remove that person from the *Reliability Panel*.

- (c1) The persons referred to in clauses 8.8.2(a)(3)(A), (B), (C) and (D) must be appointed and removed by the *AEMC* after consultation with the class of *Registered Participants* the person is to represent, and the *AEMC* must:
 - (1) appoint a person agreed to by at least one third in number of the relevant class of *Registered Participants*; and
 - (2) commence consultation on the removal of such a person if requested to do so by a member of the relevant class of *Registered Participants*, and must remove that person if so agreed by at least one third in number of the relevant class of *Registered Participants*.
- (d) The *AEMC* may remove any member of the *Reliability Panel*, including the chairperson, at any time during his or her term in the following circumstances:

- (1) the person becomes insolvent or under administration;
 - (2) the person becomes of unsound mind or his or her estate is liable to be dealt with in any way under a law relating to mental health;
 - (3) the person resigns or dies;
 - (4) the *AEMC* is required to remove the person under clause 8.8.2(c) or 8.8.2(c1)(2); or
 - (5) the person fails to discharge the obligations of that office imposed by the *Rules*.
- (d1) The person referred to in clause 8.8.2(a)(3)(E) must be appointed and removed by the *AEMC* after consultation with such bodies representing the interests of end use customers for electricity and other persons as the *AEMC* considers appropriate and, subject to such consultation, may be removed at any time for any reason.
- (e) A person may resign from the *Reliability Panel* by giving notice in writing to that effect to the *AEMC*.
- (f) The *Reliability Panel* must meet and regulate its meetings and conduct its business in accordance with the *Rules*.
- (g) A decision of the *Reliability Panel* on any matter may be made by a majority of the members comprising the *Reliability Panel*. Where the members of the *Reliability Panel* are equally divided on any matter, the chairperson has a casting vote.

8.8.3 Reliability review process

- (a) As soon as practicable, the *Reliability Panel* must determine:
- (1) the *power system security and reliability standards*;
 - (2) the guidelines referred to in clause 8.8.1(a)(3);
 - (3) the policies and guidelines referred to in clause 8.8.1(a)(4);
 - (4) the guidelines referred to in clause 8.8.1(a)(9);
 - (5) the *system restart standard*; and
 - (6) the *template for generator compliance programs*,
- in accordance with this clause 8.8.3.
- (aa) The *system restart standard* must:

- (1) be consistent with the *SRAS* objective referred to in clause 3.11.4A(a);
 - (2) apply equally across all *regions*, unless the *Reliability Panel* varies the *system restart standard* between *electrical sub-networks* to the extent necessary:
 - (A) to reflect any technical system limitations or requirements; or
 - (B) if the benefits of adopting the *system restart standard* would be outweighed by the costs of implementing such a standard;
 - (3) identify the maximum amount of time within which *system restart ancillary services* are required to restore *supply* to a specified level;
 - (4) include guidelines on the required reliability of *primary restart services* and *secondary restart services*;
 - (5) include guidelines to be followed by *NEMMCO* in determining *electrical sub-networks*, including the determination of the appropriate number of *electrical sub-networks* and the characteristics required within an *electrical sub-network* (such as the amount of generation or *load*, or electrical distance between *generation centres*, within an *electrical sub-network*);
 - (6) include guidelines specifying the diversity and strategic locations required of *primary restart services* and *secondary restart services*;
- (b) At least once each calendar year and at such other times as the *AEMC* may request, the *Reliability Panel* must conduct a review of the performance of the *market* in terms of *reliability* of the *power system*, the *power system security and reliability standards*, the *system restart standard*, the guidelines referred to in clause 8.8.1(a)(3), the policies and guidelines referred to in clause 8.8.1(a)(4) and the guidelines referred to in clause 8.8.1(a)(9) in accordance with this clause 8.8.3.
- (ba) At least every 3 years from the date the *template for generator compliance programs* is determined pursuant to clause 8.8.3(a) and at such other times as the *AEMC* may request, the *Reliability Panel* must conduct a review of the *template for generator compliance programs* in accordance with this clause 8.8.3. Following such a review, the *Reliability Panel* may amend the *template for generator compliance programs* in accordance with its report to the *AEMC* submitted under clause 8.8.3(j).
- (c) The *AEMC* must advise the *Reliability Panel* of the terms of reference for any determination or review by the *Reliability Panel*. The *AEMC* may advise the *Reliability Panel* of standing terms of reference in relation to the reviews described in clauses 8.8.3(b) and 8.8.3(ba) from time to time.

- (d) The *Reliability Panel* must give notice to all *Registered Participants* of a determination or review. The notice must give particulars of the terms of reference for the determination or review (as the case may be), the deadline for the receipt of any submissions to the *Reliability Panel* and the date and place for the meeting referred to in clause 8.8.3(f). The notice must be given at least 8 weeks prior to the meeting or such other time specified by the *AEMC* in any request for a review.
- (e) The deadline for receipt of submissions must not be earlier than 4 weeks prior to the meeting or such other time specified by the *AEMC* in any request for a review.
- (f) The *Reliability Panel* must hold a meeting open to all *Registered Participants*.
- (g) The meeting referred to in clause 8.8.3(f) must be held in the capital city of one of the *participating jurisdictions*. Selection of the relevant capital city in a particular case will be determined by the *Reliability Panel* on a rotating basis.
- (h) The *Reliability Panel* may obtain such technical advice or assistance from time to time as it thinks appropriate including, without limitation, advice or assistance from *NEMMCO* and any *Registered Participant*.
- (i) In undertaking any review and preparing any report and recommendations, the *Reliability Panel* must take into consideration the policy statements, directions or guidelines published by the *AEMC* from time to time.
- (j) Following the conclusion of the meeting and consideration by the *Reliability Panel* of any submissions or comments made to it, the *Reliability Panel* must submit a written report to the *AEMC* on the review setting out its recommendations or determinations, its reasons for those recommendations or determinations and the procedure followed by the *Reliability Panel* in undertaking the review or determination. The report must be submitted to the *AEMC* no later than 6 weeks after the meeting referred to in clause 8.8.3(f) or such other deadline for reporting specified by the *AEMC* in any request for a review.
- (k) The *AEMC* must, within 10 days of receiving the written report of the *Reliability Panel*, make the report publicly available, subject to the confidentiality provisions of rule 8.6.
- (l) The recommendations of the *Reliability Panel* may include (without limitation) recommended *changes* to the *Rules* in relation to matters concerning *reliability* of the *power system*.

8.9 Rules Consultation Procedures

- (a) These provisions apply wherever in the *Rules* any person (“the *consulting party*”) is required to comply with the *Rules consultation procedures*. For the avoidance of doubt, the *Rules consultation procedures* are separate from, and do not apply to, the process for changing the *Rules* under Part 7 of the *National Electricity Law*.
- (b) The *consulting party* must give a notice to all persons nominated (including *Intending Participants* in the class of persons nominated) by the relevant provision as those with whom consultation is required or, if no persons are specifically nominated, *NEMMCO*, all *Registered Participants* and *interested parties*, (“Consulted Persons”) giving particulars of the matter under consultation.
- (c) Except where the *consulting party* is the *AEMC*, or the *AER*, the *consulting party* must provide a copy of the notice referred to in rule 8.9(b) to *NEMMCO*. Within 3 *business days* of receipt of the notice *NEMMCO* must *publish* the notice on its website. Where the *AEMC* is the *consulting party*, the *AEMC* must *publish* the notice referred to in rule 8.9(b) on its website. Where the *AER* is the *consulting party*, the *AER* must *publish* the notice referred to in rule 8.9(b) on its website.
- (d) The notice must invite interested Consulted Persons to make written submissions to the *consulting party* concerning the matter.
- (e) A written submission may state whether a Consulted Person considers that a meeting is necessary or desirable in connection with the matter under consultation and, if so, the reasons why such a meeting is necessary or desirable. To be valid, a submission must be received not later than the date specified in the notice (not to be less than 25 *business days* after the notice referred to in rule 8.9(b) is given).
- (f) The *consulting party* must consider all valid submissions within a period of not more than a further 20 *business days*. If the *consulting party*, after having considered all valid submissions, concludes that it is desirable or necessary to hold any meetings, the *consulting party* must use its best endeavours to hold such meetings with Consulted Persons who have requested meetings within a further 25 *business days*.
- (g) Following the conclusion of any meetings held in accordance with rule 8.9(f) and the *consulting party*’s consideration of a matter under consultation, the *consulting party* must publish a draft report, available to all Consulted Persons, setting out:
 - (1) the conclusions and any determinations of the *consulting party*;
 - (2) its reasons for those conclusions;

- (3) the procedure followed by the *consulting party* in considering the matter;
- (4) summaries of each issue, that the *consulting party* reasonably considers to be material, contained in valid written submissions received from Consulted Persons or in meetings, and the *consulting party's* response to each such issue; and
- (5) in a notice at the front of the draft report, an invitation to Consulted Persons to make written submissions to the *consulting party* on the draft report,

and, subject to the provisions of rule 8.6, the *consulting party* must make available to all Consulted Persons, on request, copies of any material submitted to the *consulting party*.

- (h) Except where the *consulting party* is the *AEMC*, or the *AER*, the *consulting party* must provide a copy of the draft report referred to in rule 8.9(g) to *NEMMCO*. Within 3 *business days* of receipt of the draft report *NEMMCO* must *publish* the draft report on its website. Where the *AEMC* is the *consulting party*, the *AEMC* must *publish* the draft report referred to in rule 8.9(g) on its website. Where the *AER* is the *consulting party*, the *AER* must *publish* the draft report referred to in rule 8.9(g) on its website.
- (i) To be valid, a submission invited in a notice referred to in rule 8.9(g)(5) must be received not later than the date specified in the notice (not to be less than 10 *business days* after the publication of the draft report pursuant to rule 8.9(h) or such longer period as is reasonably determined by the *consulting party* having regard to the complexity of the matters and issues under consideration).
- (j) The *consulting party* must consider all valid submissions within a period of not more than a further 30 *business days*.
- (k) Following the conclusion of the *consulting party's* consideration of all valid submissions the *consulting party* must publish a final report, available to all Consulted Persons, setting out:
 - (1) the conclusions and any determinations of the *consulting party* on the matter under consultation;
 - (2) its reasons for those conclusions;
 - (3) the procedure followed by the *consulting party* in considering the matter;
 - (4) summaries required pursuant to rule 8.9(g)(4); and

- (5) summaries of each issue, that the *consulting party* reasonably considers to be material, contained in valid written submissions received from Consulted Persons on the draft report and the *consulting party's* response to each such submission,

and, subject to the provisions of rule 8.6, the *consulting party* must make available to all Consulted Persons, on request, copies of any material submitted to the *consulting party*.

- (l) Except where the *consulting party* is the *AEMC*, or the *AER*, the *consulting party* must provide a copy of the final report referred to in rule 8.9(k) to *NEMMCO*. Within 3 *business days* of receipt of the final report *NEMMCO* must *publish* the final report on its website. Where the *AEMC* is the *consulting party*, the *AEMC* must *publish* the final report referred to in rule 8.9(k) on its website. Where the *AER* is the *consulting party*, the *AER* must *publish* the final report referred to in rule 8.9(k) on its website.
- (m) The *consulting party* must not make the decision or determination in relation to which the *Rules consultation procedures* apply until the *consulting party* has completed all the procedures set out in this clause.
- (n) Notwithstanding rule 8.9(m), substantial compliance by a *consulting party* with the procedures set out in this clause is sufficient.

8.10 Consumer Advocacy Panel

- (a) In this rule:

consumer advocacy funding obligation for *NEMMCO* means the share of the costs of administration and funding allocated to *NEMMCO* under a budget prepared by the *Consumer Advocacy Panel* and approved by the *MCE* under Part 4 of the relevant Act.

Consumer Advocacy Panel means the Consumer Advocacy Panel established under the relevant Act.

former Advocacy Panel means the Advocacy Panel established under the former rule 8.10 of the Rules.

relevant Act means the *Australian Energy Market Commission Establishment Act 2004* (SA).

- (b) *NEMMCO* must pay to the *AEMC*, as required under the relevant Act, the amount of its consumer advocacy funding obligation for each financial year.
- (c) *NEMMCO* may recover the cost of meeting its consumer advocacy funding obligation from *Participant fees* and may allocate the costs to *Market Customers*.

- (d) An amount budgeted or raised by NEMMCO before the commencement of this rule to meet costs associated with the former Advocacy Panel that had not been expended at the commencement of this rule, will be taken to be an amount budgeted or raised for meeting the cost of *NEMMCO's* consumer advocacy funding obligation under this rule.

CHAPTER 8A

8A. Participant Derogations

Note~~Purpose of the Chapter~~

This Chapter contains the *participant derogations* for the purposes of the *National Electricity Law* and the *Rules*.

Part 1 – Derogations Granted to TransGrid

8A.1 Derogation for the Treatment of Contingent Projects under Revenue Determination

8A.1.1 Expiry date

This derogation expires on 1 July 2009.

8A.1.2 Definitions

In this *participant derogation*:

contingent project means a project approved by the ACCC and identified in the Determination as a contingent project.

current regulatory control period means the period 1 July 2004 to 30 June 2009.

Determination means the “Final Decision, NSW and ACT Transmission Network Revenue Cap TransGrid 2004-05 to 2008-09” dated 27 April 2005 determined by the ACCC pursuant to clause 6.2.4(b) of the National Electricity Code.

maximum allowed revenue means the maximum allowed revenue in the Determination.

TransGrid means the energy services corporation constituted under section 6A of the Energy Services Corporations Act 1995 (NSW).

trigger event means an event identified as a trigger in Attachment G of the Determination in respect of a contingent project.

8A.1.3 Treatment of contingent projects

(a) Where the trigger event identified in respect of a contingent project occurs prior to 1 July 2009, the *AER* must, in accordance with the Determination:

(1) determine:

- (i) the total capital expenditure which the *AER* considers is reasonably required for the purpose of undertaking the contingent project;
- (ii) the forecast capital and incremental operating expenditure for that contingent project for each remaining regulatory year of the current regulatory control period, which the *AER* considers is

- reasonably required for the purpose of undertaking the contingent project in accordance with Appendix F of the Determination;
- (iii) the likely commencement and completion dates for the contingent project;
 - (iv) the incremental revenue which is likely to be earned by TransGrid in each remaining regulatory year of the current regulatory control period as a result of the contingent project being undertaken; and
 - (v) the maximum allowed revenue for each regulatory year in the remainder of the current regulatory control period by adding the incremental revenue for that regulatory year; and
- (2) calculate the estimate referred to in subparagraph (1)(iii) in accordance with the Determination, including:
- (i) on the basis of the rate of return for TransGrid for the current regulatory control period; and
 - (ii) consistently with the manner in which depreciation is calculated under the Determination; and
- (3) vary the Determination to apply for the remainder of the current regulatory control period in accordance with paragraph (b).
- (b) The *AER* may only vary the Determination to the extent necessary:
- (1) to adjust the forecast capital expenditure for the current regulatory control period to accommodate the amount of additional capital expenditure determined under paragraph (a)(1)(i); and
 - (2) to adjust the forecast operating expenditure for the current regulatory control period to accommodate the amount of additional operating expenditure determined under paragraph (a)(1)(ii); and
 - (3) to reflect the effect of any resultant increase in forecast capital expenditure and incremental operating expenditure on the maximum allowed revenue for each regulatory year in the remainder of the current regulatory control period.
- (c) The intended date for commencing the contingent project must be during the current regulatory control period.

Part 2 - Derogations Granted to EnergyAustralia

8A.2 Derogation from clause 3.18.2(g)(2) - Auctions and eligible persons

8A.2.1 Definitions

In this *participant derogation*, rule 8A.2:

commencement date means the day the National Electricity Amendment (EnergyAustralia Participant Derogation (Settlement Residue Auctions)) Rule 2006 commences operation.

EnergyAustralia means the energy distributor known as EnergyAustralia and established under the Energy Services Corporations Act 1995 (NSW).

8A.2.2 Expiry date

This *participant derogation* expires on the earlier of:

- (1) 30 June 2009;
- (2) the date that EnergyAustralia's retail business is transferred to a new legal entity pursuant to a NSW Government restructure of EnergyAustralia or by any other means;
- (3) the date that EnergyAustralia ceases to engage in the activity of owning, controlling or operating a *transmission system*;
- (4) the first date after the commencement date on which EnergyAustralia engages in the activity of owning, controlling or operating a *transmission system* that NEMMCO determines, in accordance with the criteria developed pursuant to clause 5.6.3(i), is capable of having a material impact on *interconnector* capability; or
- (5) the date that EnergyAustralia is not excluded from entering into *SRD agreements* under clause 3.18.2(g)(2).

8A.2.3 Derogation

- (a) The reference in clause 3.18.2(g)(2) to *Transmission Network Service Provider* does not include EnergyAustralia.
- (b) If this *participant derogation* expires due to the occurrence of the event in clause 8A.2.2(4) of clause 8A.2.2, then any *SRD agreement* between NEMMCO and EnergyAustralia which is in existence on that date, will terminate on that date.

8A.2A Derogation from inspection and testing of metering installations

8A.2A.1 Definitions

In this *participant derogation*, rule 8A.2A:

EnergyAustralia means the energy distributor known as EnergyAustralia and established under the Energy Services Corporations Act 1995 (NSW).

EnergyAustralia transmission metering installations means any type 2 and type 3 *metering installation* located at the interface between EnergyAustralia's *transmission network* and EnergyAustralia's *distribution network* in New South Wales on the date that the National Electricity Amendment (EnergyAustralia Participant Derogation (Metering Installations)) Rule 2006 commences operation.

expiry date means 1 July 2009 or the publishing of an expiration notice by the *AEMC* under clause 8A.2A.2(h) of this *participant derogation*.

report means a report in writing submitted by EnergyAustralia at 6 monthly intervals, which is prepared as soon as practicable after the EnergyAustralia transmission metering installations are tested, that outlines compliance of the EnergyAustralia transmission metering installations with the requirements of the derogated provisions of the *Rules* as identified in clause 8A.2A.2.

type 2 and type 3 metering installation means the meaning given to type 2 and type 3 *metering installations* in Chapter 7 of the *Rules*.

8A.2A.2 Derogation

- (a) Until the expiry date, the following clauses of the *Rules* (referred to as the '**derogated provisions of the Rules**') do not apply to EnergyAustralia transmission *metering installations*:
 - (1) clause 7.3.1(a)(2);
 - (2) clause 7.3.4(a); and
 - (3) clause 7.6.1(a)(2).
- (b) Until the expiry date, the EnergyAustralia transmission *metering installations* and the *metering data* generated from them is taken to comply with the requirements of the derogated provisions of the *Rules*.
- (c) Until the expiry date, EnergyAustralia must provide a report to *NEMMCO*.
- (d) If *NEMMCO* is not satisfied that a report is satisfactory, *NEMMCO* may give notice to EnergyAustralia that it will recommend to the *AEMC* the

issue of a notice under paragraph (f) if the next report continues to be unsatisfactory.

- (e) Where a report is unsatisfactory, *NEMMCO* may make appropriate adjustments to the *metering data* in the report to take account of errors in that data, in order to minimise adjustments to the final *settlements* account or for any other requirement of the *Rules*.
- (f) If notice was given to EnergyAustralia under paragraph (d) and *NEMMCO* considers that the next report continues to be unsatisfactory, *NEMMCO* may recommend to the *AEMC* the issue of an expiration notice under paragraph (g).
- (g) If *NEMMCO* recommends to the *AEMC* the issue of an expiration notice, the *AEMC* may issue a notice having regard to that recommendation and the *national electricity objective*.
- (h) A notice must be published in the South Australian Government Gazette and takes effect 4 weeks after it is published.

Part 3 [Deleted]

~~Part 3 - Derogations Granted to Woolnorth Studland Bay Wind Farm Pty Ltd~~

~~8A.3 — Derogation for ride through of frequency disturbances~~

~~8A.3.1 — Definitions~~

~~For the purposes of this rule 8A.3:~~

~~expiry date~~ means the earlier of:

- ~~(1) the date on which the National Electricity Amendment (Technical Standards for Wind Generation and other Generator Connections) Rule 2007 commences operation; or~~
- ~~(2) 1 August 2007.~~

~~Studland Bay Wind Farm~~ means ~~Woolnorth Studland Bay Wind Farm Pty Ltd~~ with ACN 111 996 377.

~~8A.3.2 — Non-scheduled generating units as generating units~~

~~Until the expiry date referred to in clause 8A.3.1, any non-scheduled generating units registered under the Rules by Studland Bay Wind Farm are taken to be scheduled generating units for the purposes of clause S5.2.5.8(a)(2) of the Rules.~~

~~8A.3A — Derogation for voltage disturbance ride through regime~~

~~8A.3A.1 — Definitions~~

~~For the purposes of this rule 8A.3:~~

~~expiry date~~ means the earlier of:

- ~~(1) the date on which the National Electricity Amendment (Technical Standards for Wind Generation and other Generator Connections) Rule 2007 commences operation; or~~
- ~~(2) 1 October 2007.~~

~~generating units~~ means those ~~generating units~~ registered in accordance with the ~~Rules~~ to Studland Bay Wind Farm.

~~Studland Bay Wind Farm means Woolnorth Studland Bay Wind Farm Pty Ltd with ACN 111 996 377.~~

~~8A.3A.2 Continuous uninterrupted operation~~

- ~~(a) Subject to paragraphs (b) and (c), until the expiry date, clause S5.2.5.3(a)(2) of the Rules requiring generating units to be capable of continuous uninterrupted operation at voltages in excess of 110% of normal voltage at the connection point, does not apply to the generating units.~~
- ~~(b) The total capacity of the generating units referred to in paragraph (a) must not exceed 80MW.~~
- ~~(c) The capability of the generating units of continuous uninterrupted operation during the occurrence of power system voltages in excess of 110% of normal voltage at the connection point, must be negotiated and agreed between Studland Bay Wind Farm and the relevant Network Service Provider.~~

Part 4 [Deleted]

~~Part 4 - Derogations Granted to NEMMCO~~

~~8A.4 — Deferral of Settlement Payments due to APEC~~

~~8A.4.1 — Expiry of derogation~~

~~This rule 8A.4 expires on 31 December 2007.~~

~~8A.4.2 — Derogation~~

- ~~(a) — For the purposes of clause 3.15.16 of the *Rules* and the *timetable*, the 21st *business day* after the *billing period* commencing on 5 August 2007 is taken to be the 20th *business day*.~~
- ~~(b) — For the purposes of the *billing period* commencing on 5 August 2007, clause S3.3.1(b)(6)(ii) of the *Rules* continues to apply as if the *Amending Rule* known as the National Electricity Amendment (NEMMCO Participant Derogation (Deferral of Settlement Payments due to APEC)) Rule 2007 had not been made.~~

Part 5 [Deleted]

Part 6 - Derogations Granted to Victorian Market Participants

[Deleted]

Part 7 - [Deleted]

Part 8 [Deleted]

~~Part 8 – Network Constraint Formulation~~

- ~~(a) Despite any other provision of the *Rules* to the contrary, including without limitation clauses 3.6.4(a), 3.6.4(a1), 3.6.4(b), 3.7.2(c)(3), 3.7.3(d)(3), 3.8.1(b)(5), 3.8.1(b)(6), 3.13.4(o) and 3.13.8(a)(5), network limitations may occur which impact on both *intra-regional* and *inter-regional* power flows.~~
- ~~(b) NEMMCO must determine and represent network constraints in dispatch which may result from limitations on both *intra-regional* and *inter-regional* power flows.~~
- ~~(c) If the use of a network constraint in dispatch developed under clause (b) substantially creates, in NEMMCO's reasonable opinion, a significant *inter-regional* power flow from a region with a dispatch price that is greater than the dispatch price of the importing region (a 'significant counter price power flow'), NEMMCO must, without prejudicing its obligations to maintain power system security, use reasonable endeavours to apply an alternative formulation for that network constraint for the expected duration of the significant counter price power flow. That alternative form of the network constraint must apply for the expected period of the significant counter price power flow if the original formulation of the network constraint were used.~~
- ~~(c1) Paragraph (c) does not apply to the use of a network constraint referred to in the 'Murray/Tumut constraint list' developed pursuant to paragraph (f).~~
- ~~(d) NEMMCO must develop and publish a procedure for determining when an *inter-regional* power flow referred to in clause (c) is considered to be significant for the purposes of that clause.~~
- ~~(e) Paragraphs (a)–(d) of this participant derogation will cease to apply on:
 - ~~(1) 31 October 2008; or~~
 - ~~(2) as otherwise determined by the AEMC.~~~~

Specific pricing arrangements for Snowy region

- ~~(c1) Clauses (f) to (p) commence on 1 October 2005.~~
- ~~(f) NEMMCO must determine and publish a list of network constraints (the 'Murray/Tumut constraint list') developed pursuant to clause (b) that relate directly to managing power flows in either a northward or southward direction between the network nodes to which the following power stations are directly connected:
 - ~~(1) Lower Tumut;~~
 - ~~(2) Upper Tumut;~~
 - ~~(3) Murray; and~~~~

~~(4) — Guthega:~~

~~(g) — For the purpose of clauses (f) to (p), constraint “k” in the Murray/Tumut constraint list must be expressed in the following generic form:~~

$$\alpha_k \times LT + \beta_k \times UT + \delta_k \times MURR + \lambda_k \times GUTH + \gamma_k \times V-Sn + \eta_k \times Sn-NSW \leq RHS_k$$

~~Where:~~

~~LT — is the dispatch target for MW from Lower Tumut power station;~~

~~UT — is the dispatch target for MW from Upper Tumut power station;~~

~~MURR — is the dispatch target for MW from Murray power station;~~

~~GUTH — is the dispatch target for MW from Guthega power station;~~

~~Sn-NSW — is the dispatch target for MW flow on the Snowy to NSW interconnector;~~

~~V-Sn — is the dispatch target for MW flow on the Victoria to Snowy interconnector; and~~

~~RHS — includes a line rating term with an effective coefficient of 1.~~

~~(h) — (1) — Subject to clause (h)(3), if in any dispatch interval of a trading interval any of the constraints in the Murray/Tumut constraint list have bound, then congestion fund payments must be determined for Lower Tumut and Upper Tumut power stations pursuant to clauses (i) to (o).~~

~~— (2) — If in any trading interval clause (h)(1) does not apply, then no congestion fund payments need be determined pursuant to clauses (i) to (o) for that trading interval.~~

~~— (3) — If in any trading interval an administered price period is declared pursuant to clause 3.14.2, in any one of the Victorian, Snowy or NSW regions, no congestion fund payments are to be determined for that trading interval pursuant to this participant derogation.~~

~~(i) — If congestion fund payments must be determined for Lower Tumut and Upper Tumut power stations pursuant to clause (h)(1) then, for each relevant trading interval, NEMMCO must determine power flows between Murray and Tumut as either northwards or southwards as follows:~~

~~Let:~~

~~X — be, for each dispatch interval in a trading interval, the sum of the absolute value of all RHS values of binding constraints in the Murray/Tumut constraint list where the constraint has bound on flows in the direction from Tumut to Murray; and~~

~~Y — be, for each dispatch interval in a trading interval, the sum of the absolute value of all RHS values of binding constraints in the Murray/Tumut constraint list where the constraint has bound on flows in the direction from Murray to Tumut.~~

If:

- ~~$X < Y$ then power flows for the *trading interval* between Murray and Tumut must be determined as northwards and congestion fund payments must be determined for Lower Tumut and Upper Tumut power stations pursuant to clause (n); and~~
- ~~$X \geq Y$ then power flows for the *trading interval* between Murray and Tumut must be determined as southwards and congestion fund payments must be determined for Lower Tumut and Upper Tumut power stations pursuant to clause (o).~~

- (j) ~~In any *trading interval* where any of the *constraints* in the Murray/Tumut constraint list have bound for one or more *dispatch intervals*, NEMMCO must perform the following calculation for every *dispatch interval* in the relevant *trading interval*:~~

$$\text{SPd}_p = \left[\text{DP}_{\text{Snowy}} \times \text{TLF}_p \right] - \left[\sum_k (\text{CSPa}_k \times \text{Coeff}_{p,k}) \right] \text{ for } p = \text{Lower Tumut and Upper Tumut}$$

Where:

- ~~SPd_p is the substitute price for each *dispatch interval* for generation from power station “p”;~~
- ~~DP_{Snowy} is the *dispatch price* that applies to the Snowy region for the relevant *dispatch interval*;~~
- ~~TLF_p is the *transmission loss factor* for power station “p”;~~
- ~~CSPa_k is the *constraint marginal value* (\$/MWh) as determined by the *dispatch engine* for each *dispatch interval* of relieving binding *constraint* “k” by a marginal amount; and~~
- ~~$\text{Coeff}_{p,k}$ is the coefficient (α , β , δ , λ , γ or η) assigned to element “p” in *constraint* “k” from the Murray/Tumut constraint list developed pursuant to clause (g);~~

and subject to the following:

- (1) ~~if the SPd_p determined pursuant to this clause is calculated as an amount less than the *market floor price* it must be deemed to be equal to the *market floor price*; and~~
- (2) ~~if the SPd_p determined pursuant to this clause is calculated as an amount greater than *VoLL* it must be deemed to be equal to *VoLL*.~~
- (k) ~~A substitute price (SP) for each *trading interval* must be determined by NEMMCO for generation from power station “p” as follows:~~

- ~~SP_p is the substitute price being the arithmetic average for a *trading interval* of each relevant *dispatch interval* of SPd_p ; and~~
- ~~SPd_p is as determined pursuant to clause (j).~~

- ~~(l) — NEMMCO must determine for each relevant trading interval an energy value differential (EVD) as follows:~~

$$\text{EVD}_p = \text{SP}_p - (\text{TLF}_p \times \text{RRP}_{\text{Snowy}}) \text{ for } p = \text{Lower Tumut and Upper Tumut}$$

~~Where:~~

~~EVD_p — is the per unit energy value differential for a trading interval for power station “p”;~~

~~TLF_p — is the transmission loss factor for power station “p”;~~

~~SP_p — is the substitute price determined pursuant to clause (k); and~~

~~RRP_{Snowy} — is the regional reference price for a trading interval that applies to the Snowy region.~~

- ~~(m) — A CSC allocation factor is determined as follows:~~

$$\text{CSC allocation factor} = (\text{A} - \text{B}) / \text{A}$$

~~Where:~~

~~A — is nominal transmission limit between Murray and Tumut which is to be taken as 1350 MW for the purpose of this participant derogation; and~~

~~B — is nominal interconnector capacity from the NSW region to the Snowy region which is to be taken as 800 MW for the purpose of this participant derogation.~~

~~In clauses (n) and (o), the following conventions apply:~~

~~a “trading amount” (TA) is a payment to or from a Market Participant or inter-regional settlement residue fund;~~

~~if TA > 0, then this represents a payment to the Market Participant or inter-regional settlement residue fund as appropriate;~~

~~if TA < 0, then this represents a payment from the Market Participant or inter-regional settlement residue fund as appropriate.~~

- ~~(n) — If power flows between Murray and Tumut for a trading interval have been determined as northwards pursuant to clause (i), NEMMCO must determine the following amounts:~~

- ~~(1) — An energy value adjustment determined as follows:~~

$$\text{EVA}_N = \sum_p (\text{AGE}_p \times \text{EVD}_p) \text{ for } p = \text{Lower Tumut and Upper Tumut}$$

~~Where:~~

~~EVA_N—is the *energy* value adjustment for northward flows between Murray and Tumut that is to be applied to the determination of the trading amount pursuant to this clause (n);~~
~~AGE_p—is the adjusted gross *energy* for a trading interval for generation from power station “p”; and~~
~~EVD_p—is the *energy* value differential determined pursuant to clause (l) for generation from power station “p”;~~

~~(2) Trading amounts determined as follows:~~

~~$$TA_1 = \text{Min} (EVA_N, IRSR_{Sn-NSW})$$~~

~~$$TA_2 = 1 \times \text{Min} (0, IRSR_{Vic-Sn})$$~~

~~$$TA_2 = 1 \times TA_1 - TA_7$$~~

~~Where:~~

~~TA₁— is a trading amount for Snowy Hydro Limited;~~

~~IRSR_{Sn-NSW}— is the inter-regional settlement residue allocated to flows **from the Snowy region to the NSW region** for the relevant trading interval;~~

~~IRSR_{Vic-Sn}— is the inter-regional settlement residue allocated to flows **from the Victorian region to the Snowy region** for the relevant trading interval;~~

~~TA₂— is a trading amount for the inter-regional settlement residue allocated to flows **from the Snowy region to the NSW region**; and~~

~~TA₇— is a trading amount for the inter-regional settlement residue allocated to flows **from the Victorian region to the Snowy region**.~~

~~(o) If power flows between Murray and Tumut for a trading interval have been determined as southwards pursuant to clause (i), NEMMCO must determine the following amounts:~~

~~(1) A trading amount determined as follows:~~

~~$$TA_3 = \sum_p (AGE_p \times EVD_p) \text{ for } p = \text{Lower Tumut and Upper Tumut}$$~~

~~Where:~~

~~TA₃— is a trading amount for Snowy Hydro Limited;~~

~~AGE_p— is the adjusted gross *energy* for a trading interval for generation from power station “p”; and~~

~~EVD_p is the energy value differential determined pursuant to clause (1) for generation from power station “p”;~~

~~(2) A settlements residue trading amount determined as follows:~~

$$TA_4 = 1 \times IRSR_{Sn-NSW}$$

~~Where:~~

~~TA₄ is a trading amount for the inter-regional settlement residue allocated to flows from the Snowy region to the NSW region; and~~

~~IRSR_{Sn-NSW} is the inter-regional settlement residue allocated to flows from the Snowy region to the NSW region for the relevant trading interval;~~

~~(3) A trading amount to determined as follows:~~

$$TA_5 = (IRSR_{NSW-Sn} - TA_3 - TA_4) \times \text{CSC allocation factor}$$

~~Where:~~

~~TA₅ is a trading amount for Snowy Hydro Limited;~~

~~IRSR_{NSW-Sn} is the inter-regional settlement residue allocated to flows from the NSW region to the Snowy region for the relevant trading interval; and~~

~~CSC allocation factor is the CSC allocation factor determined pursuant to clause (m).~~

~~(4) A settlements residue trading amount determined as follows:~~

$$TA_8 = 1 \times \text{Min}(0, IRSR_{Sn-Vie})$$

~~where:~~

~~TA₈ is a trading amount for the inter-regional settlement residue allocated to flows from the Snowy region to the Victorian region; and~~

~~IRSR_{Sn-Vie} is the inter-regional settlement residue allocated to flows from the Snowy region to the Victorian region for the relevant trading interval.~~

~~(5) A settlements residue trading amount determined as follows:~~

$$TA_6 = (1 \times TA_3) - TA_4 - TA_5 - TA_8$$

~~where:~~

~~TA_g~~ is a ~~trading amount~~ for the inter-regional settlement residue allocated to flows ~~from the NSW region to the Snowy region~~; and

~~$IRSR_{Sn-Vie}$~~ is the inter-regional settlement residue allocated to flows ~~from the Snowy region to the Victorian region~~ for the relevant ~~trading interval~~.

~~(p) NEMMCO must publish all trading amounts arising from application of this participant derogation (if any) using the current settlement cycle.~~

~~(q) Paragraph (c1) and paragraphs (c1) — (p) of this participant derogation will cease to apply at 00:00 hours EST on 1 July 2008.~~

Part 9 [Deleted]

~~Part 9 – Participant Derogation Granted to Hydro Tasmania~~

~~1. Scope of Derogation~~

~~This participant derogation operates to modify or vary the obligations that apply to Hydro Tasmania under clauses S7.2.2 and S7.2.3 of schedule 7.2 in relation to the metering installations referred to in paragraph 2, in the manner specified in paragraph 3 and subject to the reporting requirements set out in paragraph 5.~~

~~1A. Commencement of Derogation~~

~~This participant derogation commences on the date that Tasmania becomes a participating jurisdiction (for the purposes of this participant derogation, such date is referred to as the "commencement date").~~

~~2. Metering Installations to which the Derogation Applies~~

~~The modifications or variations to clauses S7.2.2 and S7.2.3 of schedule 7.2 specified in paragraph 3 apply to the metering installations in respect of any generating unit operated by Hydro Tasmania and located in Tasmania, where the relevant metering installation:~~

- ~~(a) was originally commissioned by Hydro Tasmania prior to the time at which section 6 of the *Electricity National Scheme (Tasmania) Act 1999* commenced; and~~
- ~~(b) as at the commencement date, does not comply with the provisions of clauses S7.2.2 or S7.2.3 of schedule 7.2.~~

~~3. Scope of Derogation~~

~~The accuracy levels of the metering installations referred to in paragraph 2 will be calculated by multiplying the values in Tables S7.2.3.1, S7.2.3.2, S7.2.3.3, S7.2.3.4 and S7.2.3.5 of schedule 7.2 by a factor of 3.~~

~~4. Cessation of Derogation~~

~~This participant derogation ceases to apply on the day which is the earlier of:~~

- ~~(a) the day on which the last of the metering installations referred to in paragraph 2 complies with the provisions of clauses S7.2.2 and S7.2.3 of schedule 7.2; or~~
- ~~(b) the day which is 12 months after the commencement date.~~

5. Reporting

~~Within 5 business days after the commencement date Hydro Tasmania must provide to the AEMC a plan showing a current scheduled metering installations works programme and thereafter must provide the AEMC with quarterly updates showing actual progress against that plan.~~

Part 10 [Deleted]– ~~Statement of Opportunities~~

~~[Deleted]~~

Part 11 - [Deleted]

Part 12 - Ancillary Services Provisions

1. Transitional Arrangements

- (a) The Invitation to Tender issued by *NEMMCO* on 18 October 2000 (as amended from time to time) (called the "Third ITT") is to be taken as having been a call for offers under clause 3.11.5 notwithstanding anything else in the *Rules* or the fact that the description and the procedure contemplated by clause 3.11.3 did not exist at the time the Third ITT was issued.
- (b) Notwithstanding anything else in the *Rules*:
 - (1) the description of each *ancillary service* included in the Third ITT is deemed to be the description contemplated by clause 3.11.3; and
 - (2) the quantities specified as indicative *NEMMCO* requirements in schedule A to the Third ITT in respect of the *power system* are to be taken to have been determined by applying a procedure developed under clause 3.11.3.

2. ~~[Deleted]~~ Extension of Existing Ancillary Services Agreements

- ~~(a) Notwithstanding clause 3.11.5, if *NEMMCO* is a party to an agreement for the provision to *NEMMCO* of *ancillary services* and one or more schedules to that agreement is due to terminate, then *NEMMCO* may, by agreement with the service provider under that agreement, extend the period during which the service provider is obliged to provide the kind of *ancillary services* to which the schedule relates or those schedules relate on terms and conditions agreed between *NEMMCO* and the service provider.~~
- ~~(b) This clause 2 ceases to apply on 30 June 2007.~~

CHAPTER 11

11. Savings and Transitional Rules

Part A Negative Inter-Regional Settlements Residue (2006 amendments)

11.1 Rules consequent on making of the National Electricity Amendment (Negative Inter-Regional Settlements Residue) Rule 2006

11.1.1 Recovery of accrued negative settlements residue

- (a) Clause 3.6.5(a)(4), as in force immediately before 1 July 2006 which is the date the National Electricity Amendment (Negative Inter-Regional Settlements Residue) Rule 2006 commences operation, continues to apply to any negative *settlements residue* amounts arising before 1 July 2005 and not recovered as at 1 July 2005 until all such negative amounts have been recovered.
- (b) Where negative *settlements residue* amounts arise on or after 1 July 2005 and are not recovered before 1 July 2006 which is the date the National Electricity Amendment (Negative Inter-Regional Settlements Residue) Rule 2006 commences operation, then:
 - (i) the whole or any part of the amount may be recovered from the proceeds of the first *auction* after 1 July 2006 which is the date the National Electricity Amendment (Negative Inter-Regional Settlements Residue) Rule 2006 commences operation; and
 - (ii) if the whole or a part of the amount is not recoverable under clause 11.1.1(b)(i), the unrecovered amount may be recovered from the proceeds of successive *auctions* until the negative amount is recovered.
- (c) Clause 3.6.5(a)(4A), as in force immediately before 30 June 2009, continues to apply to any *negative settlements residue* amounts arising on or after 1 July 2006 but before 30 June 2009, and not recovered as at 30 June 2009, until all such negative amounts have been recovered.

11.1.2 Recovery of interest costs associated with accrued negative settlements residue

- (a) Where interest costs interest costs incurred by *NEMMCO* in relation to any unrecovered negative *settlements residue* amounts referred to in clause 3.6.5(a)(4A) arise on or after 1 July 2005 and are not recovered before 1 July 2006 which is the date the National Electricity Amendment (Negative Inter-Regional Settlements Residue) Rule 2006 commences operation, then:

- (i) the whole or any part of the interest costs may be recovered from the proceeds of the first *auction* after 1 July 2006 which is the date the National Electricity Amendment (Negative Inter-Regional Settlements Residue) Rule 2006 commences operation; and
 - (ii) if the whole or a part of the interest costs are not recoverable under clause 11.1.2(b)(i), the unrecovered interest costs may be recovered from the proceeds of successive *auctions* until the interest costs are recovered.
- (b) Clause 3.6.5(a)(4B), as in force immediately before 30 June 2009, continues to apply to any interest costs arising on or after 1 July 2006 but before 30 June 2009, and not recovered as at 30 June 2009, until all such interest costs have been recovered.

Part B System Restart Ancillary Services (2006 amendments)

11.2 Rules consequent on making of the National Electricity Amendment (System Restart Ancillary Services and pricing under market suspension) Rule 2006 No.6

11.2.1 Transitional provision for acquisition of non-market ancillary services

- (a) For the purposes of clause 11.2.1:

Amending Rule means the National Electricity Amendment (System Restart Ancillary Services and pricing under market suspension) Rule 2006.

Existing NMAS contract means an *ancillary services agreement* between NEMMCO and another person to acquire *non-market ancillary services* from that person, entered into prior to the NMAS commencement date.

NMAS commencement date means the date of commencement of the National Electricity Amendment (System Restart Ancillary Services and pricing under market suspension) Rule 2006;

- (b) On the NMAS commencement date
- (1) Any action taken by NEMMCO or a *Rules body* prior to the NMAS commencement date in anticipation of the commencement of the Amending Rule is deemed to have been taken for the purpose of the Amending Rule and continues to have effect for that purpose.
 - (2) NEMMCO may continue to acquire *non-market ancillary services* under an existing NMAS contract and may extend the period of an

existing *NMAS* contract for such period as *NEMMCO* and that person reasonably determine.

- (3) At any time when no *system restart standard* under clause 8.8.3(a)(1a) is in force, *NEMMCO* must develop and *publish* an interim *system restart standard* that is:

- (i) consistent with the requirements in clause 8.8.3(a); and
- (ii) approved by the *Reliability Panel*;

and the interim *system restart standard* applies until such time as the *Reliability Panel* determines a *system restart standard*.

11.3 [Deleted]

Part C Dispute Resolution for Regulatory Test (2006 amendments)

11.4 Rules consequent on making of the National Electricity Amendment (Dispute Resolution for Regulatory Test) Rule 2006

11.4.1 Continuation of things done under old clause 5.6.6

- (a) For the purposes of clause 11.4.1:

amending Rule means the National Electricity Amendment (Dispute Resolution for Regulatory Test) Rule 2006

commencement date means the date of commencement of the amending Rule

new clause 5.6.6 means clause 5.6.6 after the commencement of the amending Rule

old clause 5.6.6 means clause 5.6.6 before the commencement of the amending Rule.

- (b) On the commencement date:

- (1) any dispute commenced under the old clause 5.6.6 and not completed before the commencement date, must continue to be conducted and completed as if it were a dispute commenced in accordance with the old clause 5.6.6.
- (2) Subject to clause 11.4.1(b)(1), any action taken under the old clause 5.6.6 is deemed to have been taken for the purposes of the corresponding requirement in the new clause 5.6.6 and continues to have effect for those purposes.

Part D Metrology (2006 amendments)

11.5 Rules consequential on the making of the National Electricity Amendment (Metrology) Rule 2006

11.5.1 Definitions

For the purposes of this rule 11.5:

Amending Rule means the National Electricity Amendment (Metrology) Rule 2006.

commencement date means the day on which the Amending Rule commences operation.

old Chapter 7 means Chapter 7 of the *Rules* as in force immediately before the commencement date.

new Chapter 7 means Chapter 7 of the *Rules* as in force immediately after the commencement date.

11.5.2 Metrology procedures continues to apply until 31 December 2006

A metrology procedure as in force under the old Chapter 7 continues in force in accordance with the old Chapter 7 until 31 December 2006.

11.5.3 Responsible person

A *Local Network Service Provider* who is the responsible person for a *metering installation* under Chapter 9 of the *Rules* immediately before the commencement date continues to be the *responsible person* for that *metering installation* for the purposes of clause 7.2.3.

11.5.4 NEMMCO's responsibility to develop a metrology procedure

- (a) Subject to this clause 11.5.4, *NEMMCO* must *publish* an initial metrology procedure by 1 January 2007 in accordance with the new Chapter 7 and this procedure must commence operation on 1 January 2007.
- (b) The requirement in clause 7.14.1(b) that requires a minimum period of 3 months between the date the *metrology procedure* is published and the date the *metrology procedure* commences does not apply to the initial metrology procedure developed and published under this clause 11.5.4.
- (c) Any action taken by *NEMMCO* for the purpose of developing and publishing an initial metrology procedure prior to the commencement date is taken to satisfy the equivalent actions required for a *metrology procedure* under the new Chapter 7.

- (d) *NEMMCO* may dispense with, or not comply with, any relevant action under rule 7.14, if the action duplicates or is consistent with action that has already been taken under paragraph (c).
- (e) An initial metrology procedure developed and published under this clause 11.5.4 is taken to be the *metrology procedure* for the purposes of Chapter 7 of the *Rules*.
- (f) The initial metrology procedure is not required to incorporate the matters referred to in clause 7.14.1(c)(4) until 30 June 2008 and *NEMMCO* may develop a separate procedure for those matters during that period to 30 June 2008.

11.5.5 Jurisdictional metrology material in the metrology procedure

- (a) For the purposes of this clause 11.5.5, **expiry date** means 1 January 2009.
- (b) Until the expiry date, the *Ministers of the MCE* is taken to be each *Minister of the participating jurisdictions*, acting on behalf of that jurisdiction and undertaking the role of the *Ministers of the MCE* in relation to *jurisdictional metrology material* under clause 7.14.2.
- (c) For the avoidance of doubt, a *Minister of a participating jurisdiction* may delegate the role of submitting *jurisdictional metrology material* to *NEMMCO* under paragraph (b) by instrument in writing.
- (d) A certified copy of any delegation given under paragraph (c) must be provided to *NEMMCO* at the time any *jurisdictional metrology material* is submitted to *NEMMCO* under clause 7.14.2.

[**Note:** Ministers of participating jurisdiction have powers of delegation under their own jurisdictional legislation governing the procedure for conferring such delegations.]

Part E Economic Regulation of Transmission Services (2006 amendments)

11.6 Rules consequent on making of the National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006

11.6.1 Definitions

Subject to this rule 11.6, in this rule 11.6:

Amending Rule 2006 means the National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006.

commencement date means the date on which the *Amending Rule 2006* commences operation.

current regulatory control period means the regulatory control period applicable to an existing revenue determination.

distribution matters includes matters relating to the economic regulation of *distribution services*, including, but not limited to, existing determinations, decisions, instruments, agreements or any other relevant action.

ElectraNet means ElectraNet Pty Ltd ACN 094 482 416 trading as ElectraNet.

existing revenue determination means any determination made, or deemed to be made, by the *ACCC* or the *AER* on or prior to the commencement date for the purpose of regulating the revenues of a *Transmission Network Service Provider*.

first regulatory control period means a *regulatory control period* immediately after a current regulatory control period.

first revenue cap determination means the first *revenue cap determination* after an existing revenue cap determination.

new Chapter 6A means Chapter 6A of the *Rules* as in force immediately after the commencement of the *Amending Rule 2006*.

old Chapter 6 means Chapter 6 of the *Rules* as in force immediately before the commencement of the *Amending Rule 2006*.

old clause 6.5.9 means clause 6.5.9 of the *Rules* as in force immediately before the commencement of the *Amending Rule 2006*.

old Part C means Part C (Transmission Pricing) of Chapter 6 of the *Rules* as in force immediately before the commencement of the *Amending Rule 2006*.

old Part F means Part F (Interconnections) of Chapter 6 of the *Rules* as in force immediately before the commencement of the *Amending Rule 2006*.

relevant action includes (without limitation) any of the following actions in relation to *distribution matters*:

- (a) the performance or exercise of any function, power, obligation or right;
- (b) the making or publishing of any guideline, standard, procedure, report, negotiating framework or other document;
- (c) the giving, publishing, service or receipt of any communication, notice or other document;
- (d) the provision or receipt of any submission or information;

- (e) the making or receiving any inquiry, request or application;
- (f) the undertaking or completion of any transaction;
- (g) the payment of any monetary amount or fee.

renumbered Chapter 6 means Chapter 6 of the *Rules* as in force immediately after the commencement of the *Amending Rule 2006*.

SP AusNet means SPI PowerNet Pty Ltd ACN 079 798 173.

Statement of Regulatory Principles means the Statement of Principles published by the *AER* as part of the Compendium of Electricity Transmission Regulatory Guidelines dated August 2005.

VENCorp means the Victorian Energy Networks Corporation established under the Gas Industry Act 1994 (Vic) and continued under the Gas Industry Act 2001 (Vic).

11.6.2 New Chapter 6A does not affect existing revenue determinations

- (a) Subject to this rule 11.6, the old Chapter 6 continues to apply to and in respect of, existing revenue determinations as if the new Chapter 6A had not been made.
- (b) The Amending Rule 2006 has no effect on the continuing operation of clause 9.8.4G.
- (c) The Amending Rule 2006 has no effect on the continuing operation of clause 9.16.5 in so far as it:
 - (1) applies to deem a revenue cap for the *financial year* commencing on 1 July 2004;
 - (2) specifies the basis on which prices for certain transmission services during the *financial year* commencing on 1 July 2004 are to be determined;
 - (3) specifies the manner in which clause 6.4.3C of the old Chapter 6 is to apply for the *financial year* commencing on 1 July 2005; and
 - (4) deems a revenue cap for the period commencing on 1 July 2004 until the end of 30 June 2009 to be for a period of five years.

11.6.3 Old Part C and Schedules 6.2, 6.3, 6.4, 6.7 and 6.8 of old Chapter 6

Subject to this rule 11.6 and rule 11.8, old Part C (including Schedules 6.2, 6.3, 6.4, 6.7 and 6.8) continues to apply for the duration of a current regulatory control period.

11.6.4 Old Part F of Chapter 6

Subject to this rule 11.6, old Part F of Chapter 6 continues to apply for the duration of a current regulatory control period.

11.6.5 Application of new Chapter 6A to Transmission Network Service Providers

Subject to this rule 11.6, a *Transmission Network Service Provider* is not required to submit a *Revenue Proposal* or a proposed *negotiating framework* to the AER under the new Chapter 6A until a date that is 13 months before the expiry of a current regulatory control period.

11.6.6 Application of Chapter 6 to old distribution matters

- (a) The restructuring and renumbering of provisions of the old Chapter 6 by the *Amending Rule 2006* does not affect:
 - (1) *distribution* matters occurring or in existence before the commencement date; or
 - (2) anything done or omitted to be done in respect of *distribution* matters before the commencement date.
- (b) Without limiting paragraph (a), anything done or omitted to be done under a provision of the old Chapter 6 in respect of *distribution* matters before the commencement date is deemed to have been done or omitted to be done under the corresponding provision of that Chapter as restructured and renumbered by the *Amending Rule 2006*, as if that Rule had been in operation when the thing was done or omitted to be done.

11.6.7 References to the old Chapter 6

Unless the context otherwise requires, on and from the commencement date every reference to the old Chapter 6 in a document (however described) is deemed to be a reference to the renumbered Chapter 6 or the new Chapter 6A (as the case may be).

11.6.8 References to provisions of the old Chapter 6

Unless the context otherwise requires, on and from the commencement date every reference to a provision of the old Chapter 6 in a document (however described) is deemed to be a reference to the corresponding provision of the renumbered Chapter 6 or the corresponding provision (if any) of the new Chapter 6A (as the case may be).

11.6.9 Roll forward of regulatory asset base for first regulatory control period

In making a *revenue determination* for the first *regulatory control period*, the value of the regulatory asset base at the beginning of the first *regulatory year* of that period calculated in accordance with clause S6A.2.1(f), may be adjusted having regard to an existing revenue determination and any other arrangements agreed between the *AER* and the *Transmission Network Service Provider*.

11.6.10 Other adjustment carry-over mechanisms from current to first regulatory control period

The *maximum allowed revenue* that a *Transmission Network Service Provider* may earn in any *regulatory year* of the first *regulatory control period* may be adjusted for any carry-over mechanisms provided for in the relevant existing revenue determination and in any other arrangements agreed between the *AER* and the *Transmission Network Service Provider* for the purposes of, and in accordance with, the existing revenue determination.

11.6.11 Clause consequent upon making National Electricity Amendment (Cost Allocation Arrangements for Transmission Services) Rule No 2009 No 3 - Transition to new Chapter 6A: existing prescribed connection services

Definitions

(a) In this clause 11.6.11:

existing asset means an asset that as at 9 February 2006:

- (1) was used in connection with a *transmission system* where the value, or a portion of the value, of that asset was included in the regulatory asset base; or
- (2) was committed to be constructed for use in connection with a *transmission system* where the forecast value, or a portion of the forecast value, of that asset was included in the forecast capital expenditure,

for that *transmission system* under a revenue determination in force as at 9 February 2006.

For the purpose of this definition, an asset is, and is only, to be taken to be committed to be constructed if it satisfied the criteria which a project needed to satisfy to be a “committed project” for the purpose of the *regulatory test* in force as at 9 February 2006.

replacement asset means:

- (1) an asset which replaces an existing asset after 9 February 2006; or

- (2) an asset which replaces an asset referred to in this clause 11.6.11(a) after 9 February 2006.

For the purpose of this definition, an asset will be treated as replacing another asset even if it provides an increased or different functionality to the asset it replaces, provided that the increased or different functionality was not requested by the relevant *Transmission Network User*.

eligible asset means, subject to clause 11.6.11(d)(3):

- (1) an existing asset which was, immediately before the commencement date, or was or is, when first commissioned after the commencement date, wholly and exclusively used by a *Transmission Network Service Provider* to provide *connection services* to a *Transmission Network User* or a group of *Transmission Network Users* at a *transmission network connection point*; and
- (2) a replacement asset which is wholly and exclusively used after the commencement date by a *Transmission Network Service Provider* to continue providing *connection services* to a *Transmission Network User* or a group of *Transmission Network Users* at a *transmission network connection point*,

and excludes:

- (3) an existing asset or a replacement asset to the extent that it ceases to be used after the commencement date to provide *connection services* to a *Transmission Network User* or a group of *Transmission Network Users* at a *transmission network connection point*; and
- (4) an existing asset or replacement asset that, as at the 2009 commencement date, was wholly and exclusively used by a *Transmission Network Service Provider* to provide connection services to a *Transmission Network User* or a group of *Transmission Network Users* at a *transmission network connection point* but had all of its costs treated as directly attributable to, or incurred in providing, *transmission use of system services* at that date.

prescribed connection service means a *connection service* provided by a *Transmission Network Service Provider* to a *Transmission Network User* at a *transmission network connection point* on or after the 2009 commencement date in respect of which the following criteria are satisfied:

- (1) the relevant service is provided by using assets that include eligible assets;

- (2) the whole of the relevant service is being provided under a *connection agreement* which was first entered into before the commencement date (as extended, amended or novated from time to time);
- (3) the *connection agreement* has not at any time after the 2009 commencement date been amended at the request of the *Transmission Network User* for the purposes of altering the relevant service; and
- (4) the relevant service would not otherwise be a *prescribed transmission service* for the purposes of new Chapter 6A but for this clause 11.6.11.

If, at the date a *Transmission Network Service Provider* submits a *Revenue Proposal* after the 2009 commencement date to the AER under new Chapter 6A, a *connection service* does not satisfy each of the above criteria, then the *connection service* remains a prescribed connection service until the start of the next *regulatory control period* to which the *Revenue Proposal* relates, from which time it ceases to be a prescribed connection service.

2009 commencement date means the date on which the National Electricity Amendment (Cost Allocation Arrangements for Transmission Services) Rule 2009 commences operation.

Prescribed transmission services

- (b) References to *prescribed transmission services* in new Chapter 6A include prescribed connection services and, where a service is a *prescribed transmission service* by virtue of the operation of this clause 11.6.11, that service is taken not to be a *negotiated transmission service*.

Interaction with new Chapter 6A

- (c) For the purposes of new Chapter 6A:
 - (1) the costs of the *transmission system* assets that from time to time may be treated as:
 - (i) directly attributable to the provision of a prescribed connection service; or
 - (ii) incurred in providing a prescribed connection service,

to a *Transmission Network User* or a group of *Transmission Network Users* at a *transmission network connection point* are limited to the costs of the eligible assets which, from time to time, provide that prescribed connection service;
 - (2) any costs of an existing asset or a replacement asset (or of any portion of an existing asset or a replacement asset) that:

- (i) is not an eligible asset (other than as a result of clause 11.6.11(d)); and
- (ii) is used by a *Transmission Network Service Provider* to provide *connection services* to a *Transmission Network User* or a group of *Transmission Network Users* at a *transmission network connection point*,

must be treated as costs that are directly attributable to the provision of, or are incurred in providing, *prescribed TUOS services* and, to avoid doubt, the services provided by those assets which would otherwise be *connection services* are taken to be *prescribed TUOS services*; and

- (3) the *stand-alone amount* for *prescribed TUOS services* is taken to include any portion of the costs referred to in clause 11.6.11(c)(2) that has not been allocated under clause 6A.23.2(d)(1).

Cessation of prescribed connection services

- (d) If a *connection service* ceases to be a prescribed connection service at the start of a *regulatory control period* for the relevant *Transmission Network Service Provider*:
 - (1) the *connection service* is taken to be a *negotiated transmission service*;
 - (2) despite clause 6A.19.2(7), the costs which were allocated to the prescribed connection service may be reallocated to *negotiated transmission services*;
 - (3) the eligible assets that previously provided the prescribed connection service cease to be eligible assets; and
 - (4) despite clause S6A.2.3, the value of the eligible assets which previously provided the prescribed connection service may be removed from the regulatory asset base of the *Transmission Network Service Provider*.

11.6.12 Powerlink transitional provisions

Definitions

- (a) In this clause 11.6.12:

contingent project means a project identified in the transitional revenue determination as a contingent project.

Powerlink means the Queensland Electricity Transmission Corporation Limited (ACN 078 849 233), trading as Powerlink Queensland .

transitional regulatory control period means the regulatory control period commencing on 1 July 2007 and ending on 30 June 2012.

transitional revenue determination means a final revenue determination by the *AER* for the Powerlink transmission network, in respect of the transitional regulatory control period.

trigger means the unique investment driver identified in the transitional revenue determination as a trigger for a contingent project.

Scope and application

- (b) This clause 11.6.12:
 - (1) applies only in respect of the Powerlink *transmission network* and applies only until 30 June 2012; and
 - (2) prevails, to the extent of any inconsistency, over any other clause in the *Rules*.

Transitional revenue determination

- (c) Except as provided in this clause 11.6.12, and despite any changes to the old Chapter 6:
 - (1) the old Chapter 6 continues to apply in respect of the *AER* setting the revenue cap for the transitional regulatory control period for the Powerlink *transmission network*; and
 - (2) in setting the revenue cap for the transitional regulatory control period, the *AER* must substantially adhere to the Statement of Regulatory Principles including the ex ante approach to setting the revenue cap set out in the statement.
- (d) The *AER* must calculate the *weighted average cost of capital* for the transitional regulatory control period, in accordance with the values, methodologies or benchmarks in the new Chapter 6A, in respect of the following items:
 - (1) the nominal risk free rate including the maturity period and source of the benchmark;
 - (2) the debt risk premium including the maturity period and source of the benchmark;
 - (3) the equity beta;

- (4) the market risk premium; and
- (5) the ratio of the market value of debt as a proportion of the market value of equity and debt.
- (e) In calculating the *WACC* for the transitional regulatory control period, the *AER* must use an average gamma of 0.5.

Contingent projects

- (f) Where the trigger event identified in respect of a contingent project occurs prior to 30 June 2012, the *AER* must, in accordance with the transitional revenue determination:
 - (1) determine:
 - (i) the amount of capital and incremental operating expenditure for that contingent project for each remaining regulatory year of the transitional regulatory control period, which the *AER* considers is reasonably required for the purpose of undertaking the contingent project;
 - (ii) the likely commencement and completion dates for the contingent project;
 - (iii) the incremental revenue which is likely to be earned by Powerlink in each remaining regulatory year of the transitional regulatory control period as a result of the contingent project being undertaken; and
 - (iv) the *maximum allowed revenue* for each regulatory year in the remainder of the transitional regulatory control period by adding the incremental revenue for that regulatory year; and
 - (2) calculate the estimate referred to in subparagraph (1)(iii):
 - (i) on the basis of the rate of return for Powerlink for the transitional regulatory control period in accordance with the transitional revenue determination; and
 - (ii) consistently with the manner in which depreciation is calculated under the transitional revenue determination; and
 - (3) amend the transitional revenue determination to apply for the remainder of the transitional regulatory control period in accordance with paragraph (g).
- (g) The *AER* may only vary the transitional revenue determination to the extent necessary:

- (1) to adjust the forecast capital expenditure for the transitional regulatory control period to accommodate the amount of additional capital expenditure determined under paragraph (f)(1)(i);
 - (2) to adjust the forecast operating expenditure for the current regulatory control period to accommodate the amount of additional operating expenditure determined under paragraph (f)(1)(i); and
 - (3) to reflect the effect of any resultant increase in forecast capital expenditure and incremental operating expenditure on the maximum allowed revenue for each regulatory year in the remainder of the transitional regulatory control period.
- (h) An application for approval of a contingent project may only be made if the intended date for commencing the contingent project is during the transitional regulatory control period.
- (i) For the first *regulatory control period* after the transitional regulatory control period, the forecast of capital expenditure for that first *regulatory control period* must be determined by applying the provisions of clause 6A.6.7 of the new Chapter 6A, in respect of the capital expenditure for a contingent project, with such modifications as are necessary to properly apply clause 6A.6.7.

Cost pass-through

- (j) For the duration of the transitional regulatory control period:
- (1) subject to subparagraph (2), clause 6A.7.2 of the new Chapter 6A applies to a *network support event* under the transitional revenue determination;
 - (2) the process to apply to the calculation, presentation and approval of pass through resulting from a network support event is as set out in the transitional revenue determination; and
 - (3) in respect of any *positive change event* or *negative change event*, the new Chapter 6A applies, with any modifications that are necessary to apply the relevant provisions to the transitional revenue determination.

Roll forward of regulatory asset base

- (k) For the avoidance of doubt, in making a *revenue determination* for the first *regulatory control period* after the transitional regulatory control period, the value of the regulatory asset base at the beginning of the first *regulatory year* of that period calculated in accordance with clause S6A.2.1(f), may be adjusted having regard to the transitional revenue determination and any other arrangements agreed between the AER and Powerlink.

Application of efficiency benefit sharing scheme

- (l) The *efficiency benefit sharing scheme* in force under clause 6A.6.5 applies to Powerlink during the transitional regulatory control period.

Power to re-open transitional revenue determination

- (m) Clause 6A.7.1 applies to the transitional revenue determination, and a reference in the clause to:
 - (1) “revenue determination” is taken to be a reference to the transitional revenue determination;
 - (2) “regulatory control period” is taken to be a reference to the transitional regulatory control period;
 - (3) “contingent project” has the meaning referred to in paragraph (a); and
 - (4) “X Factor” has the same meaning as in the transitional revenue determination.
- (n) Subject to rule 11.8, old Part C (including Schedules 6.2, 6.3, 6.4, 6.7 and 6.8 of old Chapter 6) continues to apply for the duration of the transitional regulatory control period

11.6.13 ElectraNet easements transitional provisions

- (a) In this clause 11.6.13:

current regulatory control period means the regulatory control period for ElectraNet commencing on 1 January 2003 and ending on 30 June 2008.

Determination means the South Australian Transmission Network Revenue Cap Decision of the ACCC dated 11 December 2002.

easement means easements referred to in the Determination.

- (b) Without limiting the operation of the new Chapter 6A, in establishing the opening regulatory asset base for ElectraNet for the regulatory control period subsequent to ElectraNet’s current regulatory control period, the *AER* may also consider adjustments to the regulatory asset base for ElectraNet that relate to easements, as agreed by letter dated 3 August 2004, between the ACCC and ElectraNet.

11.6.14 TransGrid contingent projects

- (a) In this clause 11.6.14:

contingent project means a project identified in the Determination as a contingent project.

current regulatory control period means the period 1 July 2004 to 30 June 2009.

Determination means the “Final Decision, NSW and ACT Transmission Network Revenue Cap TransGrid 2004-05 to 2008-09” dated 27 April 2005 determined by the ACCC pursuant to clause 6.2.4(b) of the National Electricity Code.

TransGrid means the energy services corporation constituted under section 6A of the Energy Services Corporations Act 1995 (NSW) and specified in Part 1A of Schedule 1 to that Act.

- (b) For the purposes of the application of clause 11.6.2(a) to the Determination, a reference to the old Chapter 6 is a reference to the old Chapter 6 as modified by rule 8A.1.
- (c) For the first *regulatory control period* after the current regulatory control period, the forecast of capital expenditure for TransGrid for that first *regulatory control period* must be determined by applying the provisions of clause 6A.6.7 in respect of the capital expenditure for a contingent project, with such modifications as are necessary to properly apply clause 6A.6.7.

11.6.15 Transmission determination includes existing revenue determinations

The definition of a *transmission determination* may, where the context so requires, include a determination (or substituted determination) made, or deemed to be made, by the AER or the ACCC prior to the commencement date.

11.6.16 References to regulatory control period

A reference to a *regulatory control period* may, where the context so requires, include a period during which a revenue cap applied by virtue of a determination (or substituted determination) made, or deemed to be made, by the AER or the ACCC prior to the commencement date.

11.6.17 Consultation procedure for first proposed guidelines

- (a) In this clause 11.6.17:

guideline means:

- (1) the *post-tax revenue model* referred to in rule 6A.5.2;
- (2) the *roll forward model* referred to in rule 6A.6.1;

- (3) an *efficiency benefit sharing scheme* referred to in rule 6A.6.5;
 - (4) a *service target performance incentive scheme* referred to in rule 6A.7.4;
 - (5) *submission guidelines* referred to in rule 6A.10.2; and
 - (6) *Cost Allocation Guidelines* referred to in rule 6A.19.3.
- (b) The *AER* must develop and *publish* the first proposed guidelines on or before 31 January 2007, and may carry out consultation in the preparation of those proposed guidelines as the *AER* considers appropriate.
 - (c) Each proposed guideline must be *published* in accordance with the requirements of rule 6A.20(b), including an explanatory statement and an invitation for written submissions.
 - (d) The invitation for written submissions for the proposed guidelines must allow no less than 60 *business days* for the making of submissions.
 - (e) The *AER* may *publish* papers and hold conferences or information sessions in relation to the proposed guidelines as provided by rule 6A.20(d).
 - (f) Rule 6A.20(e)-(f) applies to the publication of the final decision of the *AER* in relation to the first guidelines, which must be published under rule 6A.20 on or before 30 September 2007.

11.6.18 Reliance on proposed guidelines for SP AusNet, VENCORP and ElectraNet

- (a) In this clause 11.6.18:

guideline has the same meaning as in clause 11.6.17.

proposed guideline means a proposed guideline published under clause 11.6.17.

relevant provider means SP AusNet, VENCORP or ElectraNet.

2008 determination means a transmission determination to be made in 2008 for a relevant provider.

- (b) For the purposes of making a 2008 determination for the regulatory control period to be covered by a 2008 determination, anything that must be done in accordance with a guideline must instead be done in accordance with the corresponding proposed guideline.
- (c) Unless sooner revoked, a proposed guideline ceases to have effect in relation to a relevant provider at the end of the regulatory control period

covered by a 2008 determination applying to the provider. For the avoidance of doubt, a proposed guideline does not apply to or in respect of the making of a subsequent transmission determination.

- (d) For the purposes of making a 2008 determination for the regulatory control period to be covered by a 2008 determination, a relevant provider is taken to have complied with a requirement to comply with a *Cost Allocation Methodology* under the new Chapter 6A if the AER is satisfied that the relevant provider has complied with the relevant proposed guideline for cost allocation referred to in clause 11.6.17(a)(6), but only until the AER has approved a *Cost Allocation Methodology* for that provider under clause 6A.19.4.

11.6.19 EnergyAustralia transitional provisions

- (a) In this clause 11.6.19:

contingent project means a project approved by the ACCC and identified in the Determination as a contingent project.

current regulatory control period means the period 1 July 2004 to 30 June 2009.

Determination means the “Final Decision, NSW and ACT Transmission Network Revenue Cap EnergyAustralia 2004-05 to 2008-09”.

EnergyAustralia means the energy services corporation constituted under section 7 of the Energy Services Corporations Act 1995 (NSW) and specified in Part 2 of Schedule 1 to that Act.

maximum allowed revenue means the maximum allowed revenue in the Determination.

trigger event means an event identified as a trigger in Appendix A of the Determination in respect of a contingent project.

triggered contingent project means the contingent project referred to in Appendix A of the Determination as “A.1 Replacement of Feeders 908/909”.

Application of Chapter 6A to Determination

- (b) Subject to paragraph (c), clauses 6A.7.1, 6A.7.2 and 6A.7.3 apply to the Determination from the commencement date.
- (c) In applying clause 6A.7.1 to the Determination, a reference in the clause to:
 - (1) “revenue determination” is taken to be a reference to the Determination;

- (2) “regulatory control period” is taken to be a reference to the current regulatory control period;
- (3) “contingent project” has the meaning referred to in paragraph (a); and
- (4) “X Factor” has the same meaning as in the Determination.

Treatment of contingent projects

- (d) Where the trigger event identified in respect of a contingent project occurs prior to 1 July 2009, the *AER* must, in accordance with the Determination:
 - (1) determine:
 - (i) the total capital expenditure which the *AER* considers is reasonably required for the purpose of undertaking the *contingent project* including any amount for forecast capital expenditure already included in the Determination in respect of the triggered contingent project;
 - (ii) the forecast capital and incremental operating expenditure for that contingent project (in addition to any amount for forecast capital expenditure already included in the Determination in respect of the triggered contingent project) for each remaining regulatory year of the current regulatory control period, which the *AER* considers is reasonably required for the purpose of undertaking the contingent project in accordance with Appendix A of the Determination;
 - (iii) the likely commencement and completion dates for the contingent project;
 - (iv) the incremental revenue which is likely to be earned by EnergyAustralia in each remaining regulatory year of the current regulatory control period as a result of the contingent project being undertaken; and
 - (v) the maximum allowed revenue for each regulatory year in the remainder of the current regulatory control period by adding the incremental revenue for that regulatory year;
 - (2) calculate the estimate referred to in subparagraph (1)(iv) in accordance with the Determination, including:
 - (i) on the basis of the rate of return for EnergyAustralia for the current regulatory control period; and
 - (ii) consistently with the manner in which depreciation is calculated under the Determination; and

- (3) vary the Determination to apply for the remainder of the current regulatory control period in accordance with paragraph (e).
- (e) The *AER* may only vary the Determination to the extent necessary:
 - (1) to adjust the forecast capital expenditure for the current regulatory control period to accommodate the amount of additional capital expenditure determined under paragraph (d)(1)(ii); and
 - (2) to adjust the forecast operating expenditure for the current regulatory control period to accommodate the amount of additional operating expenditure determined under paragraph (d)(1)(ii); and
 - (3) to reflect the effect of any resultant increase in forecast capital expenditure and incremental operating expenditure on the maximum allowed revenue for each regulatory year in the remainder of the current regulatory control period.
- (f) The intended date for commencing the contingent project must be during the current regulatory control period.
- (g) For the first *regulatory control period* after the current regulatory control period, the forecast of capital expenditure for EnergyAustralia for that first *regulatory control period* must be determined by applying the provisions of clause 6A.6.7 in respect of the capital expenditure for a contingent project, with such modifications as are necessary to properly apply clause 6A.6.7.

11.6.20 Basslink transitional provisions

Definitions

- (a) In this clause 11.6.20:

Basslink has the meaning provided in the *Electricity Supply Industry Act 1995* of Tasmania, and means the interconnection between the electricity grids of the States of Tasmania and Victoria by means of:

- (1) a high voltage, direct current, submarine cable across Bass Strait;
- (2) converter stations in those States;
- (3) direct current connecting lines to those converter stations;
- (4) alternating current transmission connections to the transmission networks of those States; and
- (5) related infrastructure.

previous regulatory approach means the methodologies, objectives and principles for determination of a regulatory asset base applied in the previous regulatory determinations.

previous regulatory determinations means the decision (including the reasons for decision) made under clause 2.5.2(c) of the National Electricity Code or clause 2.5.2(c) of the *Rules* (as the case may be):

- (1) by the *ACCC*, entitled the “Murraylink Transmission Company Application for Conversion and Maximum Allowable Revenue” dated 1 October 2003; and
- (2) by the *AER*, entitled “Directlink Joint Ventures’ Application for Conversion and Revenue Cap” dated 3 March 2006.

Application

- (b) Where, after the commencement date, a service provided by means of, or in connection with, the Basslink *transmission system* ceases to be classified as a *market network service*:
 - (1) paragraph (c) applies to that service to the exclusion of clause 2.5.2(c); and
 - (2) paragraphs (d),(e),(f) and (g) apply to that service to the exclusion of clause S6A.2.1(e)(1) and (2).
- (c) If, after the commencement date, a *network service* provided by means of, or in connection with, the Basslink *transmission system* ceases to be classified as a *market network service*, it may at the discretion of the *AER* be determined to be a *prescribed transmission service*, in which case the relevant *total revenue cap* may be adjusted in accordance with Chapter 6A and this clause 11.6.20 to include to an appropriate extent the relevant *network elements* which provide those *network services*.
- (d) Where services are determined to be *prescribed transmission services* as referred to in paragraph (c), the value of the regulatory asset base, as at the beginning of the first *regulatory year* of the first *regulatory control period* for which those *prescribed transmission services* are to be regulated under a *revenue determination*, is the amount that is determined by the *AER* in accordance with paragraphs (e), (f) and (g).
- (e) Subject to paragraph (f), the *AER* must determine the value of the regulatory asset base for the Basslink *transmission system* for the purposes of paragraph (d) by applying the previous regulatory approach to the circumstances of that *transmission system*.
- (f) In the event of an inconsistency between the previous regulatory approach adopted in each of the previous regulatory determinations, the approach

adopted in a decision of the *AER* regarding the Directlink *transmission system* prevails over the approach adopted in the decision of the *ACCC* regarding the Murraylink *transmission system* to the extent of the inconsistency.

- (g) Without limiting paragraph (e), the *AER* must, when exercising any discretion in relation to the application of paragraph (e) above:
 - (1) have regard to the prudent and efficient value of the assets that are used by the relevant *Transmission Network Service Provider* to provide those *prescribed transmission services* (but only to the extent that those assets are used to provide such services); and
 - (2) for this purpose, determine that value having regard to the matters referred to in clause S6A.2.2.

11.6.21 SPI Powernet savings and transitional provision

Definitions

- (a) In this clause 11.6.21:

easements tax change event means a *change* in the amount of land *tax* that is payable by SPI PowerNet in respect of the easements which are used for the purposes of SPI PowerNet's *transmission network*. For the purposes of this definition, the *change* in the amount of land tax that is payable by SPI PowerNet must be calculated as the difference between:

- (1) the amount of land tax that is payable in each *regulatory year* by SPI PowerNet, as advised by the Commissioner of State Revenue, Victoria; and
- (2) the amount of land tax which is forecast for the purposes of and included in the *revenue determination* for each *regulatory year* of the *regulatory control period*.

Regulated owner and **SPI PowerNet** both have the meaning provided in clause 9.3.1(2) of the *Rules*.

Transition to new Chapter 6A: existing prescribed transmission services

- (b) Notwithstanding clause 11.5.11, references to *prescribed transmission services* in the new Chapter 6A include a service provided by an asset used in connection with, or committed to be constructed for use in connection with, a *transmission system* as at 9 February 2006, where that asset is the subject of an agreement between SPI PowerNet and any of:
 - (1) VENC Corp;

- (2) a Distributor;
 - (3) a Regulated owner;
 - (4) a *Generator*; or
 - (5) a *Market Network Service Provider*,
- and:
- (6) the agreement provides or contemplates that following an interim period the relevant asset will become subject to regulation under a revenue determination applicable to SPI PowerNet; and
 - (7) in the case of an agreement with a *Generator* or a *Market Network Service Provider*, the service the subject of the agreement is for *connection assets* provided on a non-contestable basis.

Method of adjustment of value of regulatory asset base

- (c) For the avoidance of doubt, in adjusting the previous value of the regulatory asset base for SPI PowerNet's *transmission system* as required by clause S6A.2.1(f), the previous value of the regulatory asset base must be increased by the amount of capital expenditure specified in, or that forms the basis of, agreements pursuant to which SPI PowerNet constructed assets during the previous regulatory control period used to provide *prescribed transmission services*, adjusted for outturn inflation and depreciation in accordance with the terms of those agreements.
- (d) For the purposes of a *revenue determination* for SPI PowerNet (including but not limited to, a 2008 determination as defined in clause 11.6.18(a)) and clause 6A.7.3, easements tax change event is deemed to be:
 - (1) a *pass through event*; and
 - (2) a *positive change event* or *negative change event*, as the case may be, whether or not the easements tax change event would be *material* for the purposes of those definitions.

11.6.22 Interim arrangements pricing-related information

- (a) Clause 6.2.5(a1) as in force immediately before the commencement date continues to apply during the current regulatory control period.
- (b) The *information guidelines* may, in addition to the matter referred to in clause 6A.17.2(e), require the inclusion in the certified annual statements of:
 - (1) information on the amount of each instance, during the relevant reporting period, of any reduction in the prices payable by a

Transmission Customer for prescribed transmission services provided by the *Transmission Network Service Provider*;

- (2) information on each instance, during the relevant reporting period, of a reduction in the prices payable by a *Transmission Customer* for prescribed transmission use of system services or prescribed common transmission services (or both) that were recovered from other *Transmission Customers* for prescribed transmission use of system services or prescribed common transmission services; and
- (3) information to substantiate any claim by the *Transmission Network Service Provider* that the information provided to the AER with respect to reductions in the prices payable by a *Transmission Customer* for the relevant prescribed transmission services under subparagraphs (2) or (3) is confidential information.

Part F Reform of Regulatory Test Principles (2006 amendments)

11.7 Rules consequent on making of the National Electricity Amendment (Reform of the Regulatory Test Principles) Rule 2006 No.19

11.7.1 Definitions

For the purposes of this rule 11.7:

Amending Rule means the National Electricity Amendment (Reform of the Regulatory Test Principles) Rule 2006 No.19.

commencement date means the date on which the Amending Rule commences operation.

current application means any action taken or process commenced under the *Rules*, which relies on or is referenced to, the *regulatory test*, and is not completed as at the commencement date.

new clause 5.6.5A means clause 5.6.5A of the *Rules* as in force immediately after the commencement of the Amending Rule.

old clause 5.6.5A means clause 5.6.5A of the *Rules* as in force immediately before the commencement of the Amending Rule.

transitional application means any action taken or process commenced under the *Rules*, which relies on or is referenced to, the *regulatory test* and is not completed on 31 December 2007, or the date on which amendments (if any) to the *regulatory test* commence, whichever is the earlier.

11.7.2 Amending Rule does not affect old clause 5.6.5A

- (a) On the commencement date, the *regulatory test* promulgated by the *AER* in accordance with the old clause 5.6.5A and in effect immediately before the commencement date, continues in effect and is taken to be consistent with the new clause 5.6.5A until 31 December 2007.
- (b) Old clause 5.6.5A, and the *regulatory test* promulgated under that clause 5.6.5A, continues to apply to and in respect of, any current application and any transitional application.

Part G Pricing of Prescribed Transmission Services (2006 amendments)

11.8 Rules consequent on making the National Electricity Amendment (Pricing of Prescribed Transmission Services) Rule 2006

11.8.1 Definitions

Subject to this rule 11.8, in this rule 11.8:

agreed interim requirements means interim requirements that are equivalent to the requirements of the *pricing methodology guidelines* referred to in rule 6A.25 and have been developed in consultation with the relevant providers for the purposes of a proposed 2008 pricing methodology.

ElectraNet means ElectraNet Pty Ltd ACN 094 482 416 trading as ElectraNet.

existing assets means *transmission system* assets in existence as at 24 August 2006.

previous regulatory determinations means the decision (including the reasons for decision) made under clause 2.5.2(c) of the National Electricity Code or clause 2.5.2(c) of the *Rules* (as the case may be):

- (1) by the *ACCC*, entitled the “Murraylink Transmission Company Application for Conversion and Maximum Allowable Revenue” dated 1 October 2003; and
- (2) by the *AER*, entitled “Directlink Joint Ventures’ Application for Conversion and Revenue Cap” dated 3 March 2006.

Pricing Rule commencement date means the date on which the National Electricity Amendment (Pricing of Prescribed Transmission Services) Rule 2006 commences operation.

relevant provider means SPAusNet, ElectraNet or VENCORP.

SPAusNet means SPI PowerNet Pty Ltd ACN 079 798 173.

2008 pricing methodology means a pricing methodology to be made in 2008 for a relevant provider.

VENCorp means the Victorian Energy Networks Corporation established under the Gas Industry Act 1994(Vic) and continued under the Gas Industry Act 2001(Vic).

11.8.2 Regulated interconnectors

- (a) All *interconnectors* that formed part of the *power system* in the *participating jurisdictions* as at 31 December 1997 continue to be taken to be *regulated interconnectors*.
- (b) All *interconnectors* that ceased to be classified as a *market network service* by a previous regulatory determination made before 28 December 2006 are taken to be *regulated interconnectors*.
- (c) All *interconnectors* that, by a decision made after 28 December 2006 under clause 2.5.2(c) of the *Rules* cease to be classified as a *market network service* are taken to be *regulated interconnectors*.

11.8.3 Application of new Part J of Chapter 6A to Transmission Network Service Providers

- (a) Subject to this rule 11.8, a *Transmission Network Service Provider* is not required to submit a proposed *pricing methodology* to the *AER* under the new Part J of Chapter 6A until a date that is 13 months before the expiry of a current *regulatory control period*.
- (b) For the purposes of this clause 11.8.3, the transitional regulatory control period referred to in rule 11.6.12 (a) for Powerlink is taken to be the current *regulatory control period*.

11.8.4 Reliance on agreed interim guideline for ElectraNet, SPAusNet, and VenCorp

For the purpose of making a 2008 pricing methodology, anything that must be done in accordance with the *pricing methodology guidelines* must instead be done in accordance with the agreed interim requirements.

11.8.5 Prudent discounts under existing agreements

- (a) A *Transmission Network Service Provider* may continue to recover discounts arising as a result of agreements that were entered into prior to 10 October 2001 so long as the agreement remains in effect and its terms are not renegotiated.

- (b) A *Transmission Network Service Provider* may continue to recover discounts arising as a result of agreements that were entered into prior to 28 December 2006 so long as the agreement remains in effect and its terms are not renegotiated.
- (c) The *AER* is not required to re-approve discounts arising under paragraphs (a) or (b) that were approved prior to 28 December 2006, and any approval for the recovery of such discounts is valid so long as the agreement between the *Transmission Network Service Provider* and the *Transmission Customer* remains in effect and its terms are not renegotiated.

11.8.6 Application of prudent discounts regime under rule 6A.26

- (a) Despite clause 11.6.3, a *Transmission Network Service Provider* may apply rule 6A.26 during a current regulatory control period (as defined in clause 11.6.1).
- (b) Where a *Transmission Network Service Provider* applies to the *AER* under clause 6A.26.2 for approval to recover a proposed recovery amount in circumstances where paragraph (a) applies, the *AER* must make a determination in accordance with clause 6A.26.2 notwithstanding that there is no approved *pricing methodology* for that provider.

11.8.7 Prudent discounts pending approval of pricing methodology

- (a) This clause 11.8.7 applies where:
 - (1) a *Transmission Network Service Provider* has submitted or resubmitted a proposed *pricing methodology* to the *AER* under clause 6A.10.1, 6A.11.2 or 6A.12.3;
 - (2) the *AER* has not made a final decision approving or amending that methodology under rule 6A.13; and
 - (3) a *Transmission Customer* requests the provider to charge lower prices for *prescribed TUOS services* or *prescribed common transmission services* than the prices determined in accordance with the provider's *pricing methodology* as referred to in clause 6A.26.1(d).
- (b) Despite clause 6A.26.1, a *Transmission Network Service Provider* may agree to charge lower prices for *prescribed TUOS services* or *prescribed common transmission services* than the prices determined as referred to in clause 6A.26.1(d) in accordance with:
 - (1) in the case where the *AER* has made a draft decision in which it proposes to approve a proposed *pricing methodology*, - that proposed *pricing methodology*; or

- (2) if subparagraph (1) does not apply, the *pricing methodology* most recently approved for that *Transmission Network Service Provider* prior to the proposed *pricing methodology* referred to in subparagraph (a)(1); or
 - (3) if there is no a previously approved *pricing methodology* for that *Transmission Network Service Provider*, - the previous method used by the *Transmission Network Service Provider* to establish prices, however determined must be used in place of an approved *pricing methodology*.
- (c) Where a *Transmission Network Service Provider* applies to the *AER* under clause 6A.26.2 for approval to recover a proposed recovery amount in circumstances where paragraphs (a) and (b) apply, the *AER* must make a determination in accordance with clause 6A.26.2 notwithstanding that the reduced charges were agreed before a *pricing methodology* was approved.
- (d) The subsequent approval by the *AER* of a *pricing methodology* for a *Transmission Network Service Provider* does not require the provider to adjust, reverse or recompense any amounts to *Transmission Customers* in connection with charges for services established pursuant to this clause 11.8.7.

Part H Reallocations (2007 amendments)

11.9 Rules consequent on the making of the National Electricity Amendment (Reallocations) Rule 2007

11.9.1 Definitions

For the purposes of this rule 11.9:

Amending Rule means the National Electricity Amendment (Reallocations) Rule 2007.

commencement date means the day on which the Amending Rule commences operation.

existing reallocation means a *reallocation* in place immediately before the commencement date.

new reallocation means a *reallocation* undertaken in accordance with the *Rules* after the date of *publication* of the *reallocation procedures* under clause 3.15.11A(d).

transitional reallocation means a *reallocation* in place immediately after the commencement date but prior to the date of *publication* of the *reallocation procedures* by NEMMCO under clause 3.15.11A(d).

11.9.2 Existing and transitional reallocations

- (a) Subject to paragraph (c), an existing reallocation is to be treated as if the Amending Rule had not been made.
- (b) Subject to paragraph (c), a transitional reallocation is to be treated as if the Amending Rule had not been made.
- (c) A *Market Participant* who is a party to an existing reallocation or a transitional reallocation may elect to have the reallocation treated as a new reallocation if the participant obtains the agreement of the *Market Participant* who is the other party to the reallocation.

Part I Technical Standards for Wind Generation (2007 amendments)

11.10 Rules consequent on making of the National Electricity Amendment (Technical Standards for Wind Generation and other Generator Connections) Rule 2007

11.10.1 Definitions

Subject to this rule 11.10, in this rule 11.10:

Amending Rule means the National Electricity Amendment (Technical Standards for Wind Generation and other Generator Connections) Rule 2007.

commencement date means the date on which the Amending Rule commences operation.

new Chapter 5 means Chapter 5 of the *Rules* in force immediately after the commencement date.

old Chapter 5 means Chapter 5 of the *Rules* in force immediately prior to the commencement date.

11.10.2 Provision of information under S5.2.4 in registration application

- (a) Any requirements in the Amending Rule that require a person who is applying to be a *Registered Participant* to submit information in relation to clause S5.2.4 for the purposes of clause 2.9.2 does not apply to any person who has, in accordance with clause 2.9.1:
 - (1) submitted an application to be registered as a *Registered Participant*;
 - (2) commenced a process for submitting further information in relation to the application referred to in subparagraph (1); or

- (3) has submitted further information in relation to the application referred to in subparagraph (1),

and, at the commencement date, has not been registered by *NEMMCO* in accordance with clause 2.9.2 as a *Registered Participant*.
- (b) A person registered in accordance with this clause 11.10.2:
 - (1) subject to subparagraph (2), is taken to be registered in accordance with the requirements of the *Rules* as amended by the Amending Rule; and
 - (2) must submit all information required under clause S5.2.4 within six months of the commencement date.

11.10.3 Access standards made under the old Chapter 5

- (a) Any *automatic access standard* or *negotiated access standard* that applied to a *generating unit or generating system* under the old Chapter 5 continues to apply to that system or unit as if the Amending Rule had not been made.
- (b) Unless a *Generator* and a *Network Service Provider* otherwise agree, a *negotiated access standard* that is the subject of a negotiating process as at the commencement date, is to be negotiated in accordance with the old Chapter 5, as if the Amending Rule had not been made.

11.10.4 Modifications to plant by Generators

Unless the *Generator* and the relevant *Network Service Provider* otherwise agree, a *Generator* who at the commencement date has proposed to modify a *plant* and has commenced negotiations with a *Network Service Provider* under the old Chapter 5 is to continue the negotiating process in accordance with the old Chapter 5 as if the Amending Rule had not been made.

11.10.5 Technical Details to Support Application for Connection and Connection Agreement

- (a) Subject to paragraphs (b) and (c), any decision or action taken by *NEMMCO* for the purpose of developing and *publishing* an initial *Generating System Design Data Sheet*, an initial *Generating System Setting Data Sheet* and initial *Generating System Model Guidelines* under clause S5.5.7 prior to the commencement date has continuing effect as if the decision had been made or the action had been taken under the Amending Rule.
- (b) Pending the final *publication* of the *Generating System Design Data Sheet* and the *Generating System Setting Data Sheet* under clause S5.5.7:

- (1) schedule 5.5.1 of the *Rules* as in force immediately before the commencement date is taken to be the interim *Generating System Design Data Sheet*; and
- (2) schedule 5.5.2 of the *Rules* as in force immediately before the commencement date is taken to be the interim *Generating System Setting Data Sheet*.
- (c) The interim *Generating System Design Data Sheet* and interim *Generating System Setting Data Sheet* referred to in paragraph (b) continue in force until *NEMMCO publishes* the equivalent data sheet under S5.5.7 which must be no later than 29 February 2008.

11.10.6 Transitional arrangements for establishment of performance standards

For the purposes of the definition of performance requirement in clause 4.16.1, clauses S5.2.8 and S5.2.9 of the old Chapter 5 applies as if the Amending Rule had not been made.

11.10.7 Jurisdictional Derogations for Queensland

- (a) For the purposes of clause 9.37.12, clause S5.2.5.2(c) of the old Chapter 5 applies as if the Amending Rule had not been made.
- (b) For the purposes of clause 9.37.21, clause S5.2.5.13 of the old Chapter 5 applies as if the Amending Rule had not been made.

11.10A Rules consequent on the making of the National Electricity Amendment (Central Dispatch and Integration of Wind and Other Intermittent Generation) Rule 2008

11.10A.1 Definitions

In this rule 11.10A:

Amending Rule means the National Electricity Amendment (Central Dispatch and Integration of Wind and Other Intermittent Generation) Rule 2008.

classified generating unit means a *non-scheduled generating unit* or *scheduled generating unit* immediately before the registration date that could be classified as a *semi-scheduled generating unit* immediately after the registration date.

commencement date means the date on which Schedule 2 of the Amending Rule commences operation.

committed project means a project that *NEMMCO* considers has been fully committed by the project proponent taking into account the following factors:

- (a) the project proponent's rights to land for the construction of the project;
- (b) whether contracts for the supply and construction of the project's major plant or equipment, including contract provisions for project cancellation payments, have been executed;
- (c) the status of all planning and construction approvals and licences necessary for the commencement of construction of the project, including completed and approved environmental impact statements;
- (d) the level of commitment to financing arrangements for the project; and
- (e) whether project construction has commenced or a firm date has been set for it to commence.

initial ECM guidelines has the meaning given in clause 11.10A.8.

potential semi-scheduled generating unit means a *generating unit* that, at the time of registration of that unit under Chapter 2, could have been classified as a *semi-scheduled generating unit* in accordance with clause 2.2.7 and:

- (a) is listed in "Table 4.22: Committed NEM Wind Farms" of the 2007 *statement of opportunities*; or
- (b) is considered by *NEMMCO* to be a committed project as at 1 January 2008, and, for the avoidance of doubt, does not include a classified generating unit.

registered generating unit means a *generating unit* which has had its classification as a *semi-scheduled generating unit* approved by *NEMMCO* on or after the registration date and before the commencement date.

registration date means the date on which Schedule 1 of the Amending Rule commences operation.

11.10A.2 Registration and reclassification of classified generating units

- (a) On and after the registration date, a *Non-Scheduled Generator* or *Scheduled Generator* with a classified generating unit will not be required to register as a *Semi-Scheduled Generator* and reclassify the classified generating unit as a *semi-scheduled generating unit*.
- (b) For a period of 2 years after the commencement date, a *Generator* who:
 - (1) as at the commencement date has classified generating units; and
 - (2) subsequently reclassifies those generating units as *semi-scheduled generating units*,

is not required to pay *Participant fees* in accordance with rule 2.11.

- (c) Classified generating units that are reclassified as *semi-scheduled generating units* after the registration date but prior to the commencement date are taken to be *non-scheduled generating units* or *scheduled generating units* (as the case may be) until the commencement date.

11.10A.3 Registered generating unit

- (a) Subject to paragraph (b) and clause 11.10A.4, until the commencement date, a registered generating unit is taken to be a *non-scheduled generating unit* for the purposes of the *Rules*.
- (b) A registered generating unit must meet the technical requirements for a *semi-scheduled generating unit* in schedule 5.2.
- (c) A registered generating unit that:
 - (1) prior to the registration date is classified as a *scheduled generating unit*; and
 - (2) on or after the registration date but prior to the commencement date is reclassified as a *semi-scheduled generating unit*,

is taken to continue to be a *scheduled generating unit* until the commencement date.

11.10A.4 Classification of potential semi-scheduled generating unit

- (a) On and after the registration date, a person may apply to *NEMMCO* to classify a potential semi-scheduled generating unit as:
 - (1) a *scheduled generating unit* in accordance with clause 2.2.2; or
 - (2) a *non-scheduled generating unit* in accordance with clause 2.2.3.
- (b) *NEMMCO* must treat an application received under paragraph (a) as:
 - (1) in the case of an application referred to paragraph (a)(1), as an application to be classified as a *scheduled generating unit*; or
 - (2) in the case of an application referred to in paragraph (a)(2), as an application to be classified as a *non-scheduled generating unit*.
- (c) In assessing an application referred to in paragraph (a)(2), *NEMMCO* must approve the classification if *NEMMCO* is satisfied that the output of the *generating unit* is *intermittent* even where the *generating unit* does not meet the requirements of clause 2.2.3(b)(1) or (2).
- (d) If an application for classification of a potential semi-scheduled generating unit made under this clause 11.10A.4 is approved by *NEMMCO* in

accordance with clause 2.2.2 or, subject to paragraph (c), clause 2.2.3, the relevant unit is taken to be a *scheduled generating unit* or *non-scheduled generating unit* (as the case may be) for the purposes of the *Rules*.

11.10A.5 Participant fees

Until *NEMMCO* determines a structure of *Participant fees* under rule 2.11 which provides for *Semi-Scheduled Generators*, references to *Scheduled Generators* in *NEMMCO's* "Structure of Participant Fees under rule 2.11 of the National Electricity Rules" publication dated 24 March 2006, will be taken to include *Semi-Scheduled Generators*.

11.10A.6 Timetable

- (a) *NEMMCO* must amend the *timetable* in accordance with clause 3.4.3(b) to take into account the Amending Rule with those amendments to take effect from the commencement date.
- (b) All actions taken by *NEMMCO* prior to the commencement date in anticipation of the commencement date to amend the *timetable* as required under paragraph (a) are taken to satisfy the equivalent action required under clause 3.4.3(b).

11.10A.7 Procedure for contribution factors for ancillary service transactions

- (a) *NEMMCO* must amend the procedure prepared by *NEMMCO* under clause 3.15.6A(k) in accordance with clause 3.15.6A(m) to take into account the Amending Rule with those amendments to take effect from the commencement date.
- (b) All actions taken by *NEMMCO* prior to the commencement date in anticipation of the commencement date to amend the procedure prepared by *NEMMCO* under clause 3.15.6A(k) as required under paragraph (a) are taken to satisfy the equivalent action under clause 3.15.6A(m).

11.10A.8 Guidelines for energy conversion model information

- (a) Subject to paragraph (b), for the purposes of clause 2.2.7(d) *NEMMCO* must *publish* guidelines by no later than the registration date setting out the information to be contained in *energy conversion models* (the **initial ECM guidelines**).
- (b) The initial ECM guidelines do not need to be prepared in consultation with *Semi-Scheduled Generators*. *NEMMCO* must replace the initial ECM guidelines as soon as reasonably practicable with guidelines described in clause 2.2.7(d) which have been prepared in consultation with *Semi-*

Scheduled Generators and such other person that *NEMMCO*, acting reasonably, considers appropriate.

11.11 Rules consequent on making of the National Electricity Amendment (Cost Recovery of Localised Regulation Services) Rule 2007

11.11.1 Definitions

For the purposes of this rule 11.11:

Amending Rule means the National Electricity Amendment (Cost Recovery of Localised Regulation Services) Rule 2007.

commencement date means 1 January 2009.

11.11.2 Action taken by NEMMCO for the purposes of Amending Rule

- (a) Any action taken by *NEMMCO* prior to the commencement date for the purpose of amending the procedure prepared by *NEMMCO* under clause 3.15.6A(k) for the purpose of the Amending Rule is taken to have satisfied the equivalent action under the *Rules*.
- (b) Any action taken by *NEMMCO* prior to the commencement date to calculate the *local market ancillary service requirement* to include *regulation services* for the purposes of the Amending Rule is taken to have satisfied the equivalent action under the *Rules*.

11.12 Rules consequent on making of the National Electricity Amendment (Efficient Dispatch of Regulation Services) Rule 2007

11.12.1 Definitions

For the purposes of this rule 11.12:

Amending Rule means the National Electricity Amendment (Efficient Dispatch of Regulation Services) Rule 2007.

commencement date means 1 January 2009.

11.12.2 Action taken by NEMMCO for the purposes of Amending Rule

- (a) Any action taken by *NEMMCO* prior to the commencement date for the purpose of revising the *market ancillary service specification* as a result of the Amending Rule is taken to satisfy the equivalent actions required for revising a *market ancillary service specification* under the *Rules*.

- (b) Any action taken by *NEMMCO* prior to the commencement date for the purpose of revising the procedures established under clause 3.8.1(c) to allow relaxation of *power system constraints* as a result of the Amending Rule, is taken to satisfy any equivalent actions required under the *Rules*.
- (c) Any action taken by *NEMMCO* prior to the commencement date for the purpose of amending the methodology developed by *NEMMCO* to determine *dispatch prices* and *ancillary service prices* under clause 3.9.3(b) as a result of the Amending Rule is taken to satisfy the equivalent actions required under the *Rules*.

Part L Abolition of Snowy Region (2007 amendments)

11.13 Rules consequent on making the National Electricity Amendment (Abolition of Snowy Region) Rule 2007

11.13.1 Definitions

In this rule 11.13:

Amending Rule 2007 means the National Electricity Amendment (Abolition of Snowy Region) Rule 2007.

current Regions Publication means the document published by *NEMMCO* entitled “List of Regional Boundaries and Marginal Loss Factors for the 2007/08 Financial Year”.

Draft Determination date means 25 January 2007.

implementation period means the period specified in clause 11.13.4.

implementation plan means the plan referred to in clause 11.13.5.

implementation function means a function referred to in clause 11.13.6.

Loss Factors Publication means the document *published* by *NEMMCO* from time to time under clauses 3.6.1(f) and 3.6.2(f1) which sets out *marginal loss factors*.

modified regions means the *regions* identified as the New South Wales *region* and the Victoria *region* in the current *Regions Publication*, modified as a result of the abolition of the Snowy *region* under the *Amending Rule 2007* taking effect.

new regions means the unmodified *regions* and the modified *regions*.

New South Wales region, Snowy region and Victoria region each have the same meaning as in clause 3.5.6.

old regions means the *regions* identified in the current *Regions Publication*.

Rule commencement date means the date on which the *Amending Rule 2007* commences operation.

unmodified regions means the *regions* known as the Queensland *region*, the South Australia *region* and the Tasmania *region* as identified in the current *Regions Publication*, the boundaries of which are not affected by the abolition of the Snowy *region* under the *Amending Rule 2007*.

11.13.2 Purpose of rule 11.13

The purpose of this rule 11.13 is to enable the efficient and effective implementation of a change of *region* boundaries as a result of the abolition of the Snowy *region* during the implementation period, prior to the start of the new *regions*, and to support a smooth transition from the old *regions* to the new *regions*.

11.13.3 Application of rule 11.13

This rule 11.13 applies despite any other provision of the *Rules* (including any guideline or procedure made under the *Rules*), and to the extent of any inconsistency, this rule 11.13 prevails during the implementation period.

11.13.4 Implementation period

- (a) The implementation period starts on the Rule commencement date and ends on 15 July 2008.
- (b) Any decision made or action taken by *NEMMCO* for the purpose of implementing the abolition of the Snowy *region* between the Draft Determination date and the Rule commencement date, has continuing effect as if the decision had been made or the action had been taken under the *Rules* as amended by the *Amending Rule 2007*.

11.13.5 Publishing of implementation plan by NEMMCO

- (a) *NEMMCO* must develop and *publish* by 15 September 2007 an implementation plan that identifies the key implementation steps to be taken during the implementation period, including the proposed exercise by *NEMMCO* of the implementation functions.
- (b) *NEMMCO* may, during the implementation period, amend the implementation plan as necessary, and must *publish* the amended plan.

11.13.6 NEMMCO implementation functions

- (a) Subject to this rule 11.13, *NEMMCO* has, during the implementation period, the following functions and powers (‘the implementation functions’):
 - (1) the power to make a decision or take any action (including the power to refrain from making a decision or taking action) that is necessary or consequential to the implementation of the *Amending Rule 2007*; and
 - (2) the other functions and powers specified under this rule 11.13.
- (b) The exercise of the implementation functions by *NEMMCO* must be referable to and consistent with the implementation plan as *published*.

11.13.7 Software modifications to implement abolition of Snowy region

Despite clause 3.17.1 and subject to this clause 11.13.7, *NEMMCO*:

- (1) may, as an implementation function, alter, reconfigure, reprogram or otherwise modify or enhance any computer software required for the operation of the *market*; and
- (2) must, to the extent practicable, adhere to the procedures for change management under the document entitled “NEM Systems IT Procedure Manual: Change Management” and *NEMMCO* may make the changes under paragraph (1) without authorisation by the *AER* even if *NEMMCO* does not fully adhere to that document.

11.13.8 Allocation of transmission connection points as a result of abolition of Snowy region

Each *transmission network connection point* previously assigned to the Snowy region as at the Rule commencement date is allocated to the New South Wales region and the Victoria region as follows:

Loads

Location	Voltage kV	TNI code	Region
Khancoban	330	NKHN	Victoria

Generation

Location	Voltage kV	Connection point ID	TNI code	Region
Jindabyne pump at Guthega	132	NGJP	NGJP	Victoria

Location	Voltage kV	Connection point ID	TNI code	Region
Guthega	132	NGUT	NGUT	NSW
Guthega Ancillary Services 2	132	NGUT2	NGUT	NSW
Guthega	132	NGUT8	NGUT	NSW
Lower Tumut	330	NLTS	NLTS	NSW
Lower Tumut Ancillary Services 2 (pumps)	330	NLTS3	NLTS	NSW
Lower Tumut Ancillary Services 3	330	NLTS5	NLTS	NSW
Lower Tumut	330	NLTS8	NLTS	NSW
Murray Ancillary Services 1	330	NMUR11	NMUR	Victoria
Murray Ancillary Services 2	330	NMUR13	NMUR	Victoria
Murray Ancillary Services 3	330	NMUR5	NMUR	Victoria
Murray Ancillary Services 4	330	NMUR7	NMUR	Victoria
Murray	330	NMUR8	NMUR	Victoria
Murray Ancillary Services 5	330	NMUR9	NMUR	Victoria
Upper Tumut	330	NUTS	NUTS	NSW
Upper Tumut Ancillary Services 2	330	NUTS3	NUTS	NSW
Upper Tumut Ancillary Services 3	330	NUTS5	NUTS	NSW
Upper Tumut Ancillary Services 4	330	NUTS7	NUTS	NSW
Upper Tumut	330	NUTS8	NUTS	NSW

11.13.9 Location of region boundaries

The location of the *region* boundary between the New South Wales *region* and the Victoria *region* as a result of the abolition of the Snowy *region* is as follows:

- (1) at Red Cliffs Terminal Station on the 0X1 Red Cliffs to Buronga 220 Transmission Line;

- (2) at Wodonga Terminal Station on the 060 Wodonga to Jindera 330 Transmission Line;
- (3) at Murray Switching Station on the 066 Murray to Lower Tumut 330 Transmission Line;
- (4) at Murray Switching Station on the 065 Murray to Upper Tumut 330 Transmission Line;
- (5) at the Guthega 132kV Switchyard 132kV Bus No 2-3 bus Section Disconnecter 4128.

11.13.10 2008/09 Regions Publication and Loss Factors Publication

- (a) *NEMMCO* must, as an implementation function, review and *publish* by 1 April 2008:
 - (1) the 2008/09 *Regions Publication*; and
 - (2) the 2008/09 Loss Factors Publication,making any changes necessary in accordance with the *Amending Rule 2007*, including but not limited to the allocation of *transmission network connection points* under clause 11.13.8 and the location of *region* boundaries under clause 11.13.9.
- (b) In relation to the publications referred to in paragraph (a) (or subsequent annual *Regions Publications* or Loss Factors Publications), nothing prevents *NEMMCO*:
 - (1) amending those publications to implement:
 - (i) the *Amending Rule 2007* or future *region* boundary changes under the *Rules*;
 - (ii) future physical changes to the *transmission network*; or
 - (iii) changes in the configuration of *connection points* requested by *Registered Participants* for the purposes of participation in the *NEM*; or
 - (2) publishing the annual *Regions Publication* and the Loss Factors Publication in a single document.

11.13.11 Reserve margin calculations

NEMMCO may, as an implementation function, determine estimates of the minimum reserve levels to be applied to the modified *regions* provided that the process used to determine the estimates is *published*.

11.13.12 Re-calculation of network constraints and transmission loss factors

- (a) A *Transmission Network Service Provider* must, to the extent practicable, provide to *NEMMCO* on request information for or with respect to the re-calculation of *network constraints* and *transmission loss factors* including but not limited to:
 - (1) advice on the re-calculation of *network* limits, including stability limits; and
 - (2) information relating to the determination of *network losses* and *loss factors*.
- (b) Where a *Transmission Network Service Provider* advises *NEMMCO* that it is not practicable to provide information relating to the re-calculation of *network* limits or losses within the time period specified in the request, *NEMMCO* may:
 - (1) request the *Transmission Network Service Provider* to provide the information to *NEMMCO* as it becomes available to the provider;
 - (2) determine *inter-regional loss factors* on the basis of estimates;
 - (3) apportion losses for the purpose of *settlements residue payments* using estimates; or
 - (4) re-formulate existing *network constraints* to apply to the new *regions* using estimates.
- (c) *NEMMCO* must *publish* the process used for determining estimates under paragraph (b).

11.13.13 Transition of settlements residue auction arrangements

- (a) Terms used in this clause 11.13.13 that are used in the *auction rules* have the same meaning as in those rules.
- (b) Despite anything in rule 3.18, *NEMMCO*:
 - (1) may, as an implementation function:
 - (i) amend the *auction rules*;
 - (ii) remove or modify Unit Categories affected by the abolition of the *Snowy region* and the consequential modification of the *New South Wales region* and the *Victoria region*;

- (iii) re-set *auction expense fees* as required to align with any new Unit Categories;
 - (iv) conduct *auctions* in relation to new Unit Categories; and
 - (v) take any other action in relation to *auctions* that is necessary or consequential on the abolition of the Snowy *region*; and
- (2) must consult with the *Settlements Residue Committee* in amending the *auction rules* under paragraph (1) and is only required to comply with the *Rules consultation procedures* to the extent practicable in the circumstances of the implementation of the abolition of the Snowy *region*.

11.13.14 Continuity of regions

Subject to this rule 11.13 and clause 3.5.6, on and from 00:00 hours *EST* on 1 July 2008:

- (1) the unmodified *regions* continue and are taken to be *regions* for all purposes under the *Rules*; and
- (2) the New South Wales *region* and the Victoria *region* as modified by the *Amending Rule 2007* continue and are taken to be *regions* specified under clause 3.5.1 for all purposes under the *Rules*.

Part M Economic Regulation of Distribution Services (2007 amendments)

Division 1 General Provisions

[11.14 General provisions](#)

11.14.1 Application of this Division

This Division has no application in relation to Victoria.

11.14.2 Definitions

amending rules means the *National Electricity (Economic Regulation of Distribution Services) Amendment Rules 2007*.

current Chapter 6 means Chapter 6 of these *Rules* as currently in force.

former Chapter 6 means Chapter 6 of these *Rules* as in force before the substitution of the *current Chapter 6* by the amending rules.

jurisdictional pricing determination for a *participating jurisdiction* means a determination regulating *distribution service* pricing made by the *Jurisdictional Regulator* for the *participating jurisdiction* and in force immediately before the date of the relevant amendment.

new regulatory provisions means the provisions of *current Chapter 6* or (if applicable) of later Divisions of this Part providing for the economic regulation of *distribution services* after the transitional regulatory period comes to an end.

old regulatory regime for a *participating jurisdiction* includes:

- (a) the jurisdictional pricing determination for the *participating jurisdiction*; and
- (b) the laws (including the *former Chapter 6*) governing the making, monitoring, administration and enforcement of the jurisdictional pricing determination;
- (c) any other determination, guideline, code or document (whatever its description) of a kind contemplated by the *former Chapter 6* that was made for the *participating jurisdiction* by the relevant *Jurisdictional Regulator* and was in force immediately before the date of the relevant amendment;
- (d) any other obligation imposed by or under the *former Chapter 6*;
- (e) any power or function of the *Jurisdictional Regulator* under the *former Chapter 6*.

new regulatory regime means the system for the economic regulation of *distribution services* contemplated by the new regulatory provisions.

relevant amendment means the substitution of the current Chapter 6 for the *former Chapter 6* by the amending rules.

transitional regulatory period for a *participating jurisdiction* means the *regulatory control period* for which the *jurisdictional pricing determination* for the relevant *participating jurisdiction* was made.

11.14.3 Preservation of old regulatory regime

- (a) Subject to this Part, a *Distribution Network Service Provider* who was providing *distribution services* in a *participating jurisdiction* at the date of the relevant amendment
 - (1) remains subject to the old regulatory regime for the duration of the transitional regulatory period; and

- (2) does not become subject to the new regulatory regime until the end of the transitional regulatory period.

Examples:

- 1. *Reporting, monitoring and other compliance requirements continue under the old regulatory regime until the end of the transitional regulatory period and (subject to this Part) are unaffected by the new regulatory provisions.*
- 2. *Price regulation continues under the old regulatory regime until the end of the transitional regulatory period and is unaffected by the new regulatory provisions.*
- 3. *Prudential, billing and settlement issues are governed by rules 6.7 and 6.8 of former Chapter 6 and any applicable regulatory instruments (rather than Parts J and K of current Chapter 6).*
- 4. *Access disputes are dealt with under the old regulatory regime (and cannot be notified under Part L of current Chapter 6).*

(b) However:

- (1) the new regulatory provisions govern the making of a distribution determination for the *Distribution Network Service Provider* at the end of the transitional regulatory period; and
- (2) in that respect the *new regulatory provisions* apply to a *Distribution Network Service Provider* who is still subject to the old regulatory regime as if the jurisdictional pricing determination were a distribution determination approaching the end of its *regulatory control period*.

11.14.4 Transfer of regulatory responsibility

- (a) The Minister for a *participating jurisdiction* may, during the course of the transitional regulatory period, transfer responsibility for the economic regulation of *distribution services* in the relevant jurisdiction from the *Jurisdictional Regulator* to the *AER*.
- (b) A Minister for a *participating jurisdiction* makes (or is taken to make) a transfer of regulatory responsibility under this clause:
 - (1) by giving notice of the transfer to the *Jurisdictional Regulator* and the *AER*; or
 - (2) if powers exist apart from this clause under the law of the *participating jurisdiction* to transfer regulatory responsibility from the *Jurisdictional Regulator* to the *AER* – by exercising those powers.

- (c) If the Minister makes a transfer of regulatory responsibility under this clause:
 - (1) the *AER* is subrogated to the position of the *Jurisdictional Regulator*; and
 - (2) the *AER* may therefore exercise powers and functions of the *Jurisdictional Regulator* (including legislative powers and functions) under the old regulatory regime; and

Note:

The AER may also use its powers (e.g. for information gathering) under the Law.

- (3) references to the *Jurisdictional Regulator* in a determination or other instrument (including a legislative instrument) related to the old regulatory regime will be read as references to the *AER*.

11.14.5 Special requirements with regard to ring fencing

- (a) The requirements of the old regulatory regime with regard to ring fencing (rule 6.12 of *former Chapter 6* and related guidelines) apply to a *Distribution Network Service Provider* until the *AER* assumes regulatory responsibility at the end of the transitional regulatory period or on the earlier transfer of regulatory responsibility to the *AER*.
- (b) On the *AER's* assumption of regulatory responsibility, a *Distribution Network Service Provider*:
 - (1) ceases to be subject to the requirements of the old regulatory regime with regard to ring fencing; and
 - (2) becomes subject to the ring fencing requirements of the new regulatory regime; but
 - (3) guidelines in force for a *participating jurisdiction* immediately before the *AER's* assumption of regulatory responsibility (**transitional guidelines**) continue in force for that jurisdiction subject to amendment, revocation or replacement by guidelines made under the new regulatory regime.
- (c) The transitional guidelines:
 - (1) are taken to be guidelines made by the *AER* under the new regulatory regime; and
 - (2) are to be construed as if references to a *Jurisdictional Regulator* were references to the *AER*.

- (d) A waiver granted, or additional ring fencing requirement imposed, by a *Jurisdictional Regulator* under the transitional guidelines continues in force under the transitional guidelines subject to variation or revocation by the *AER*.

11.14.6 Additional requirements with regard to cost allocation

- (a) Even though a *Distribution Network Service Provider* remains subject to the old regulatory regime, the provider is also subject, as from the date of the relevant amendment, to the requirements of Part F of the current Chapter 6 (Cost Allocation).
- (b) This clause applies only for the purposes of the next distribution determination for the *Distribution Network Service Provider*.

11.14.7 Construction of documents

To facilitate the transition from the old regulatory regime to the new regulatory regime, references in determinations and other documents to provisions of former Chapter 6 are to be read (where the context admits) to corresponding provisions of the current Chapter 6.

Division 2 Special provisions applying to New South Wales and the Australian Capital Territory for the Regulatory Control Period 2009-2014

11.15 Special provisions applying to New South Wales and the Australian Capital Territory

11.15.1 Regulatory control period 2009-2014 for NSW and ACT

There is to be a regulatory control period of 5 years for the NSW and ACT Distribution Network Service Providers commencing on 1 July 2009, which is referred to in this Division 2 as the regulatory control period 2009-2014.

11.15.2 Application of Chapter 6 to NSW and ACT for regulatory control period 2009-2014

- (a) Chapter 6 of the *Rules* applies in relation to the NSW and ACT Distribution Network Service Providers in respect of the regulatory control period 2009-2014 as if that Chapter were amended so as to be in the form set out in Appendix 1 to the *Rules*.
- (b) However, anything required to be done by or in relation to the NSW and ACT Distribution Network Service Providers during the regulatory control period 2009-2014 for the purposes of the *regulatory control period* commencing on 1 July 2014 is to be done in accordance with general

Chapter 6, but (where appropriate) taking into account anything done under transitional Chapter 6.

- (c) Accordingly general Chapter 6 does not apply in relation to the NSW and ACT Distribution Network Service Providers in respect of the regulatory control period 2009-2014 except:
 - (1) as provided by paragraphs (a) and (b); and
 - (2) to the extent that a provision of transitional Chapter 6 expressly applies a provision of general Chapter 6 or expressly provides that an act, matter or thing has to be done in accordance with a provision of or a procedure in general Chapter 6.
- (d) For the avoidance of doubt, this rule 11.15 and transitional Chapter 6 do not apply to *Distribution Network Service Providers* not referred to in paragraph (c).
- (e) References in the *Rules* (other than Chapter 6 and this rule 11.15) to Chapter 6 or a provision of Chapter 6 are references to transitional Chapter 6 or a provision of transitional Chapter 6 so far as the references relate to the regulatory control period 2009-2014 for the NSW and ACT Distribution Network Service Providers.
- (f) In this rule 11.15:
 - “general Chapter 6” means Chapter 6 as in force apart from this rule 11.15.
 - “transitional Chapter 6” means Chapter 6 in the form set out in Appendix 1 to the Rules.

Division 3 Transitional arrangements for first distribution determination for Queensland Distribution Network Service Providers

11.16 Transitional arrangements for first distribution determination for Queensland Distribution Network Service Providers

11.16.1 Definitions

In this Division 3:

2005 determination means the Final Determination: Regulation of Electricity Distribution of the Queensland Competition Authority dated April 2005.

EDSD Review means the review by the Independent Panel appointed by the Queensland Government into Electricity Distribution and Service Delivery for the 21st Century which was established in March 2004 and reported in July 2004.

ENERGEX means Energex Limited A.C.N 078 849 055 and any successor business.

Ergon Energy means Ergon Energy Corporation Limited A.C.N. 087 646 062 and any successor business.

Queensland Competition Authority means the authority established by section 7 of the *Queensland Competition Authority Act 1997* (Qld).

regulatory control period means the *regulatory control period* beginning 1 July 2010.

11.16.2 Application of Part to Queensland 2010 distribution determinations

The requirements of this Division 3 apply for the purposes of making a distribution determination for ENERGEX and Ergon Energy for the regulatory control period and modify the application of Chapter 6 of the Rules to the extent set out in this Division 3.

11.16.3 Treatment of the regulatory asset base

- (a) Nothing in Chapter 6 of the *Rules* requires ENERGEX or Ergon Energy to amend the approach allowed in the 2005 determination in relation to the treatment of *standard control services* and other services in the regulatory asset base for the regulatory control period.
- (b) The *AER* must accept the approach proposed by ENERGEX and Ergon Energy for the regulatory control period if it is consistent with the approach in the 2005 determination.
- (c) The *AER* must provide for any necessary adjustments or mechanisms in the *distribution determination* for the regulatory control period to prevent any cross-subsidies between *standard control services* and other *distribution services*.

Note:

The regulatory asset bases for Ergon Energy and ENERGEX are likely to include assets used to provide services which are not standard control services and accordingly the expected revenue for each year will need to be adjusted to avoid double recovery of those costs.

11.16.4 Efficiency Benefit Sharing Scheme

- (a) An *efficiency benefit sharing scheme* for ENERGEX and Ergon Energy for the regulatory control period must not cover efficiency gains and losses relating to capital expenditure.

- (b) For the purposes of clause 6.5.8(c) the *AER* must also have regard to the continuing obligations on ENERGEX and Ergon Energy throughout the regulatory control period to implement the recommendations from the EDSD Review adopted by the Queensland Government.

11.16.5 Service Target Performance Incentive Scheme

In formulating a *service target performance incentive scheme* to apply to ENERGEX and Ergon Energy for the regulatory control period, the *AER*, in addition to the requirements in clause 6.6.2(b), must also:

- (1) take into account the continuing obligations on ENERGEX and Ergon Energy throughout the regulatory control period to implement the recommendations from the EDSD Review adopted by the Queensland Government;
- (2) take into account the impact of severe weather events on service performance; and
- (3) consider whether the scheme should be applied by way of a paper trial or whether a lower powered incentive is appropriate.

11.16.6 Framework and approach

- (a) If either ENERGEX or Ergon Energy submits a proposal to the *AER* as to the classification of services and control mechanism for the regulatory control period on or before 31 March 2008, the *AER* must publish its *framework and approach paper* under clause 6.8.1 in relation to those issues within five months of receiving the proposal from ENERGEX or Ergon Energy (as the case may be).
- (b) This clause does not affect the timing or the processes of the *AER* in preparing and publishing its *framework and approach paper* on the remaining issues in clause 6.8.1 for ENERGEX or Ergon Energy if they submit a proposal under paragraph (a).

11.16.7 Regulatory Proposal

- (a) For the purposes of submitting a *regulatory proposal* under clause 6.8.2 for the regulatory control period, ENERGEX and Ergon Energy may, for the purposes of calculating indicative prices referred to in clause 6.8.2(c)(4) and including X factors for the purposes of clause 6.5.9, treat the proposed *statement of regulatory intent* published under clause 6.16(b)(1) as if it were the applicable *statement of regulatory intent*.
- (b) If the *statement of regulatory intent* differs materially from the proposed *statement of regulatory intent*, ENERGEX or Ergon Energy may revise its

calculation of indicative prices and proposed X factors in its *regulatory proposal* on or before 1 July 2009.

- (c) The *AER* must *publish* any revised information submitted by ENERGEX or Ergon Energy under this clause.

11.16.8 Side constraints

For the regulatory control period, nothing in clause 6.18.6 should preclude the implementation of any price paths approved by the Queensland Competition Authority (including any necessary adjustment of those price paths in light of the expected revenue for the first *regulatory year* of the regulatory control period).

11.16.9 Cost pass throughs

- (a) If an event or circumstance occurs before 1 July 2010 which would constitute a pass through under the 2005 determination and no application for a pass through has been made in relation to that event or circumstance, ENERGEX or Ergon Energy may apply to the *AER* within a year of the event or circumstance occurring to accommodate the impact of the event in the regulatory control period.
- (b) The *AER* must allow a pass through of such amounts if the event or circumstance would have constituted a pass through under the 2005 determination as if the amounts were *approved pass through amounts* under clause 6.6.1.

11.16.10 Capital Contributions Policy

- (a) ENERGEX and Ergon Energy must comply with a capital contributions policy published under this clause 11.16.10 for the regulatory control period.
- (b) By 1 July 2009, ENERGEX and Ergon Energy must publish on their website a capital contributions policy based upon the requirements relating to capital contributions in their Network Pricing Principles Statements approved by the Queensland Competition Authority immediately in force prior to 1 July 2009.
- (c) The *AER* may by written notice, before 1 January 2010, direct ENERGEX or Ergon Energy to revise and republish their capital contributions policy within 15 *business days* of the notice only if the published policy does not give effect to the requirements relating to capital contributions in their Network Pricing Principles Statement.
- (d) After 1 January 2010, ENERGEX or Ergon Energy may apply to the *AER* to amend their published capital contributions policy and the *AER* may, after

such consultation as it considers appropriate, approve or not approve that amendment.

Division 4 – Transitional provisions of specific application to Victoria

11.17 Transitional provisions of specific application to Victoria

11.17.1 Definitions

In this Division:

AMI Order in Council means the Order in Council made by the Governor of Victoria under section 15A and section 46D of the *Electricity Industry Act 2000* (Vic) and published in the Victoria Government Gazette on 28 August 2007 (and includes that Order in Council as amended from time to time).

ESC cost allocation guidelines means *Electricity Industry Guideline No.3, Regulatory Information Requirements* made by the ESC and dated 14 December 2006 (and includes those guidelines as amended from time to time).

ESC distribution pricing determination means the Victorian distribution pricing determination as defined in section 3(1) of the *National Electricity (Victoria) Act 2005*.

Victorian Distribution Network Service Provider means a *Distribution Network Service Provider* for a *distribution network* situated wholly or partly in Victoria.

11.17.2 Calculation of estimated cost of corporate income tax

- (a) This clause applies to the calculation of the estimated cost of corporate income tax for the purposes of distribution determinations that are to take effect on 1 January 2011 for Victorian Distribution Network Service Providers.
- (b) For calculating the estimated cost of corporate income tax, the *AER* must adopt:
 - (1) the taxation values of assets carried over from the ESC distribution pricing determination; and
 - (2) the classification of assets, and the method of classification, adopted for the ESC distribution pricing determination; and
 - (3) the same method of depreciation as was adopted by the ESC for the ESC distribution pricing determination.

- (c) The *AER* may, however, depart from methods of asset classification or depreciation mentioned in paragraph (b)(2) or (3) to the extent required by changes in the taxation laws or rulings given by the Australian Taxation office.
- (d) A *post-tax revenue model* must be consistent with this clause.

11.17.3 Decisions made in the absence of a statement of regulatory intent

- (a) This clause applies if a Victorian Distribution Network Service Provider submits a *building block proposal* before the *AER* issues a *statement of regulatory intent*.
- (b) In deciding questions to which the considerations stated in clause 6.5.4(e) are relevant, the *AER* must have regard to those considerations.

11.17.4 Cost allocation guidelines

- (a) In formulating the *Cost Allocation Guidelines* under clause 6.15.3, the *AER* must include guidelines specifically applicable to Victorian Distribution Network Service Providers (the *guidelines of specific application to Victoria*).
- (b) The guidelines of specific application to Victoria:
 - (1) must be formulated with regard to the ESC cost allocation guidelines; and
 - (2) must be designed to ensure, to the maximum practicable extent, consistency between cost allocation as required by the ESC distribution pricing determination and cost allocation in later *regulatory control periods*.

11.17.5 Modification of requirements related to cost allocation method

- (a) Clause 6.15.4(a) applies to a Victorian Distribution Network Service Provider as if, instead of requiring submission of the provider's proposed *Cost Allocation Method* within 12 months after the commencement of Chapter 6, it required submission of the proposed *Cost Allocation Method* together with the first *building block proposal* to be submitted by the provider after the commencement of Chapter 6.
- (b) The references in clauses 6.5.6(b)(2) and 6.5.7(b)(2) to the *Cost Allocation Method* are, if paragraph (a) is applicable, to be read as references to the proposed *Cost Allocation Method* submitted with the *building block proposal*.

- (c) The *AER* must include in its *framework and approach paper* prepared for a Victorian *Distribution Network Service Provider*, in relation to the first *building block proposal* to be submitted by the provider after the commencement of Chapter 6, a statement of its likely approach to cost allocation based on the guidelines then in force.
- (d) The *AER*:
 - (1) must, in deciding under clause 6.15.4(c) whether to approve a *Cost Allocation Method* submitted by a Victorian Distribution Network Service Provider, have regard to previous cost allocation in accordance with the ESC distribution pricing determination; and
 - (2) must not approve the *Cost Allocation Method* unless it allows effective comparison of historical and forecast cost allocation between the period to which the ESC distribution pricing determination applies and later *regulatory control periods*; and
 - (3) may, subject to the relevant *Cost Allocation Guidelines*, refuse to approve the *Cost Allocation Method* if it differs from the method previously used by the Victorian Distribution Network Service Provider.

11.17.6 AMI Order in Council

- (a) Metering services that are regulated under the AMI Order in Council are not, while so regulated, subject to regulation under a distribution determination but, on cessation of regulation under the AMI Order in Council, are liable to regulation under a distribution determination.
- (b) However, for a relevant *regulatory control period*, services to which exit fees under clause 7, or restoration fees under clause 8, of the AMI Order in Council applied are to be classified as alternative control services and are to be regulated by the *AER* on the same basis as applied under the AMI Order in Council.
- (c) For paragraph (b), a relevant *regulatory control period* is a *regulatory control period* commencing on or after 1 January 2016 and before 1 January 2021.
- (d) Until there is a transfer of regulatory responsibility from the *ESC* to the *AER* under a law of Victoria, clause 7.3.6(f) in its application to Victoria will be read as if it permitted the recovery of the costs to which it refers in accordance with a determination made either by the *AER* or by the *ESC*.
- (e) This clause expires on 1 January 2021.

Part N Registration of Foreign Based Persons and Corporations as Trader Class Participants (2007 amendments)

11.18 Rules consequential on the making of the National Electricity Amendment (Registration of Foreign Based Persons and Corporations as Trader Class Participants) Rule 2007

11.18.1 Definitions

For the purposes of this rule 11.18:

Amending Rule means the National Electricity Amendment (Registration of Foreign Based Persons and Corporations as Trader Class Participants) Rule 2007.

commencement date means the day on which the Amending Rule commences operation.

11.18.2 Auction rules

- (a) *NEMMCO* must amend the *auction rules* by 1 September 2008 in accordance with clause 3.18.3 to incorporate the amendments to the *Rules* made by the Amending Rule.
- (b) Any action taken by *NEMMCO* prior to the commencement date, in anticipation of the commencement date, to amend the *auction rules* for the purpose of the Amending Rule is taken to satisfy the equivalent action under clause 3.18.3.

Part O Process for Region Change (2007 amendments)

11.19 Rules consequent on making of the National Electricity Amendment (Process for Region Change) Rule 2007

11.19.1 Definitions

Amending Rule means the National Electricity Amendment (Process for Region Change) Rule 2007.

commencement date means the day on which the Amending Rule commences operation.

old clause 3.5.5 means clause 3.5.5 of the *Rules* as in force immediately before the commencement date.

11.19.2 Regions Publication

The Regions Publication published by *NEMMCO* immediately before the commencement date in accordance with old clause 3.5.5 and clause 11.13.10 is taken to be the *Regions Publication* published by *NEMMCO* in accordance with clause 2A.1.3.

Part P Integration of NEM Metrology Requirements

11.20 Rules consequential on the making of the National Electricity Amendment (Integration of NEM Metrology Requirements) Rule 2008

11.20.1 Definitions

For the purposes of this rule 11.20:

Amending Rule means the National Electricity Amendment (Integration of NEM Metrology Requirements) Rule 2008.

commencement date means the day on which the Amending Rule commences operation.

first-tier jurisdictional requirements publication means the publication published by *NEMMCO* in accordance with clause 11.20.6.

Minimalist Transitioning Approach has the same meaning as in the Queensland Electricity Industry Code.

new clause 7.3.1 means clause 7.3.1 of the *Rules* immediately after the commencement date.

Victorian *first-tier load* means a load in Victoria where the electricity flowing through the *connection point* is equal to, or greater than, 160 MWh per annum.

11.20.2 Metering installations for non-market generating units immediately prior to 30 June 2008

- (a) A *metering installation* for a *non-market generating unit* that was installed immediately prior to 30 June 2008 and complied with the applicable jurisdictional requirements for that installation on 30 June 2008 is taken to satisfy the requirements for *metering installations* for *non-market generating units* in new clause 7.3.1.
- (b) Where a *metering installation* for a *non-market generating unit* did not comply with the requirements referred to in paragraph (a), that installation

must be repaired or replaced in accordance with the requirements of new clause 7.3.1.

- (c) The applicable jurisdictional requirements for *metering installations* for *non-market generating units* referred to in paragraph (a) must be referred to in the first-tier jurisdictional requirements publication.

11.20.3 First-tier load metering installations

- (a) Subject to clause 11.20.5, a *first-tier load metering installation* as at 30 June 2008 that complied with the applicable jurisdictional requirements for that installation as at that date is taken to comply with the *Rules* provided the *metering installation* continues to comply with the applicable jurisdictional requirements as at 30 June 2008.
- (b) A *first-tier load metering installation* that does not satisfy the requirements of paragraph (a) must be repaired or replaced in accordance with the *Rules*.
- (c) The applicable jurisdictional requirements referred to in paragraph (a) for *first-tier load metering installations* must be referred to in the first-tier jurisdictional requirements publication.

11.20.4 First-tier load metering installations in Victoria

- (a) Subject to paragraph (b) and despite the *Rules*, a *Market Participant* who is responsible for a Victorian *first-tier load* with a type 5 or type 6 *metering installation* immediately before the commencement date is taken to be the *responsible person* for that *metering installation*.
- (b) A *Market Participant* who is taken to be the *responsible person* for the *metering installation* referred to in paragraph (a) must ensure the *metering installation* meets the applicable jurisdictional requirements for that installation as referred to in the first-tier jurisdictional requirements publication in accordance with clause 11.20.3(c).

11.20.5 Minimalist Transitioning Approach in Queensland

For the duration of the Minimalist Transitioning Approach, clauses 7.2.3(i)(2), 7.2.5(b)(2), 7.2.5(d)(6) and 7.3.1(f) of the *Rules* do not apply in respect of a *metering installation* which:

- (a) is the responsibility of a *Market Participant* or *responsible person* who is operating under the Minimalist Transitioning Approach in Queensland; and
- (b) in accordance with the *Market Settlement and Transfer Solution Procedures*:
 - (1) has a *NMI* classification of SMALL; and

- (2) the *Local Network Service Provider* has not received a valid request from a *Market Customer* for the *NMI* to be registered with *NEMMCO*.

11.20.6 First-tier jurisdictional requirements publication

- (a) *NEMMCO* must, in consultation with the *participating jurisdictions*, publish a document (**‘first-tier jurisdictional requirements publication’**) that lists the documents that contain the applicable jurisdictional requirements referred to in clauses 11.20.2, 11.20.3 and 11.20.4.
- (b) *NEMMCO* must *publish* the first-tier jurisdictional requirements publication by 30 June 2008.

11.20.7 Metrology procedure

- (a) *NEMMCO* must make the required amendments to the *metrology procedure* as a result of the Amending Rule by 31 July 2008.
- (b) All actions taken by *NEMMCO* prior to the commencement date to amend the *metrology procedure* in accordance with paragraph (a) are deemed to be valid as at the commencement date to the extent that those actions were taken in accordance with the relevant requirements of rule 7.14 (as though the Amending Rule was in force at the time that the action was taken).
- (c) The *metrology procedure* published in accordance with rule 7.14 immediately before the commencement date continues to apply as if the Amending Rule had not been made and until *NEMMCO publishes* the amended the *metrology procedure* in accordance with paragraph (a).

11.21 Rules consequential on the making of the National Electricity Amendment (NEM Reliability Settings: Information Safety Net and Directions) Rule 2008 No. 6

11.21.1 Definitions

In this rule 11.21:

Amending Rule means the National Electricity Amendment (NEM Reliability Settings: Information Safety Net and Directions) Rule 2008 No. 6.

Commencement date means the date the Amending Rule commences operation.

11.21.2 EAAP guidelines

All actions taken by *NEMMCO* prior to the commencement date in anticipation of the commencement date for the purposes of preparing and publishing the first

EAAP guidelines as required by clause 3.7C(p) are taken to satisfy the equivalent actions required for *EAAP guidelines* under rule 3.7C.

11.21.3 NEMMCO procedures for exercising RERT

- (a) All actions taken by *NEMMCO* prior to the commencement date in anticipation of the commencement date for the purposes of developing and publishing the procedures for the exercise of the *RERT* as required by clause 3.20.7(e) are taken to satisfy the equivalent actions required for the procedures under clause 3.20.7.
- (b) *NEMMCO* may develop, *publish*, and may amend from time to time, interim procedures for the exercise of the *RERT* under rule 3.20 at any time before it *publishes* the first procedures for that purpose as required by clause 3.20.7(e). For these purposes:
 - (1) *NEMMCO* is not required to develop, *publish* or amend those interim procedures in accordance with the *Rules consultation procedures*;
 - (2) those interim procedures must take into account the *RERT principles* and *RERT guidelines* or, if there are no *RERT guidelines* in existence at that time, the draft guidelines referred to in clause 11.21.4(b);
 - (3) those interim procedures must include measures as referred to in clause 3.20.7(e);
 - (4) those interim procedures will cease to apply when *NEMMCO publishes* the first procedures for the exercise of the *RERT* as required by clause 3.20.7(g); and
 - (5) for so long as those interim procedures apply, references in rule 3.20 to the procedures referred to in clause 3.20.7(e) are taken to include references to those interim procedures.

11.21.4 RERT guidelines

- (a) All actions taken by the *Reliability Panel* prior to the commencement date in anticipation of the commencement date for the purposes of developing and *publishing* the first *RERT guidelines* as required by clause 3.20.8(c) are taken to satisfy the equivalent actions required for *RERT guidelines* under clause 3.20.8.
- (b) If it exercises the *RERT* under rule 3.20 prior to the *publication* of the first *RERT guidelines* as required by clause 3.20.8(c), *NEMMCO* must take into account the draft guidelines set out in Appendix C.3 to the document entitled 'Comprehensive Reliability Review: Second Interim Report' issued by the *Reliability Panel* and dated August 2007.

11.21.5 Timetable

- (a) *NEMMCO* must amend the *timetable* in accordance with clause 3.4.3(b) to take into account the Amending Rule and those amendments are to take effect from the commencement date.
- (b) All actions taken by *NEMMCO* prior to the commencement date in anticipation of the commencement date to amend the *timetable* as required by paragraph (a) are taken to satisfy the equivalent action required under clause 3.4.3(b).

11.21.6 Power system security and reliability standards

- (a) The *Reliability Panel* must amend the *power system security and reliability standards* in accordance with clause 8.8.3 to take into account the Amending Rule and those amendments are to take effect from the commencement date.
- (b) All actions taken by the *Reliability Panel* prior to the commencement date in anticipation of the commencement date to amend the *power system security and reliability standards* as required by paragraph (a) are taken to satisfy the equivalent action required under clause 8.8.3.

11.21.7 Report on statement of opportunities

All actions taken by *NEMMCO* prior to the commencement date in anticipation of the commencement date for the purposes of preparing and providing a report to the *Reliability Panel* as required by clause 3.13.3(u) are taken to satisfy the equivalent actions required for preparing and providing a report under clause 3.13.3(u).

11.21.8 Methodology for dispatch prices and ancillary services prices

Minor or administrative amendments made by *NEMMCO* to the methodology for determining *dispatch prices* and *ancillary service prices* developed in accordance with clause 3.9.3(e) prior to the commencement date are taken to have been made under clause 3.9.3(g).

Part Q ~~Part R~~ Regulatory Test Thresholds and Information Disclosure on Network Replacements

11.22 Rules consequential on the making of the National Electricity Amendment (Regulatory Test Thresholds and Information Disclosure on Network Replacements) Rule 2008

11.22.1 Definitions

In this rule 11.22:

amended definitions means the definitions of "new large transmission network asset" and "new small transmission network asset" as amended by the Amending Rule.

Amending Rule means the National Electricity Amendment (Regulatory Test Thresholds and Information Disclosure on Network Replacements) Rule 2008.

commencement date means the date on which the Amending Rule commences operation.

old definitions means the definitions of "new large transmission network asset" and "new small transmission network asset" as in force immediately before the commencement date.

11.22.2 Amending Rule does not affect existing regulatory test

The old definitions continue to apply in place of the amended definitions following the commencement date in respect of:

- (a) a *new small transmission network asset* for which a *Transmission Network Service Provider* has set out the matters required under clauses 5.6.2A(b)(4) and (5) in an *Annual Planning Report published* prior to the commencement date;
- (b) a *new small transmission network asset* not identified in an *Annual Planning Report* for which a *Transmission Network Service Provider* has *published* a report required under clause 5.6.6A(c) prior to the commencement date; and
- (c) a *new large transmission network asset* for which a *Transmission Network Service Provider* has taken an action or commenced a process under the *Rules* which relies on or is referenced to the *Regulatory Test* (such as *publishing* an application notice under clause 5.6.6(c)) that has not completed prior to the commencement date.

Part R~~Part S~~ Performance Standard Compliance of Generators

11.23 Rules consequential on the making of the National Electricity Amendment (Performance Standards Compliance of Generators) Rule 2008

11.23.1 Definitions

For the purposes of this rule 11.23:

Amending Rule means the National Electricity Amendment (Performance Standards Compliance of Generators) Rule 2008.

Old Clause 5.7.3(b) means the clause 5.7.3(b) in the version of the *Rules* that was in force immediately prior to the commencement of the Amending Rule.

11.23.2 Application of rule 11.23 for compliance programs implemented immediately after the commencement of the Amending Rule

Registered Participants are not required to comply with the obligation set out in rule 4.15(b) until 3 months after the day on which the *Reliability Panel* published its initial *template for generator compliance programs* under clause 8.8.3 of the *Rules* or until a date determined by the *Reliability Panel*.

11.23.3 Application of rule 11.23 for compliance programs implemented immediately prior to the commencement of the Amending Rule

Registered Participants which implemented compliance programs under the Old Clause 5.7.3(b) must maintain compliance with those programs until 3 months after the day on which the *Reliability Panel* published its initial *template for generator compliance programs* under clause 8.8.3 of the *Rules* or until a date determined by the *Reliability Panel*.

11.23.4 Application of rule 11.23 for compliance programs not implemented immediately prior to the commencement of the Amending Rule

Registered Participants which have not implemented compliance programs under the Old Clause 5.7.3(b) must implement and maintain compliance programs under the Old Clause 5.7.3(b) until 3 months after the day on which the *Reliability Panel* published its initial *template for generator compliance programs* under clause 8.8.3 of the *Rules* or until a date determined by the *Reliability Panel*.

Part S~~Part T~~ Compensation Arrangements under Administered Pricing

11.24 Rules consequential on the making of National Electricity Amendment (Compensation Arrangements under Administered Pricing) Rule 2008

11.24.1 Definitions

In this rule 11.24:

Amending Rule means the National Electricity Amendment (Compensation Arrangements under Administered Pricing) Rule 2008.

commencement date means the date the Amending Rule commences operation.

11.23.2 Compensation Guidelines

All actions taken by the *AEMC* prior to the commencement date in anticipation of the commencement date for the purposes of developing and *publishing* the first compensation guidelines as required by clause 3.14.6(e) are taken to satisfy the equivalent actions required for compensation guidelines under clause 3.14.6(f).

Part U Confidentiality Arrangements concerning Information required for Power System Studies

11.25 Rule consequential on the making of the National Electricity Amendment (Confidentiality Arrangements in Respect of Information Required for Power System Studies) Rule 2009

11.25.1 Definitions

For the purposes of rule 11.25:

Amending Rule means the National Electricity Amendment (Confidentiality Arrangements in Respect of Information Required for Power System Studies) Rule 2009.

Commencement date means the date on which the Amending Rule commences operation.

11.25.2 Transitional arrangements for the provision of information

- (a) A *Generator* must provide *NEMMCO* with a *releasable user guide* by 29 May 2009 or a date which *NEMMCO* considers to be reasonable in the

circumstances but which must be no later than 27 November 2009, except in relation to the following information:

- (1) information provided to *NEMMCO* before 15 March 2007 that *NEMMCO* holds at the commencement date only to the extent that such information is of a type required in a *releasable user guide* and was authorized by the *Rules* to be released for the same purpose as intended by clause 3.13.3(l) as at the date that information was provided to *NEMMCO*; and
 - (2) information provided to *NEMMCO* after 15 March 2007 only if the relevant *Generator* has provided to *NEMMCO* model source code under clause S5.2.4(b)(6), being the provider identified in clause 3.13.3(12), and provides its written consent to *NEMMCO* for *NEMMCO* to use information that *NEMMCO* holds at the commencement date of a type required in a *releasable user guide* for the purposes of clause 3.13.3(l).
- (b) A person required under the *Rules* to register as a *Generator* in respect of a *generating system* comprised of *generating units* with a combined *nameplate rating* of 30 MW or more, must provide *NEMMCO* with a *releasable user guide* by 29 May 2009 or a date which *NEMMCO* considers to be reasonable in the circumstances but which must be no later than 27 November 2009, except in relation to the following information:
- (1) information provided to *NEMMCO* before 15 March 2007 that *NEMMCO* holds at the commencement date only to the extent that such information is of a type required in a *releasable user guide* and was authorized by the *Rules* to be released for the same purpose as intended by clause 3.13.3(l) as at the date that information was provided to *NEMMCO*; and
 - (2) information provided to *NEMMCO* after 15 March 2007 only if the relevant person described in this paragraph as required under the *Rules* to register as a *Generator*, has provided to *NEMMCO* model source code under clause S5.2.4(b)(6), being the provider identified in clause 3.13.3(12), and provides its written consent to *NEMMCO* for *NEMMCO* to use information that *NEMMCO* holds at the commencement date of a type required in a *releasable user guide* for the purposes of clause 3.13.3(l).
- (c) If a *Generator* provided to *NEMMCO* model source code under clause S5.2.4(b)(6) between 15 March 2007 and the commencement date:
- (1) it may provide to *NEMMCO* a substitute model source code in respect of its *generating system* in conjunction with a *releasable user guide* provided under rule 11.25.2(a); and

- (2) that substitute model source code will be taken to be the model source code provided under clause S5.2.4(b)(6) only if it complies with clause S5.2.4(c).
 - (d) If a person required under the *Rules* to register as a *Generator* in respect of a *generating system* comprised of *generating units* with a combined *nameplate rating* of 30 MW or more, provided to *NEMMCO* model source code under clause S5.2.4(b)(6) between 15 March 2007 and the commencement date:
 - (1) it may provide to *NEMMCO* a substitute model source code in respect of its *generating system* in conjunction with a *releasable user guide* provided under rule 11.25.2(b); and
 - (2) that substitute model source code will be taken to be the model source code provided under clause S5.2.4(b)(6) only if it complies with clause S5.2.4(c).
 - (e) *Releasable user guide* information provided to *NEMMCO* under clauses 11.25.2(a) and 11.25.2(b) is deemed to be *releasable user guide* information provided under clause S5.2.4(b)(8) and for the purposes of clause 3.13.3(l).
 - (f) *NEMMCO* must implement any changes to its systems needed to comply with its obligations under the Amending Rule within 12 months of the commencement date.
-

Appendix 1 Form in which Chapter 6 applies to New South Wales and the Australian Capital Territory for the Regulatory Control Period 2009-2014

Note:

*This Appendix contains transitional Chapter 6 and is based on general Chapter 6. Matter omitted from numbered provisions of general Chapter 6 is indicated by a row of asterisks (*****).*

Chapter 6 Economic Regulation of Distribution Services

Part A Introduction

6.1 Introduction to Chapter 6

6.1.1 AER's regulatory responsibility

The *AER* is responsible, in accordance with this Chapter, for the economic regulation of *distribution services* provided by means of, or in connection with, *distribution systems* that form part of the *national grid*.

6.1.2 Structure of this Chapter

- (a) This Chapter deals with the classification and economic regulation of *distribution services*.
- (b) It is divided into parts as follows:
 - (1) this Part is introductory;
 - (2) Part B provides for the classification of *distribution services* and forms of control for *standard control services* and confers power on the *AER* to determine the forms of control for *alternative control services*, and to make distribution determinations;
 - (3) Part C sets out the building block approach to the regulation of services classified as *standard control services*;
 - (4) Part D regulates the prices that may be charged by EnergyAustralia for the provision of services classified as *negotiated distribution services*;
 - (4A) Part DA regulates the prices for negotiable components of *direct control services* (NSW and ACT);

- (5) Part E sets out the procedures for making a distribution determination;
- (6) Part F regulates cost allocation;
- (7) *****
- (8) Part H deals with ring-fencing;
- (9) Part I deals with *tariff classes* and tariffs;
- (10) Part J deals with billing and settlements;
- (11) Part K deals with prudential requirements, prepayments and capital contributions;
- (12) Part L deals with dispute resolution;
- (13) Part M deals with the disclosure of transmission and distribution charges.

6.1.3 Access to direct control services and negotiated distribution services

- (a) Subject to and in accordance with the *Rules*:
 - (1) a person (a *Service Applicant*) may apply to a *Distribution Network Service Provider* for provision of *direct control services* or *negotiated distribution services*;
 - (2) a *Distribution Network Service Provider* must provide *direct control services* or *negotiated distribution services* (as the case may be) on *terms and conditions of access* as determined under Chapters 4, 5, this Chapter 6 and Chapter 7 of the Rules.
- (b) The *terms and conditions* of access are:
 - (1) in relation to *negotiated distribution services*:
 - (i) the price of those services (including, if relevant, *access charges*); and
 - (ii) other terms and conditions for the provision of those services;
 - (2) in relation to *direct control services*:
 - (i) subject to Part DA:
 - (A) the price of those services under the *approved pricing proposal*, except as provided by subsubparagraph (B); and

- (B) in the case of EnergyAustralia's prescribed (transmission) standard control services, the price of those services under EnergyAustralia's approved pricing methodology; and
- (ii) other terms and conditions for the provision of those services.

6.1.4 Prohibition of DUOS charges for the export of energy

- (a) A *Distribution Network Service Provider* must not charge a *Distribution Network User* distribution use of system charges for the export of electricity generated by the user into the *distribution network*.
- (b) This does not, however, preclude charges for the provision of *connection services*.

6.1.5 Application of this Chapter to certain transmission assets – ActewAGL, Country Energy and Integral Energy Australia

- (a) This clause 6.1.5 applies to ActewAGL, Country Energy and Integral Energy Australia (each of which is a “relevant provider” for the purposes of this clause).
- (b) For the purposes of the regulatory control period 2009-2014:
 - (1) each part of a relevant provider's *network* that would, but for this clause, be part of the provider's *transmission network* is deemed to be part of the provider's *distribution network* for the purposes of this Chapter 6 and Chapter 6A; and
 - (2) despite anything in those Chapters, those Chapters have effect accordingly.
- (c) This clause 6.1.5 does not affect the operation of the *Rules*, apart from:
 - (1) this Chapter 6 and Chapter 6A; and
 - (2) the definitions of *distribution network* and *transmission network* in Chapter 10 in relation to this Chapter 6 and Chapter 6A.
- (d) However, the relevant providers are not required to submit revenue proposals under clause 6A.10.1.

6.1.6 Application of this Chapter to the EnergyAustralia transmission support network

- (a) This clause 6.1.6 applies to EnergyAustralia.
- (b) For the purposes of the regulatory control period 2009-2014:

- (1) the EnergyAustralia transmission support network is deemed to be part of EnergyAustralia's *distribution network* for the purposes of this Chapter and Chapter 6A; and
 - (2) despite anything in those Chapters, those Chapters have effect accordingly.
- (c) A service that is provided by EnergyAustralia by means of, or in connection with, the EnergyAustralia transmission support network and that, but for this clause, would be a *prescribed transmission service* is:
 - (1) deemed to be classified as a *direct control service* and further classified as a *standard control service*; and
 - (2) referred to in this Chapter as an "EnergyAustralia prescribed (transmission) standard control service".
- (d) A service that is provided by EnergyAustralia by means of, or in connection with, the EnergyAustralia transmission support network and that, but for this clause, would be a *negotiated transmission service* is:
 - (1) deemed to be classified as a *negotiated distribution service*;
 - (2) referred to in the Rules as an "EnergyAustralia negotiated distribution service".
- (e) Part J of Chapter 6A applies to EnergyAustralia prescribed (transmission) standard control services to the exclusion of Parts I, J and K, and so applies as if:
 - (1) references in Part J of Chapter 6A to a *prescribed transmission service* were references to Energy Australia prescribed (transmission) standard control services; and
 - (2) the reference in clause 6A.22.1 to clause 6A.3.2 were a reference to rules 6.6 and 6.13;and with any other necessary modifications.
- (f) This clause 6.1.6 does not affect the operation of the *Rules*, apart from:
 - (1) this Chapter 6 and Chapter 6A; and
 - (2) the definitions of *distribution network* and *transmission network* in Chapter 10 in relation to this Chapter 6 and Chapter 6A.

6.1.7 Definitions

- (a) In this Chapter (including Schedules 6.1 and 6.2):

“ActewAGL” means the joint venture between ACTEW Distribution Limited ACN 073 025 224 and Alinta GCA Pty Ltd ACN 008 552 663 providing *distribution services* in the Australian Capital Territory, or any successor or successors of that joint venture.

“commencement date” means the date of commencement of transitional Chapter 6.

“Cost Allocation Method” means:

- (a) for NSW Distribution Network Service Providers – the Cost Allocation Method approved under clause 6.15.6 as in force from time to time; or
- (b) for the ACT Distribution Network Service Provider – the Cost Allocation Method approved under clause 6.15.8 as in force from time to time.

“Country Energy” means the energy services corporation of that name, which is constituted under section 7 of the Energy Services Corporations Act 1995 (NSW) and specified in Part 2 of Schedule 1 to that Act, or any successor or successors of that corporation.

“EnergyAustralia” means the energy services corporation of that name, which is constituted under section 7 of the Energy Services Corporations Act 1995 (NSW) and specified in Part 2 of Schedule 1 to that Act, or any successor or successors of that corporation.

“EnergyAustralia negotiated distribution service” – see clause 6.1.6(d).

“EnergyAustralia prescribed (transmission) standard control service” – see clause 6.1.6(c).

“EnergyAustralia transmission support network” means any part of a network owned, controlled or operated by EnergyAustralia and operating between 66 kV and 220 kV that operates in parallel to and provides support to the higher voltage *transmission network*.

“ICRC” means the Independent Competition and Regulatory Commission of the Australian Capital Territory, which is established under section 5(1) of the Independent Competition and Regulatory Commission Act 1997 (ACT).

“Integral Energy Australia” means the energy services corporation of that name, which is constituted under section 7 of the Energy Services Corporations Act 1995 (NSW) and specified in Part 2 of Schedule 1 to that Act, or any successor or successors of that corporation.

“IPART” means the Independent Pricing and Regulatory Tribunal of New South Wales, which is established under section 5(1) of the Independent Pricing and Regulatory Tribunal Act 1992 (NSW).

“regulatory control period 2004-2009” means the regulatory control period of 5 years commencing on 1 July 2004.

“regulatory control period 2009-2014” means the regulatory control period of 5 years commencing on 1 July 2009 and referred to in rule 11.15.

“transitional Chapter 6” means this Chapter (being transitional Chapter 6 as defined in rule 11.15).

- (b) In this Chapter and in rule 11.15:
- (1) a reference to the NSW Distribution Network Service Providers is a reference to Country Energy, EnergyAustralia and Integral Energy Australia; and
 - (2) a reference to the ACT Distribution Network Service Provider is a reference to ActewAGL.

Part B Classification of Distribution Services and Distribution Determinations

~~Division 1 Classification of distribution services~~

6.2 Classification

6.2.1 *****

6.2.2 *****

6.2.3 *****

6.2.3A Classes and subclasses of distribution services

- (a) *Distribution services* to be provided by a *Distribution Network Service Provider* are divided into the following 3 classes:
- (1) *direct control services*;
 - (2) *negotiated distribution services*;
 - (3) *unregulated distribution services*.

Note:

Certain services provided by means of, or in connection with, the EnergyAustralia transmission support network (which is deemed by clause 6.1.6(b) to be part of EnergyAustralia's distribution network) are deemed by clause 6.1.6(d) to be classified as negotiated distribution services for certain purposes.

- (b) *Direct control services* are further divided into the following 2 subclasses:
- (1) *standard control services*; and
 - (2) *alternative control services*.

6.2.3B Classification for NSW Distribution Network Service Providers

- (a) A *distribution service* that is provided by a NSW Distribution Network Service Provider and that was determined by the IPART to be a prescribed distribution service (for the purposes of the regulatory control period 2004-2009) is deemed (for the purposes of the regulatory control period 2009-2014) to be classified as a *direct control service* and further classified as a *standard control service*.

Note:

The IPART's Final Determination No 2, 2004 (relating to NSW Electricity Distribution Pricing 2004/05 to 2008/09) provided that prescribed distribution services include:

- *Distribution Use of System Services*
- *Private Power Line Inspections and Customer Installation Inspections*
- *certain Monopoly Services*
- *certain Miscellaneous Services*
- *certain Emergency Recoverable Works*.

- (b) A *distribution service* that is provided by a NSW Distribution Network Service Provider and that was determined by the IPART to be an excluded distribution service (for the purposes of the regulatory control period 2004-2009) is deemed (for the purposes of the regulatory control period 2009-2014):
- (1) in the case of the excluded distribution service of the construction and maintenance of public lighting infrastructure – to be classified as a *direct control service* and further classified as an *alternative control service*;

- (2) in the case of any other excluded distribution service – to be classified as:
- (i) an unregulated *distribution service*, unless the AER has made a determination under paragraph (e) in relation to that *distribution service*; or
 - (ii) an *alternative control service*, if the AER has made a determination under paragraph (e) in relation to that *distribution service*.

Note:

1. Other distribution services provided by a NSW Distribution Network Service Provider are unclassified and not regulated under the Rules.

2. The IPART's Final Determination No 2, 2004 (relating to NSW Electricity Distribution Pricing 2004/2005 to 2008/2009) determined that the following Distribution Services are Excluded Distribution Services):

- *the construction and maintenance of Public Lighting Infrastructure*
- *Customer Funded Connections*
- *Customer Specific Services*
- *Type 1 to 4 Metering Services.*

- (c) A NSW Distribution Network Service Provider is, in relation to a *distribution service* classified as an unregulated *distribution service*, required to comply substantially with the relevant requirements of the provisions of Rule 2004/1 (Regulation of Excluded Distribution Services) made by the IPART in relation to the regulatory control period 2004-2009.

Note:

Distribution services provided by a NSW Distribution Network Service Provider that are unclassified are not regulated under the Rules, and accordingly are not required to comply with the requirements of Rule 2004/1.

- (d) For the purposes of paragraph (c), the provisions of Rule 2004/1 have effect as if references to the IPART were references to the AER and references to the regulatory control period 2004-2009 were references to the regulatory control period 2009-2014, and with any other necessary modifications.
- (e) The AER may, at any time during the regulatory control period 2009-2014, determine that a NSW Distribution Network Service Provider is not or has

ceased to be in substantial compliance with the requirements of the provisions referred to in paragraph (c) if the AER has:

- (1) given the provider a written notice inviting the provider to show cause within a specified period of at least 2 weeks why the *AER* should not make the determination and setting out the grounds on which the *AER* would make the determination; and
 - (2) taken into consideration any written submissions made by the provider to the *AER* within that period in response to the notice.
- (f) Once a *distribution service* has been classified as an *alternative control service* because of a determination by the *AER* under paragraph (e), the *distribution service* cannot during the remainder of the regulatory control period 2009-2014 be classified again as an unregulated *distribution service*, unless it appears to the *AER* that the determination is affected by a material error or deficiency of a kind referred to in rule 6.13(a).
- (g) Provisions having effect as referred to in paragraph (c) may be included in a distribution determination in any appropriate format.
- (h) Once a *distribution service* has been classified as an *alternative control service* because of a determination by the *AER* under paragraph (e), the *AER* must make such amendments to the relevant distribution determination as are necessary to regulate the *distribution service* as an *alternative control service*.
- (i) When making the distribution determination for a NSW Distribution Network Service Provider, the *AER* may, with the agreement of the provider, vary the deemed classification effected by this clause 6.2.3B of a *distribution service* provided by the provider.
- (j) A deemed or varied classification under this clause 6.2.3B forms part of a distribution determination and operates for the regulatory control period 2009-2014.

6.2.3C Classification for ACT Distribution Network Service Provider

- (a) A *distribution service* that is provided by the ACT Distribution Network Service Provider and that was determined by the ICRC to be a prescribed distribution service (for the purposes of the regulatory control period 2004-2009) is deemed (for the purposes of the regulatory control period 2009-2014) to be classified as a *direct control service* and further classified as a *standard control service*.
- (b) A *distribution service* that is provided by the ACT Distribution Network Service Provider and that was determined by the ICRC to be an excluded distribution service (for the purposes of the regulatory control period 2004-

2009) is deemed (for the purposes of the regulatory control period 2009-2014) to be classified as a *direct control service* and further classified as an *alternative control service*.

- (c) When making the distribution determination for the ACT Distribution Network Service Provider, the AER may, with the agreement of the provider, vary the deemed classification effected by this clause 6.2.3C of a *distribution service* provided by the provider.
- (d) A deemed or varied classification under this clause 6.2.3C forms part of a distribution determination and operates for the regulatory control period 2009-2014.

Note:

The ICRC's Final Decision-Investigation into prices for electricity distribution services in the ACT-Report No 6 of 2004 (relating to ACT Electricity Distribution Pricing 2004/2005 to 2008/2009) provided that prescribed distribution services include all distribution services provided by ActewAGL, with the exception of the provision of and servicing of meters for customers consuming fewer than 160 megawatt hours per annum, including:

- *meter testing*
- *meter reading*
- *meter checking*
- *the processing of metering data*
- *the provision of non-standard meters.*

The services covered by the exception are accordingly Excluded Distribution Services.

Division 2 Distribution determinations

6.2.4 Duty of AER to make distribution determinations

- (a) The AER must make a distribution determination for each *Distribution Network Service Provider*.
- (b) When the AER makes a distribution determination it must follow the process set out in Part E.
- (c) *****
- (d) *****

6.2.5 Control mechanisms for direct control services

- (a) A distribution determination is to impose controls over the prices of *direct control services*, the revenue to be derived from *direct control services* or both.
- (b) *****
- (c) *****
- (c1) The control mechanism for:
 - (1) subject to subparagraph (3), *standard control services* provided by a NSW Distribution Network Service Provider in the regulatory control period 2009-2014:
 - (i) must be substantially the same as that determined by the IPART for the corresponding prescribed distribution services provided in the regulatory control period 2004-2009; and
 - (ii) may, with the agreement of the provider, apply differently for different categories of services; and
 - (2) *standard control services* provided by the ACT Distribution Network Service Provider in the regulatory control period 2009-2014 must be substantially the same as that determined by the ICRC for prescribed distribution services provided in the regulatory control period 2004-2009; and
 - (3) EnergyAustralia prescribed (transmission) standard control services provided in the regulatory control period 2009-2014 and referred to in clause 6.1.6(c) must be substantially the same as that determined by the ACCC for the corresponding *prescribed transmission services* provided in the regulatory control period 2004-2009.
- (c2) The control mechanism for *alternative control services* may consist of:
 - (1) a schedule of fixed prices;
 - (2) caps on the prices of individual services;
 - (3) caps on the revenue to be derived from a particular combination of services;
 - (4) tariff basket price control;
 - (5) revenue yield control;
 - (6) a combination of any of the above.

- (d) In deciding on a control mechanism for *alternative control services*, the AER must have regard to:
 - (1) the potential for development of competition in the relevant market and how the control mechanism might influence that potential; and
 - (2) the possible effects of the control mechanism on administrative costs of the AER, the *Distribution Network Service Provider* and users or potential users; and
 - (3) the regulatory arrangements (if any) applicable to the relevant service immediately before the commencement of the distribution determination; and
 - (4) the desirability of consistency between regulatory arrangements for similar services (both within and beyond the relevant jurisdiction); and
 - (5) any other relevant factor.
- (e) The AER must, before 1 March 2008 or the date that is one month after the commencement date (whichever is the later), *publish* a statement indicating its likely approach to the control mechanisms for *alternative control services*. In preparing the statement, the AER may carry out such consultation as the AER thinks appropriate and may take into consideration any consultation carried out before the commencement date.

6.2.6 Basis of control mechanisms for direct control services

- (a) For *standard control services*, the control mechanism must be of the prospective CPI minus X form, or some incentive-based variant of the prospective CPI minus X form, in accordance with Part C.
- (b) For *alternative control services*, the control mechanism must have a basis stated in the distribution determination.
- (c) The control mechanism for *alternative control services* may (but need not) utilise elements of Part C (with or without modification).

Examples:

The control mechanism might be based on the building block approach.

The distribution determination might provide for the application of clause 6.6.1 to pass through events with necessary adaptations and specified modifications.

6.2.7 EnergyAustralia negotiated distribution services

Negotiated distribution services provided by EnergyAustralia are regulated in accordance with Part D.

6.2.7A Negotiable components of direct control services (NSW and ACT)

Despite anything in this Division 2, the control mechanism for *direct control services* may include elements referred to as negotiable components of *direct control services*, as provided in Part DA.

~~Division 3 Guidelines~~

6.2.8 Guidelines

- (a) The *AER* may *publish* guidelines as to:
 - (1) *****
 - (2) the control mechanisms for *direct control services*; and
 - (3) the calculation of stand-alone, avoidable and long-run marginal costs; and
 - (4) the *AER's* likely approach to determining materiality in the context of possible *pass through events*; and
 - (4A) the transition from pre-tax to post-tax revenue regulation; and
 - (5) other matters relevant to this Chapter.
- (b) The guidelines may relate to a specified *Distribution Network Service Provider* or *Distribution Network Service Providers* of a specified class.
- (c) The guidelines are not mandatory (and hence do not bind the *AER* or anyone else) but, if the *AER* makes a distribution determination that is not in accordance with a relevant guideline, the *AER* must state, in its reasons for the distribution determination, the reasons for departing from the guideline.
- (d) If the guidelines indicate that there may be a change of regulatory approach in future distribution determinations, the guidelines should also (if practicable) indicate how transitional issues are to be dealt with.
- (e) *****
- (f) In making or amending a guideline, the *AER* may carry out such consultation as the *AER* thinks appropriate and may take into consideration any consultation carried out before the commencement date.

Part C Building Block Determinations for standard control services

6.3 Building block determinations

6.3.1 Introduction

- (a) A *building block determination* is a component of a distribution determination.
- (b) The procedure for making a *building block determination* is contained in Part E of this Chapter and involves the submission of a *building block proposal* to the AER by the *Distribution Network Service Provider*.
- (c) The *building block proposal*:
 - (1) must be prepared in accordance with the *post-tax revenue model*, other relevant requirements of this Part, and Schedule 6.1; and
 - (2) must comply with the requirements of, and must contain or be accompanied by the information required by, any relevant *regulatory information instrument*.

6.3.2 Contents of building block determination

- (a) A *building block determination* for a *Distribution Network Service Provider* is to specify, for a *regulatory control period*, the following matters:
 - (1) the *Distribution Network Service Provider's* annual revenue requirement for each regulatory year of the regulatory control period;
 - (2) appropriate methods for the indexation of the regulatory asset base;
 - (3) how any applicable *efficiency benefit sharing scheme*, *service target performance incentive scheme*, or *demand management incentive scheme* are to apply to the *Distribution Network Service Provider*;
 - (4) the commencement and length of the *regulatory control period*;
 - (5) any other amounts, values or inputs on which the *building block determination* is based (differentiating between those contained in, or inferred from, the service provider's *building block proposal* and those based on the AER's own estimates or assumptions).
- (b) *****

6.4 Post-tax revenue model

6.4.1 Preparation, publication and amendment of post-tax revenue model

- (a) The *AER* must prepare and *publish* a *post-tax revenue model*.
- (b) *****
- (c) *****
- (d) The *AER* must *publish* the first *post-tax revenue model* before 1 February 2008 or the date that is one month after the commencement date (whichever is the later), and may carry out such consultation in connection with the preparation of the model as the *AER* thinks appropriate and may take into consideration any consultation carried out before the commencement date.
- (e) The *AER* may, from time to time and with the agreement of each affected *Distribution Network Service Provider*, amend or replace the *post-tax revenue model*.

6.4.2 Contents of post-tax revenue model

- (a) The *post-tax revenue model* must set out the manner in which the *Distribution Network Service Provider's annual revenue requirement* for each *regulatory year* of a *regulatory control period* is to be calculated.
- (b) The contents of the *post-tax revenue model* must include (but are not limited to):
 - (1) a method that the *AER* determines is likely to result in the best estimates of expected inflation; and
 - (2) the timing assumptions and associated discount rates that are to apply in relation to the calculation of the building blocks referred to in clause 6.4.3; and
 - (3) the manner in which working capital is to be treated; and
 - (4) the manner in which the estimated cost of corporate income tax is to be calculated.

6.4.3 Building block approach

- (a) Building blocks generally

The annual revenue requirement for a Distribution Network Service Provider for each regulatory year of a regulatory control period must be

determined using a building block approach, under which the building blocks are:

- (1) indexation of the regulatory asset base – see paragraph (b)(1); and
- (2) a return on capital for that year – see paragraph (b)(2); and
- (3) the depreciation for that year – see paragraph (b)(3); and
- (4) the estimated cost of corporate income tax of the provider for that year – see paragraph (b)(4); and
- (5) the revenue increments or decrements (if any) for that year arising from the application of the *service target performance incentive scheme* and the *demand management incentive scheme* – see paragraph (b)(5); and
- (6) the other revenue increments or decrements (if any) for that year arising from the application of a control mechanism in the previous *regulatory control period* – see paragraph (b)(6); and
- (7) the forecast operating expenditure for that year – see paragraph (b)(7); and
- (8) certain revenue increments or decrements for that year arising from the D-factor carry forward – see paragraph (b)(8).

(b) Details of the building blocks

For the purposes of paragraph (a):

- (1) for indexation of the regulatory asset base:
 - (i) the regulatory asset base is calculated in accordance with clause 6.5.1 and schedule 6.2; and
 - (ii) the building block comprises a negative adjustment equal to the amount referred to in clause S6.2.3(c)(4) for that year; and
- (2) the return on capital is calculated in accordance with clause 6.5.2; and
- (3) the depreciation is calculated in accordance with clause 6.5.5; and
- (4) the estimated cost of corporate income tax is determined in accordance with clause 6.5.3; and
- (5) the revenue increments or decrements referred to in paragraph (a)(5) are those that arise as a result of the operation of an applicable *service*

target performance incentive scheme or *demand management incentive scheme* as referred to in clauses 6.6.2 and 6.6.3; and

- (6) the other revenue increments or decrements referred to in paragraph (a)(6) are those that are to be carried forward to the current *regulatory control period* as a result of the application of a control mechanism in the previous *regulatory control period* and are apportioned to the relevant year under the distribution determination for the current *regulatory control period*; and
 - (7) the forecast operating expenditure for the year is the forecast operating expenditure as accepted or substituted by the *AER* in accordance with clause 6.5.6; and
 - (8) the revenue increments or decrements are those that arise as a result of the operation of the arrangements in clause 11 of the IPART's Final Determination No 2, 2004 (relating to NSW Electricity Distribution Pricing 2004/05 to 2008/09) for expenditure or foregone revenue in each of the last 2 *regulatory years* of the regulatory control period 2004-2009.
- (c) The arrangements referred to in paragraph (b)(8) have effect in relation to expenditure or foregone revenue in each of the last 2 *regulatory years* of the regulatory control period 2004-2009:
- (1) as if references to the IPART were references to the *AER* and references to the regulatory control period 2004-2009 were references to the regulatory control period 2009-2014; and
 - (2) with any other necessary modifications.

6.5 Matters relevant to the making of building block determinations

6.5.1 Regulatory asset base

Nature of regulatory asset base

- (a) The regulatory asset base for a *distribution system* owned, controlled or operated by a *Distribution Network Service Provider* is the value of those assets that are used by the provider to provide *standard control services*, but only to the extent that they are used to provide such services.

Preparation, publication and amendment of model for rolling forward regulatory asset base

- (b) The *AER* must develop and *publish* a model for the roll forward of the regulatory asset base for *distribution systems*, referred to as the *roll forward model*.

- (c) The *AER* may, from time to time and with the agreement of each affected *Distribution Network Service Provider*, amend or replace the *roll forward model*.
- (d) The *AER* must develop and *publish* the first *roll forward model*, before 1 February 2008 or the date that is one month after the commencement date (whichever is the later), and may carry out such consultation in connection with the preparation of the model as the *AER* thinks appropriate and may take into consideration any consultation carried out before the commencement date. There must be such a model available at all times after that date.

Contents of roll forward model

- (e) The *roll forward model* must set out the method for determining the roll forward of the regulatory asset base for *distribution systems*:
 - (1) from the immediately preceding *regulatory control period* to the beginning of the first year of the subsequent *regulatory control period*, so as to establish the value of the regulatory asset base as at the beginning of the first *regulatory year* of that subsequent *regulatory control period*; and
 - (2) from one *regulatory year* in a *regulatory control period* to a subsequent *regulatory year* in that same *regulatory control period*, so as to establish the value of the regulatory asset base as at the beginning of that subsequent *regulatory year*;

under which:

- (3) the roll forward of the regulatory asset base from the immediately preceding *regulatory control period* to the beginning of the first *regulatory year* of a subsequent *regulatory control period* entails the value of the first mentioned regulatory asset base being adjusted for actual inflation, consistently with the method used for the indexation of the control mechanism (or control mechanisms) for *standard control services* during the preceding *regulatory control period*.

Other provisions relating to regulatory asset base

- (f) Other provisions relating to regulatory asset bases are set out in schedule 6.2.
- (g) For the purpose of establishing the value of the regulatory asset base (as referred to in paragraph (e)(1)) as at the beginning of the first *regulatory year* of the regulatory control period 2009-2014 for the ACT Distribution Network Service Provider, and despite clause S6.2.1(e), the *roll forward model* must apply the approach adopted by the ICRC in the distribution

determination for the regulatory control period 2004-2009, but taking into account any written representations by the ICRC to the ACT Distribution Network Service Provider before the commencement date.

- (h) For the purpose of establishing the value of the regulatory asset base (as referred to in paragraph (e)(1)) as at the beginning of the first *regulatory year* of the regulatory control period 2009-2014 for EnergyAustralia, the *roll forward model* in respect of transmission network support assets must be applied as if the AER were separately regulating EnergyAustralia's transmission system under the relevant provisions of Chapter 6A.

6.5.2 Return on capital

Calculation of return on capital

- (a) The return on capital for each *regulatory year* must be calculated by applying a rate of return for the relevant *Distribution Network Service Provider* for that *regulatory control period* (calculated in accordance with this clause 6.5.2) to the value of the regulatory asset base for the relevant *distribution system* as at the beginning of that *regulatory year* (as established in accordance with clause 6.5.1 and schedule 6.2).

Weighted average cost of capital

- (b) The rate of return for a *Distribution Network Service Provider* for a *regulatory control period* is the cost of capital as measured by the return required by investors in a commercial enterprise with a similar nature and degree of non-diversifiable risk as that faced by the *distribution* business of the provider and must be calculated as a nominal post-tax *weighted average cost of capital* ("WACC") in accordance with the following formula:

$$\text{WACC} = k_e \frac{E}{V} + k_d \frac{D}{V}$$

where:

k_e is the return on equity (determined using the Capital Asset Pricing Model) and is calculated as:

$$r_f + \beta_e \times \text{MRP}$$

where:

r_f is the nominal risk free rate for the *regulatory control period* determined in accordance with paragraph (c);

β_e (the equity beta) is deemed to be 1.0; and

MRP (the market risk premium) is deemed to be 6.0%;

k_d is the return on debt and is calculated as:

$$r_f + \text{DRP}$$

where:

DRP is the debt risk premium for the *regulatory control period* determined in accordance with paragraph (e);

E/V is the value of equity as a proportion of the value of equity and debt, which is $1 - D/V$; and

D/V (the value of debt as a proportion of the value of equity and debt) is deemed to be 0.6.

Meaning of nominal risk free rate

(c) The nominal risk free rate for a *regulatory control period* is the rate determined for that *regulatory control period* by the AER on a moving average basis from the annualised yield on Commonwealth Government bonds with a maturity of 10 years using:

- (1) the indicative mid rates published by the Reserve Bank of Australia; and
- (2) a period of time which is either:
 - (i) a period ('the **agreed period**') proposed by the relevant *Distribution Network Service Provider*, and agreed by the AER (such agreement is not to be unreasonably withheld); or
 - (ii) a period specified by the AER, and notified to the provider within a reasonable time prior to the commencement of that period, if the period proposed by the provider is not agreed by the AER under subparagraph (i),

and, for the purposes of subparagraph (i):

- (iii) the start date and end date for the agreed period may be kept confidential, but only until the expiration of the agreed period; and
- (iv) the AER must notify the *Distribution Network Service Provider* whether or not it agrees with the proposed period within 30 *business days* of the date of submission of the *building block proposal*.

- (d) If there are no Commonwealth Government bonds with a maturity of 10 years on any day in the period referred to in paragraph (c)(2), the AER must determine the nominal risk free rate for the *regulatory control period* by interpolating on a straight line basis from the two Commonwealth Government bonds closest to the 10 year term and which also straddle the 10 year expiry date.

Meaning of debt risk premium

- (e) The debt risk premium for a *regulatory control period* is the premium determined for that *regulatory control period* by the AER as the margin between the 10 year Commonwealth annualised bond rate and the observed annualised Australian benchmark corporate bond rate for corporate bonds which have a maturity of 10 years and a credit rating of BBB+ from Standard and Poors.

6.5.3 Estimated cost of corporate income tax

The estimated cost of corporate income tax of a *Distribution Network Service Provider* for each *regulatory year* (ETC_t) must be calculated in accordance with the following formula:

$$ETC_t = (ETI_t \times r_t) (1 - \gamma)$$

where:

ETI_t is an estimate of the taxable income for that *regulatory year* that would be earned by a benchmark efficient entity as a result of the provision of *standard control services* if such an entity, rather than the *Distribution Network Service Provider*, operated the business of the *Distribution Network Service Provider*, such estimate being determined in accordance with the *post-tax revenue model*;

r_t is the expected statutory income tax rate for that *regulatory year* as determined by the AER; and

γ (the assumed utilisation of imputation credits) is deemed to be 0.5.

For these purposes:

- (1) the cost of debt must be based on that of a benchmark efficient *Distribution Network Service Provider*; and
- (2) the estimate must take into account the estimated depreciation for that *regulatory year* for *tax* purposes, for a benchmark efficient *Distribution Network Service Provider*, of assets where the value of those assets is included in the regulatory asset base for the relevant *distribution system* for that *regulatory year*.

6.5.4 *****

6.5.5 Depreciation

- (a) The depreciation for each *regulatory year*:
 - (1) must be calculated on the value of the assets as included in the regulatory asset base, as at the beginning of that *regulatory year*, for the relevant *distribution system*; and
 - (2) must be calculated:
 - (i) providing such depreciation schedules conform with the requirements set out in paragraph (b), using the depreciation schedules for each asset or category of assets that are nominated in the relevant *Distribution Network Service Provider's building block proposal*; or
 - (ii) to the extent the depreciation schedules nominated in the provider's *building block proposal* do not so conform, using the depreciation schedules determined for that purpose by the *AER*.
- (b) The depreciation schedules referred to in paragraph (a) must conform to the following requirements:
 - (1) the schedules must depreciate using a profile that reflects the nature of the assets or category of assets over the economic life of that asset or category of assets;
 - (2) the sum of the real value of the depreciation that is attributable to any asset or category of assets over the economic life of that asset or category of assets (such real value being calculated as at the time the value of that asset or category of assets was first included in the regulatory asset base for the relevant *distribution system*) must be equivalent to the value at which that asset or category of assets was first included in the regulatory asset base for the relevant *distribution system*;
 - (3) the economic life of the relevant assets and the depreciation methods and rates underpinning the calculation of depreciation for a given *regulatory control period* must be consistent with those determined for the same assets on a prospective basis in the distribution determination for that period.

6.5.6 Forecast operating expenditure

- (a) A *building block proposal* must include the total forecast operating expenditure for the relevant *regulatory control period* which the

Distribution Network Service Provider considers is required in order to achieve each of the following (the *operating expenditure objectives*):

- (1) meet or manage the expected demand for *standard control services* over that period;
 - (2) comply with all applicable *regulatory obligations or requirements* associated with the provision of *standard control services*;
 - (3) maintain the quality, reliability and security of supply of *standard control services*;
 - (4) maintain the reliability, safety and security of the *distribution system* through the supply of *standard control services*.
- (b) The forecast of required operating expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal* must:
- (1) comply with the requirements of any relevant *regulatory information instrument*; and
 - (2) be for expenditure that is properly allocated to *standard control services* in accordance with the principles and policies set out in the Cost Allocation Method for the *Distribution Network Service Provider*; and
 - (3) include both:
 - (i) the total of the forecast operating expenditure for the relevant *regulatory control period*; and
 - (ii) the forecast of the operating expenditure for each *regulatory year* of the relevant *regulatory control period*.
- (c) The *AER* must accept the forecast of required operating expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal* if the *AER* is satisfied that the total of the forecast operating expenditure for the *regulatory control period* reasonably reflects:
- (1) the efficient costs of achieving the *operating expenditure objectives*; and
 - (2) the costs that a prudent operator in the circumstances of the relevant *Distribution Network Service Provider* would require to achieve the *operating expenditure objectives*; and
 - (3) a realistic expectation of the demand forecast and cost inputs required to achieve the *operating expenditure objectives*.

(the *operating expenditure criteria*).

- (d) If the *AER* is not satisfied as referred to in paragraph (c), it must not accept the forecast of required operating expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal*.
- (e) In deciding whether or not the *AER* is satisfied as referred to in paragraph (c), the *AER* must have regard to the following (the *operating expenditure factors*):
 - (1) the information included in or accompanying the *building block proposal*;
 - (2) submissions received in the course of consulting on the *building block proposal*;
 - (3) analysis undertaken by or for the *AER* and *published* before the distribution determination is made in its final form;
 - (4) benchmark operating expenditure that would be incurred by an efficient *Distribution Network Service Provider* over the *regulatory control period*;
 - (5) the actual and expected operating expenditure of the *Distribution Network Service Provider* during any preceding *regulatory control periods*;
 - (6) the relative prices of operating and capital inputs;
 - (7) the substitution possibilities between operating and capital expenditure;
 - (8) whether the total labour costs included in the capital and operating expenditure forecasts for the *regulatory control period* are consistent with the incentives provided by the applicable *service target performance incentive scheme* in respect of the *regulatory control period*;
 - (9) the extent the forecast of required operating expenditure of the *Distribution Network Service Provider* is referable to arrangements with a person other than the provider that, in the opinion of the *AER*, do not reflect arm's length terms;
 - (10) the extent the *Distribution Network Service Provider* has considered, and made provision for, efficient non-network alternatives.

6.5.7 Forecast capital expenditure

- (a) A *building block proposal* must include the total forecast capital expenditure for the relevant *regulatory control period* which the *Distribution Network Service Provider* considers is required in order to achieve each of the following (the *capital expenditure objectives*):
 - (1) meet or manage the expected demand for *standard control services* over that period;
 - (2) comply with all applicable *regulatory obligations or requirements* associated with the provision of *standard control services*;
 - (3) maintain the quality, reliability and security of supply of *standard control services*;
 - (4) maintain the reliability, safety and security of the *distribution system* through the supply of *standard control services*.
- (b) The forecast of required capital expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal* must:
 - (1) comply with the requirements of any relevant *regulatory information instrument*; and
 - (2) be for expenditure that is properly allocated to *standard control services* in accordance with the principles and policies set out in the Cost Allocation Method for the *Distribution Network Service Provider*; and
 - (3) include both:
 - (i) the total of the forecast capital expenditure for the relevant *regulatory control period*; and
 - (ii) the forecast of the capital expenditure for each *regulatory year* of the relevant *regulatory control period*; and
 - (4) identify any forecast capital expenditure that is for an option that has satisfied the *regulatory test*.
- (c) The *AER* must accept the forecast of required capital expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal* if the *AER* is satisfied that the total of the forecast capital expenditure for the *regulatory control period* reasonably reflects:
 - (1) the efficient costs of achieving the *capital expenditure objectives*; and

- (2) the costs that a prudent operator in the circumstances of the relevant *Distribution Network Service Provider* would require to achieve the *capital expenditure objectives*; and
- (3) a realistic expectation of the demand forecast and cost inputs required to achieve the *capital expenditure objectives*.

(the *capital expenditure criteria*)

- (d) If the *AER* is not satisfied as referred to in paragraph (c), it must not accept the forecast of required capital expenditure of a *Distribution Network Service Provider*.
- (e) In deciding whether or not the *AER* is satisfied as referred to in paragraph (c), the *AER* must have regard to the following ('the *capital expenditure factors*'):
 - (1) the information included in or accompanying the *building block proposal*;
 - (2) submissions received in the course of consulting on the *building block proposal*;
 - (3) analysis undertaken by or for the *AER* and *published* before the distribution determination is made in its final form;
 - (4) benchmark capital expenditure that would be incurred by an efficient *Distribution Network Service Provider* over the *regulatory control period*;
 - (5) the actual and expected capital expenditure of the *Distribution Network Service Provider* during any preceding *regulatory control periods*;
 - (6) the relative prices of operating and capital inputs;
 - (7) the substitution possibilities between operating and capital expenditure;
 - (8) whether the total labour costs included in the capital and operating expenditure forecasts for the *regulatory control period* are consistent with the incentives provided by the applicable *service target performance incentive scheme* in respect of the *regulatory control period*;
 - (9) the extent the forecast of required capital expenditure of the *Distribution Network Service Provider* is referable to arrangements with a person other than the provider that, in the opinion of the *AER*, do not reflect arm's length terms;

- (10) the extent the *Distribution Network Service Provider* has considered, and made provision for, efficient non-network alternatives.

6.5.8 Efficiency benefit sharing scheme

- (a) The *AER* may develop and *publish* a scheme or schemes (*efficiency benefit sharing scheme*) that provide for a fair sharing between NSW and ACT *Distribution Network Service Providers* and *Distribution Network Users* of:
 - (1) the efficiency gains derived from the operating expenditure of *Distribution Network Service Providers* for a *regulatory control period* being less than; and
 - (2) the efficiency losses derived from the operating expenditure of *Distribution Network Service Providers* for a *regulatory control period* being more than,the forecast operating expenditure accepted or substituted by the *AER* for that *regulatory control period*.
- (b) An *efficiency benefit sharing scheme* may (but is not required to) be developed to cover efficiency gains and losses related to capital expenditure or *distribution losses*.
- (c) In developing and implementing an *efficiency benefit sharing scheme*, the *AER* must have regard to:
 - (1) the need to ensure that benefits to consumers likely to result from the scheme are sufficient to warrant any reward or penalty under the scheme for *Distribution Network Service Providers*; and
 - (2) the need to provide *Distribution Network Service Providers* with a continuous incentive, so far as is consistent with economic efficiency, to reduce operating expenditure and, if the scheme extends to capital expenditure, capital expenditure; and
 - (3) the desirability of both rewarding *Distribution Network Service Providers* for efficiency gains and penalising *Distribution Network Service Providers* for efficiency losses; and
 - (4) any incentives that *Distribution Network Service Providers* may have to capitalise expenditure; and
 - (5) the possible effects of the scheme on incentives for the implementation of non-network alternatives.
- (d) The *AER* may, from time to time and with the agreement of each affected *Distribution Network Service Provider*, amend or replace an *efficiency benefit sharing scheme*.

- (e) The *AER* must *publish* a written statement, when it *publishes* its first *efficiency benefit sharing scheme* (if any), setting out how it proposes the *efficiency benefit sharing scheme* will operate for the next distribution determination. The statement may be included in the first *efficiency benefit sharing scheme* or may be *published* separately.
- (f) However, despite *publishing* an *efficiency benefit sharing scheme*, the *AER* need not apply the scheme to one or more *Distribution Network Service Providers* in the relevant distribution determination or determinations.
- (g) The *AER* may carry out such consultation in connection with the preparation of an *efficiency benefit sharing scheme* as the *AER* thinks appropriate and may take into consideration any consultation carried out before the commencement date.
- (h) If an *efficiency benefit sharing scheme* applicable to a NSW or ACT Distribution Network Service Provider is not *published* before 1 March 2008 or the date that is one month after the commencement date (whichever is the later), no *efficiency benefit sharing scheme* may be applied to the *Distribution Network Service Provider* in its distribution determination for the regulatory control period 2009-2014.
- (i) The *AER* may monitor and collect information from any or all of the NSW and ACT Distribution Network Service Providers on matters relevant to be included in an *efficiency benefit sharing scheme* for the purpose of developing, amending or applying an *efficiency benefit sharing scheme* for the regulatory control period commencing on 1 July 2014.

6.5.9 The X factor

- (a) A *building block determination* is to include the X factor for each control mechanism for each *regulatory year* of the *regulatory control period*.
- (b) The X factor:
 - (1) must be set by the *AER* with regard to the *Distribution Network Service Provider's* total *revenue requirement* for the *regulatory control period*; and
 - (2) must be such as to minimise, as far as reasonably possible, variance between expected revenue for the last *regulatory year* of the *regulatory control period* and the *annual revenue requirement* for that last *regulatory year*; and
 - (3) must conform with whichever of the following requirements is applicable:

- (i) if the control mechanism relates generally to *standard control services* – the X factor must be designed to equalise (in terms of net present value) the revenue to be earned by the *Distribution Network Service Provider* from the provision of *standard control services* over the *regulatory control period* with the provider's *total revenue requirement* for the *regulatory control period*;
 - (ii) if there are separate control mechanisms for different *standard control services* – the X factor for each control mechanism must be designed to equalise (in terms of net present value) the revenue to be earned by the *Distribution Network Service Provider* from the provision of *standard control services* to which the control mechanism relates over the *regulatory control period* with the portion of the provider's *total revenue requirement* for the *regulatory control period* attributable to those services.
- (c) There may be different X factors:
- (1) for different regulatory years of the regulatory control period; and
 - (2) if there are 2 or more control mechanisms – for each control mechanism.

6.6 Adjustments after making of building block determination

6.6.1 Cost pass through

- (a) If a *positive change event* occurs, a *Distribution Network Service Provider* may seek the approval of the AER to pass through to *Distribution Network Users* a *positive pass through amount*.
- (b) If a *negative change event* occurs, the AER may require the *Distribution Network Service Provider* to pass through to *Distribution Network Users* a *negative pass through amount* as determined by the AER under paragraph (g).

Positive pass through

- (c) To seek the approval of the AER to pass through a *positive pass through amount*, a *Distribution Network Service Provider* must submit to the AER, within 90 *business days* of the relevant *positive change event* occurring, a written statement which specifies:
 - (1) the details of the *positive change event*; and
 - (2) the date on which the *positive change event* occurred; and

- (3) the *eligible pass through amount* in respect of that *positive change event*; and
 - (4) the *positive pass through amount* the provider proposes in relation to the *positive change event*; and
 - (5) the amount of the *positive pass through amount* that the provider proposes should be passed through to *Distribution Network Users* in each *regulatory year* during the *regulatory control period*; and
 - (6) evidence:
 - (i) of the actual and likely increase in costs referred to in subparagraph (3); and
 - (ii) that such costs occur solely as a consequence of the *positive change event*; and
 - (7) such other information as may be required under any relevant *regulatory information instrument*.
- (d) If the *AER* determines that a *positive change event* has occurred in respect of a statement under paragraph (c), the *AER* must determine:
- (1) the *approved pass through amount*; and
 - (2) the amount of that *approved pass through amount* that should be passed through to *Distribution Network Users* in each *regulatory year* during the *regulatory control period*,
- taking into account the matters referred to in paragraph (j).
- (e) If the *AER* does not make the determinations referred to in paragraph (d) within 60 *business days* from the date it receives the *Distribution Network Service Provider's* statement and accompanying evidence under paragraph (c), then, on the expiry of that period, the *AER* is taken to have determined that:
- (1) the *positive pass through amount* as proposed in the provider's statement under paragraph (c) is the *approved pass through amount* in respect of that *positive change event*; and
 - (2) the amount of that *positive pass through amount* that the provider proposes in its statement under paragraph (c) should be passed through to *Distribution Network Users* in each *regulatory year* during the *regulatory control period*, is the amount that should be so passed through in each such *regulatory year*.

Negative pass through

- (f) A *Distribution Network Service Provider* must submit to the *AER*, within 90 *business days* of becoming aware of the occurrence of a *negative change event* for the provider, a written statement which specifies:
 - (1) the details of the *negative change event* concerned; and
 - (2) the date the *negative change event* occurred; and
 - (3) the costs in the provision of *standard control services* that the provider has saved and is likely to save until the end of the *regulatory control period* as a result of the *negative change event*; and
 - (4) the aggregate amount of those saved costs that the provider proposes should be passed through to *Distribution Network Users*; and
 - (5) the amount of the costs referred to in subparagraph (4) the provider proposes should be passed through to *Distribution Network Users* in each *regulatory year* during the *regulatory control period*; and
 - (6) such other information as may be required under any relevant *regulatory information instrument*.
- (g) If a *negative change event* occurs (whether or not the occurrence of that *negative change event* is notified by the provider to the *AER* under paragraph (f)) and the *AER* determines to impose a requirement on the provider in relation to that *negative change event* as described in paragraph (b), the *AER* must determine:
 - (1) the *required pass through amount*; and
 - (2) taking into account the matters referred to in paragraph (j):
 - (i) how much of that *required pass through amount* should be passed through to *Distribution Network Users* (the *negative pass through amount*); and
 - (ii) the amount of that *negative pass through amount* that should be passed through to *Distribution Network Users* in each *regulatory year* during the *regulatory control period*.
- (h) A *Distribution Network Service Provider* must provide the *AER* with such information as the *AER* requires for the purpose of making a determination under paragraph (g) within the time specified by the *AER* in a notice provided to the provider by the *AER* for that purpose.

Consultation

- (i) Before making a determination under paragraph (d) or (g), the *AER* may consult with the relevant *Distribution Network Service Provider* and such

other persons as the *AER* considers appropriate, on any matters arising out of the relevant *pass through event* the *AER* considers appropriate.

Relevant factors

- (j) In making a determination under paragraph (d) or (g) in respect of a *Distribution Network Service Provider*, the *AER* must take into account:
- (1) the matters and proposals set out in any statement given to the *AER* by the provider under paragraph (c) or (f); and
 - (2) in the case of a *positive change event*, the increase in costs in the provision of *standard control services* that the provider has incurred and is likely to incur until the end of the *regulatory control period* as a result of the *positive change event*; and
 - (3) in the case of a *positive change event*, the efficiency of the provider's decisions and actions in relation to the risk of the *positive change event*, including whether the provider has failed to take any action that could reasonably be taken to reduce the magnitude of the *eligible pass through amount* in respect of that *positive change event* and whether the provider has taken or omitted to take any action where such action or omission has increased the magnitude of the amount in respect of that *positive change event*; and
 - (4) the time cost of money based on the *weighted average cost of capital* for the provider for the relevant *regulatory control period*; and
 - (5) the need to ensure that the provider only recovers any actual or likely increment in costs under this paragraph (j) to the extent that such increment is solely as a consequence of a *pass through event*; and
 - (6) in the case of a *tax change event*, any change in the way another *tax* is calculated, or the removal or imposition of another *tax*, which, in the *AER's* opinion, is complementary to the *tax change event* concerned; and
 - (7) whether the costs of the *pass through event* have already been factored into the calculation of the provider's *annual revenue requirement*; and
 - (8) any other factors the *AER* considers relevant.

Extension of time limits

- (k) The *AER* must, by written notice to a *Distribution Network Service Provider*, extend a time limit fixed in clause 6.6.1(c) or clause 6.6.1(f) if the *AER* is satisfied that the difficulty of assessing or quantifying the effect of the relevant *pass through event* justifies the extension.

Contributions to Climate Change Fund (NSW)

- (l) Neither a requirement by an order under the Energy and Utilities Administration Act 1987 of New South Wales to make a payment to the Climate Change Fund established under that Act, nor the making of a payment to that Fund, is a *pass through event* in relation to a NSW Distribution Network Service Provider, but the amount is recoverable in the following *regulatory year* under clause 6.18.2(b)(5A).

6.6.2 Service target performance incentive scheme

- (a) The AER may develop and *publish* an incentive scheme or incentive schemes (*service target performance incentive scheme*) to provide incentives (which may include targets) for *Distribution Network Service Providers* to maintain and improve performance.
- (b) In developing and implementing a *service target performance incentive scheme*, the AER:
 - (1) must consult with the authorities responsible for the administration of relevant *jurisdictional electricity legislation*; and
 - (2) must ensure that service standards and service targets (including guaranteed service levels) set by the scheme do not put at risk the *Distribution Network Service Provider's* ability to comply with relevant service standards and service targets (including guaranteed service levels) as specified in *jurisdictional electricity legislation*; and

Note:

A service target performance incentive scheme operates concurrently with any average or minimum service standards and guaranteed service level schemes that apply to the Distribution Network Service Provider under jurisdictional electricity legislation.

- (3) must take into account:
 - (i) the need to ensure that benefits to consumers likely to result from the scheme are sufficient to warrant any reward or penalty under the scheme for *Distribution Network Service Providers*; and
 - (ii) any *regulatory obligation or requirement* to which the *Distribution Network Service Provider* is subject; and
 - (iii) the past performance of the *distribution network*; and

- (iv) any other incentives available to the *Distribution Network Service Provider* under the *Rules* or a relevant distribution determination; and
 - (v) the need to ensure that the incentives are sufficient to offset any financial incentives the service provider may have to reduce costs at the expense of service levels; and
 - (vi) the willingness of the customer or end user to pay for improved performance in the delivery of services; and
 - (vii) the possible effects of the scheme on incentives for the implementation of non-network alternatives.
- (c) The *AER* may, from time to time and with the agreement of each affected *Distribution Network Service Provider*, amend or replace any scheme that is developed and *published* under this clause.
- (d) The *AER* must *publish* a written statement, when it *publishes* its first *service target performance incentive scheme* (if any), setting out how it proposes the *service target performance incentive scheme* will operate for the next distribution determination. The statement may be included in the first *service target performance incentive scheme* or may be *published* separately.
- (e) However, despite *publishing* a *service target performance incentive scheme*, the *AER* need not apply the scheme to one or more *Distribution Network Service Providers* in the relevant distribution determination or determinations.
- (f) The *AER* may carry out such consultation in connection with the preparation of a *service target performance incentive scheme* as the *AER* thinks appropriate and may take into consideration any consultation carried out before the commencement date.
- (g) If a *service target performance incentive scheme* applicable to a NSW or ACT Distribution Network Service Provider is not *published* before 1 March 2008 or the date that is one month after the commencement date (whichever is the later), no *service target performance incentive scheme* may be applied to the *Distribution Network Service Provider* in its distribution determination for the regulatory control period 2009-2014.
- (h) The *AER* must monitor and collect information from any or all of the NSW and ACT Distribution Network Service Providers on matters relevant to be included in a *service target performance incentive scheme* for the purpose of developing, amending or applying a *service target performance incentive scheme* for the *regulatory control period* commencing on 1 July 2014.

- (i) The *AER* may, in connection with the application of a *service target performance incentive scheme* applying to EnergyAustralia in respect of EnergyAustralia prescribed (transmission) standard control services provided in the regulatory control period 2009-2014, adopt relevant provisions of the *service target performance incentive scheme* prepared and published by the *AER* under Chapter 6A so far as it is applicable to the service.
- (j) A *service target performance incentive scheme* applying to EnergyAustralia in respect of EnergyAustralia prescribed (transmission) standard control services should ensure that the maximum revenue increment or decrement as a result of the operation of the *service target performance incentive scheme* will fall within a range that is between 1% and 5% of the maximum allowed revenue for the relevant *regulatory year*.
- (k) A *service target performance incentive scheme* applying to the ACT Distribution Network Service Provider must not, without the agreement of the provider, confer financial rewards or impose financial penalties on the provider for the regulatory control period 2009-2014, but this paragraph does not affect the operation of paragraph (h).

Note:

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

6.6.3 Demand management incentive scheme

- (a) The *AER* may develop and *publish* an incentive scheme or schemes (*demand management incentive scheme*) to provide incentives for *Distribution Network Service Providers* to implement efficient non-network alternatives or to manage the expected demand for *standard control services* in some other way.
- (b) In developing and implementing a *demand management incentive scheme*, the *AER* must have regard to:
 - (1) the need to ensure that benefits to consumers likely to result from the scheme are sufficient to warrant any reward or penalty under the scheme for *Distribution Network Service Providers*; and
 - (2) the effect of a particular control mechanism (i.e. price – as distinct from revenue – regulation) on a *Distribution Network Service*

- Provider's* incentives to adopt or implement efficient non-network alternatives; and
- (3) the extent the *Distribution Network Service Provider* is able to offer efficient pricing structures; and
 - (4) the possible interaction between a *demand management incentive scheme* and other incentive schemes; and
 - (5) the willingness of the customer or end user to pay for increases in costs resulting from implementation of the scheme.
- (c) The *AER* may, from time to time and with the agreement of each affected *Distribution Network Service Provider*, amend or replace any scheme that is developed and *published* under this clause.
 - (d) Nothing in this clause limits the content of an *efficiency benefit sharing scheme*.
 - (e) The *AER* must *publish* a written statement, when it *publishes* its first *demand management incentive scheme* (if any), setting out how it proposes the *demand management incentive scheme* will operate for the next distribution determination. The statement may be included in the first *demand management incentive scheme* or may be *published* separately.
 - (f) The *AER* may carry out such consultation in connection with the preparation of the *demand management incentive scheme* as the *AER* thinks appropriate and may take into consideration any consultation carried out before the commencement date.
 - (g) If a *demand management incentive scheme* applicable to a NSW or ACT Distribution Network Service Provider is not *published* by the *AER* before 1 March 2008 or the date that is one month after the commencement date (whichever is the later), no *demand management incentive scheme* may be applied to the *Distribution Network Service Provider* in its distribution determination for the regulatory control period 2009-2014.
 - (h) Nothing in this clause affects the application of the D-factor carry forward referred to in clause 6.4.3(a)(8) and clause 6.4.3(b)(8).

Part D EnergyAustralia negotiated distribution services

6.7 Negotiated distribution services

This rule applies only to EnergyAustralia negotiated distribution services.

6.7.1 Principles relating to access to negotiated distribution services

The following principles constitute the *Negotiated Distribution Service Principles*:

- (1) the price for a *negotiated distribution service* should be based on the costs incurred in providing that service, determined in accordance with the principles and policies set out in the Cost Allocation Method for the relevant *Distribution Network Service Provider*;
- (2) subject to subparagraphs (3) and (4), the price for a *negotiated distribution service* should be at least equal to the cost that would be avoided by not providing the service but no more than the cost of providing it on a stand alone basis;
- (3) if the *negotiated distribution service* is the provision of a *shared distribution service* that:
 - (i) exceeds the *network* performance requirements (if any) which that *shared distribution service* is required to meet under any *jurisdictional electricity legislation*; or
 - (ii) exceeds the *network* performance requirements set out in schedules 5.1a and 5.1,

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

- (4) if the *negotiated distribution service* is the provision of a *shared distribution service* that does not meet (and does not exceed) the *network* performance requirements set out in schedules 5.1a and 5.1, the differential between the price for that service and the price for the *shared distribution service* which meets (but does not exceed) the *network* performance requirements set out in schedules 5.1a and 5.1 should reflect the cost the *Distribution Network Service Provider* would avoid by not providing that service;
- (5) the price for a *negotiated distribution service* must be the same for all *Distribution Network Users* unless there is a material difference in the costs of providing the *negotiated distribution service* to different *Distribution Network Users* or classes of *Distribution Network Users*;
- (6) the price for a *negotiated distribution service* should be subject to adjustment over time to the extent that the assets used to provide that service are subsequently used to provide services to another person, in

which case the adjustment should reflect the extent to which the costs of that asset are being recovered through charges to that other person;

- (7) the price for a *negotiated distribution service* should be such as to enable the *Distribution Network Service Provider* to recover the efficient costs of complying with all *regulatory obligations or requirements* associated with the provision of the *negotiated distribution service*;
- (8) any *access charges* should be based on the costs reasonably incurred by the *Distribution Network Service Provider* in providing *distribution network user access* and, in the case of compensation referred to in rule 5.4A(h) to (j), on the revenue that is likely to be foregone and the costs that are likely to be incurred by a person referred to in those provisions where an event referred to in those provisions occurs;
- (9) the *terms and conditions of access* for a *negotiated distribution service* should be fair and reasonable and consistent with the safe and reliable operation of the *power system* in accordance with the *Rules* (for these purposes, the price for a *negotiated distribution service* is to be treated as being fair and reasonable if it complies with principles (1) to (7) of this clause;
- (10) the *terms and conditions of access* for a *negotiated distribution service* (including, in particular, any exclusions and limitations of liability and indemnities) must not be unreasonably onerous taking into account the allocation of risk between the *Distribution Network Service Provider* and the other party, the price for the *negotiated distribution service* and the costs to the *Distribution Network Service Provider* of providing the *negotiated distribution service*;
- (11) the *terms and conditions of access* for a *negotiated distribution service* should take into account the need for the service to be provided in a manner that does not adversely affect the safe and reliable operation of the *power system* in accordance with the *Rules*.

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

- (a) A *Distribution Network Service Provider* must comply with:

- (1) the provider's *negotiating framework*; and
- (2) the provider's *Negotiated Distribution Service Criteria*,

when the provider is negotiating the terms and conditions of access to *negotiated distribution services*.

- (b) The *Distribution Network Service Provider* must also comply with any other applicable requirements of the *Rules*, including the requirements of:
 - (1) rules 5.3 and 5.4A, when negotiating for the provision of *connection services* and the associated *connection service* charges; and
 - (2) rule 5.4A when negotiating the *use of system services charges* and *access charges* to be paid to or by a *Distribution Network User*.

6.7.3 Negotiating framework determination

The determination specifying requirements relating to the *negotiating framework* forming part of a distribution determination for a *Distribution Network Service Provider* is to set out requirements that are to be complied with in respect of the preparation, replacement, application or operation of its *negotiating framework*.

6.7.4 Negotiated Distribution Service Criteria determination

- (a) The determination by the *AER* specifying the *Negotiated Distribution Service Criteria* forming part of a distribution determination for a *Distribution Network Service Provider* is to set out the criteria that are to be applied:
 - (1) by the provider in negotiating *terms and conditions of access* including:
 - (i) the prices that are to be charged for the provision of *negotiated distribution services* by the provider for the relevant *regulatory control period*; or
 - (ii) any *access charges* which are negotiated by the provider during that *regulatory control period*; and
 - (2) by the *AER* in resolving an access dispute about *terms and conditions of access* including:
 - (i) the price that is to be charged for the provision of a *negotiated distribution service* by the provider; or
 - (ii) any *access charges* that are to be paid to or by the provider.
- (b) The *Negotiated Distribution Service Criteria* must give effect to and be consistent with the *Negotiated Distribution Service Principles* set out in clause 6.7.1.

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

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

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

Note:

See clause 6.7.3.

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

Note:

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

- (4) a requirement for a *Service Applicant* to provide all commercial information the provider may reasonably require to enable the provider to engage in effective negotiation with that applicant for the provision of the *negotiated distribution service*; and
 - (5) a requirement that negotiations with a *Service Applicant* for the provision of the *negotiated distribution service* be commenced and finalised within specified periods and a requirement that each party to the negotiations must make reasonable endeavours to adhere to the specified time limits; and
 - (6) a process for dispute resolution which provides that all disputes as to the *terms and conditions of access* for the provision of *negotiated distribution services* are to be dealt with in accordance with the relevant provisions of the Law and the *Rules* for dispute resolution; and
 - (7) the arrangements for payment by a *Service Applicant* of the provider's reasonable direct expenses incurred in processing the application to provide the *negotiated distribution service*; and
 - (8) a requirement that the *Distribution Network Service Provider* determine the potential impact on other *Distribution Network Users* of the provision of the *negotiated distribution service*; and
 - (9) a requirement that the *Distribution Network Service Provider* must notify and consult with any affected *Distribution Network Users* and ensure that the provision of *negotiated distribution services* does not result in non-compliance with obligations in relation to other *Distribution Network Users* under the *Rules*; and
 - (10) a requirement that the *Distribution Network Service Provider* publish the results of negotiations on its website.
- (d) Notwithstanding the foregoing, the *negotiating framework* must not be inconsistent with any of the requirements of Rules 5.3 and 5.4A and other relevant provisions of this Chapter 6 and Chapter 6A and, in the event of any inconsistency, those requirements prevail.

- (e) Each *Distribution Network Service Provider* and *Service Applicant* who is negotiating for the provision of a *negotiated distribution service* by the provider must comply with the requirements of the *negotiating framework* in accordance with its terms.

6.7.6 Confidential information

- (a) Commercial information to be provided to a *Service Applicant* in accordance with clause 6.7.5(c)(2):
 - (1) does not include *confidential information* provided to the *Distribution Network Service Provider* by another person; and
 - (2) may be provided subject to a condition that the *Service Applicant* must not provide any part of that commercial information to any other person without the consent of the *Distribution Network Service Provider*.
- (b) Commercial information to be provided to a *Distribution Network Service Provider* in accordance with clause 6.7.5(c)(4):
 - (1) does not include *confidential information* provided to a *Service Applicant* by another person; and
 - (2) may be provided subject to a condition that the provider must not provide any part of that commercial information to any other person without the consent of the *Service Applicant*.

Part DA Negotiable components of direct control services (NSW and ACT)

6.7A Negotiable components of direct control services

- (a) The *AER* may include in a *Distribution Network Service Provider's* distribution determination a decision that one or more components of the provider's *direct control services* are negotiable components.
- (b) A negotiable component may be a particular component of the *direct control service* or may relate to the terms or conditions on which a *direct control service* or a component of a *direct control service* is provided.
- (c) A reference in this rule 6.7A to the price for a negotiable component of a *direct control service* is a reference to the price for the *direct control service* if the negotiable component is successfully negotiated by the *Distribution Network Service Provider* and the *Service Applicant* concerned.

- (d) The following provisions of Rule 6.7A have effect if the AER decides that one or more components of *direct control services* provided by a *Distribution Network Service Provider* are negotiable components (as referred to in paragraph (a)).

6.7A.1 Principles relating to access to negotiable components

The following principles constitute the negotiable component principles:

- (1) the price for a negotiable component should be the price for that component in the *Distribution Network Service Provider's approved pricing proposal*, unless the terms and conditions sought for the component are so different from those used for the purposes of establishing the *approved pricing proposal* as to warrant determination of the price without regard to this subparagraph;
- (2) subject to subparagraph (1), the price for a negotiable component should be based on the costs incurred in providing that component, determined in accordance with the principles and policies set out in the Cost Allocation Method for the relevant *Distribution Network Service Provider*;
- (3) subject to subparagraphs (1), (4) and (5), the price for a negotiable component should be at least equal to the cost that would be avoided by not providing it but no more than the cost of providing it on a stand alone basis;
- (4) subject to subparagraph (1), if the *direct control service* of which the negotiable component is a component is the provision of a *shared distribution service* that:
 - (i) exceeds the *network* performance requirements (if any) which that *shared distribution service* is required to meet under any *jurisdictional electricity legislation*; or
 - (ii) exceeds the *network* performance requirements set out in schedules 5.1a and 5.1,

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

- (5) subject to subparagraph (1), if the *direct control service* of which the negotiable component is a component is the provision of a *shared distribution service* that does not meet (and does not exceed) the

network performance requirements set out in schedules 5.1a and 5.1, then the differential between the price for that service and the price for the *shared distribution service* which meets (but does not exceed) the *network* performance requirements set out in schedules 5.1a and 5.1 should reflect the cost the *Distribution Network Service Provider* would avoid by not providing that service;

- (6) subject to subparagraph (1), the price for a negotiable component must be the same for all *Distribution Network Users* unless there is a material difference in the costs of providing the negotiable component to different *Distribution Network Users* or classes of *Distribution Network Users*;
- (7) subject to subparagraph (1), the price for a negotiable component should be subject to adjustment over time to the extent that the assets used to provide the *direct control service* are subsequently used to provide services to another person, in which case the adjustment should reflect the extent to which the costs of those assets are being recovered through charges to that other person;
- (8) subject to subparagraph (1), the price for a negotiable component should be such as to enable the *Distribution Network Service Provider* to recover the efficient costs of complying with all *regulatory obligations or requirements* associated with the provision of the negotiable component;
- (9) any *access charges* should be based on the costs reasonably incurred by the *Distribution Network Service Provider* in providing *distribution network user access* and, in the case of compensation referred to in clause 5.5(f)(4)(ii) and (iii), on the revenue that is likely to be foregone and the costs that are likely to be incurred by a person referred to in those provisions where an event referred to in those provisions occurs;
- (10) the *terms and conditions of access* for a negotiable component should be fair and reasonable and consistent with the safe and reliable operation of the *power system* in accordance with the *Rules* (for these purposes, the price for a negotiable component is to be treated as being fair and reasonable if it complies with principles (1) to (8) of this clause);
- (11) the *terms and conditions of access* for a negotiable component (including, in particular, any exclusions and limitations of liability and indemnities) must not be unreasonably onerous taking into account the allocation of risk between the *Distribution Network Service Provider* and the other party, the price for the negotiable component and the costs to the *Distribution Network Service Provider* of providing the negotiable component; and

- (12) the *terms and conditions of access* for a negotiable component should take into account the need for the *direct control service* to be provided in a manner that does not adversely affect the safe and reliable operation of the *power system* in accordance with the *Rules*.

6.7A.2 Determination of terms and conditions of access for negotiable components

- (a) A *Distribution Network Service Provider* must comply with:
 - (1) the provider's *negotiating framework*; and
 - (2) the provider's negotiable component criteria,when the provider is negotiating the *terms and conditions of access* to negotiable components.
- (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, 5.4A and 5.5, when negotiating for the provision of *connection services* and the associated *connection service* charges; and
 - (2) rules 5.4A and 5.5 when negotiating the *use of system services charges* and *access charges* to be paid to or by a *Distribution Network User*.

6.7A.3 Negotiating framework determination

The determination specifying requirements relating to the *negotiating framework* forming part of a distribution determination for a *Distribution Network Service Provider* is to set out requirements that are to be complied with in respect of the preparation, replacement, application or operation of its *negotiating framework*.

6.7A.4 Negotiable component criteria determination

- (a) The determination by the *AER* specifying the negotiable component criteria forming part of a distribution determination for a *Distribution Network Service Provider* is to set out the criteria that are to be applied:
 - (1) by the provider in negotiating *terms and conditions of access* including:
 - (i) the variations to the prices that are to be charged for the provision of the negotiable component of the *direct control service* concerned by the provider for the relevant *regulatory control period*; and

- (ii) any *access charges* which are negotiated by the provider during that *regulatory control period*; and
- (2) by the *AER* in resolving an access dispute, between the *Distribution Network Service Provider* and a person who wishes to be provided with a negotiable component, in relation to *terms and conditions of access* including:
 - (i) the variation of the prices that are to be charged for the provision of the negotiable component of the *direct control service* concerned by the provider; and
 - (ii) any *access charges* that are to be paid to or by the provider.
- (b) The negotiable component criteria must give effect to and be consistent with the principles set out in clause 6.7A.1.

6.7A.5 Preparation of and requirements for negotiating framework

- (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 be provided with a negotiable component from the provider, as to the *terms and conditions of access* for the provision of the component.
- (b) The *negotiating framework* for a *Distribution Network Service Provider* must comply with and be consistent with:
 - (1) the applicable requirements of a distribution determination applying to the provider; and
 - (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 negotiable component; 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 negotiable component, 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 negotiable component; and
- (ii) to demonstrate to a *Service Applicant* that the charges for providing the negotiable component 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;

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 negotiable component; and
- (5) a requirement that negotiations with a *Service Applicant* for the provision of the negotiable component 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 negotiable components 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 negotiable component; and
- (8) a requirement that the *Distribution Network Service Provider* determine the potential impact on other *Distribution Network Users* of the provision of the negotiable component; 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 negotiable components 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 Rules 5.3, 5.4A and 5.5 and other relevant provisions of this Chapter 6 and Chapter 6A 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 negotiable component by the provider must comply with the requirements of the *negotiating framework* in accordance with its terms.
- (f) EnergyAustralia may prepare and submit a document that contains both the *negotiating framework* under this clause 6.7A.5 and the *negotiating framework* under clause 6.7.5, and both frameworks may be combined in a single framework.

6.7A.6 Confidential information

- (a) Commercial information to be provided to a *Service Applicant* in accordance with clause 6.7A.5(c)(2):
 - (1) does not include *confidential information* provided to the *Distribution Network Service Provider* by another person; and
 - (2) may be provided subject to a condition that the *Service Applicant* must not provide any part of that commercial information to any other person without the consent of the *Distribution Network Service Provider*.
- (b) Commercial information to be provided to a *Distribution Network Service Provider* in accordance with clause 6.7A.5(c)(4):
 - (1) does not include *confidential information* provided to a *Service Applicant* by another person; and
 - (2) may be provided subject to a condition that the provider must not provide any part of that commercial information to any other person without the consent of the *Service Applicant*.

Part E Regulatory proposal

6.8 Regulatory proposal

6.8.1 *****

6.8.2 Submission of regulatory proposal

- (a) A *Distribution Network Service Provider* must, whenever required to do so under paragraph (b), submit a *regulatory proposal* to the AER for *distribution services* provided by means of, or in connection with, the provider's *distribution system*.
- (b) A *regulatory proposal* must be submitted on or before 2 June 2008.
- (c) A *regulatory proposal* must include (but need not be limited to) the following elements:
 - (1) *****
 - (2) for *direct control services* classified as *standard control services* – a *building block proposal*; and
 - (3) *****
 - (3A) for *direct control services* classified as *alternative control services*:
 - (i) the proposed control mechanism, a demonstration of the application of the proposed control mechanism, and the necessary supporting information; and
 - (ii) in the case of a departure from the AER's likely approach to the relevant control mechanisms for *alternative control services* (as indicated in a statement *published* under clause 6.2.5(e)) a statement of the reasons justifying the departure; and
 - (4) for *direct control services* – indicative prices for each year of the *regulatory control period*; and
 - (5) *****
 - (6) an indication of the parts of the proposal (if any) the *Distribution Network Service Provider* claims to be confidential and wants suppressed from publication on that ground; and
 - (7) for *direct control services* – a proposal as to whether any (and, if so, which) components of *direct control services* should be negotiable components; and

- (8) for negotiable components of *direct control services* classified under the proposal as *negotiated distribution services* – the proposed *negotiating framework*; and
 - (9) for EnergyAustralia prescribed (transmission) standard control services - a proposed pricing methodology; and
 - (10) for EnergyAustralia negotiated distribution services classified under the proposal as *negotiated distribution services* – the proposed *negotiating framework*.
- (d) The *regulatory proposal* must comply with the requirements of, and must contain or be accompanied by the information required by any relevant *regulatory information instrument*.
 - (e) *****
 - (f) *****

6.9 Preliminary examination and consultation

6.9.1 Preliminary examination

- (a) If the *AER* considers that a *regulatory proposal* (or the accompanying information) does not comply, in any respect, with a requirement of the Law or the *Rules*, the *AER* may notify the provider that it requires resubmission of the proposal.
- (b) The notice must be given as soon as practicable and must state why, and in what respects, the *AER* considers the *regulatory proposal* to be non-compliant.

6.9.2 Resubmission of proposal

- (a) A *Distribution Network Service Provider* must, within 20 *business days* after receiving a notice under clause 6.9.1, resubmit its *regulatory proposal* in an amended form that complies with the relevant requirements set out in the notice.
- (b) A *Distribution Network Service Provider* may only make changes to its *regulatory proposal* to address the deficiencies identified in the notice.

6.9.3 Consultation

- (a) Subject to the provisions of the Law and the *Rules* about the disclosure of *confidential information*, the *AER* must *publish* a *regulatory proposal* submitted or resubmitted to it by the *Distribution Network Service Provider* under this Part, together with:

- (1) the *AER's* proposed negotiable component criteria for the provider;
and
- (1A) in the case of EnergyAustralia negotiated distribution services provided by EnergyAustralia - the *AER's* proposed *Negotiated Distribution Service Criteria*; and
- (2) an invitation for written submissions on the *regulatory proposal* and the proposed *Negotiated Distribution Service Criteria* or proposed negotiable component criteria (or both),

after the *AER* decides that the *regulatory proposal* complies (or that there is sufficient compliance) with the requirements of the Law and the *Rules*.

- (b) The *AER* may *publish* an issues paper examining issues related to the *regulatory proposal* and the proposed negotiable component criteria (and, in the case of EnergyAustralia negotiated distribution services provided by EnergyAustralia, the proposed *Negotiated Distribution Service Criteria*), at the same time as, or subsequent to, *publication* of the invitation referred to in paragraph (a)(2).
- (c) Any person may make a written submission to the *AER* on the *regulatory proposal* or the proposed negotiable component criteria (or, in the case of EnergyAustralia negotiated distribution services provided by EnergyAustralia, the proposed *Negotiated Distribution Service Criteria*) within the time specified in the invitation referred to in paragraph (a)(2), which must be not earlier than 30 *business days* after the invitation for submissions is *published* under that paragraph.

6.10 Draft distribution determination and further consultation

6.10.1 Making of draft distribution determination

Subject to rule 6.14(a), the *AER* must consider any written submissions made under rule 6.9 and must make a draft distribution determination in relation to the *Distribution Network Service Provider*.

6.10.2 Publication of draft determination and consultation

- (a) The *AER* must *publish*:
 - (1) the draft distribution determination; and
 - (2) notice of the making of the draft distribution determination; and
 - (3) the *AER's* reasons for suggesting that the distribution determination should be made as proposed including the draft constituent decisions

- i.e. the decisions made in accordance with rule 6.12 on which the draft distribution determination is predicated; and
- (4) notice of a predetermination conference; and
 - (5) an invitation for written submissions on its draft distribution determination.
- (b) The *AER* must hold a predetermination conference at the time, date and place specified in the notice under paragraph (a)(4) for the purpose of explaining the draft distribution determination and receiving oral submissions from interested parties. Any person may attend such a predetermination conference but the procedure to be adopted at the conference will be at the discretion of the senior *AER* representative in attendance.
- (c) Any person may make a written submission to the *AER* on the draft distribution determination within the time specified in the invitation referred to in paragraph (a)(5), which must be not earlier than 30 *business days* after the making of the draft determination.

6.10.3 Submission of revised proposal

- (a) In addition to making written submissions, the *Distribution Network Service Provider* may, not more than 30 *business days* after the publication of the draft distribution determination, submit a revised *regulatory proposal* to the *AER*.
- (b) A *Distribution Network Service Provider* may only make the revisions referred to in paragraph (a) so as to incorporate the substance of any changes required to address matters raised by the draft distribution determination or the *AER*'s reasons for it.
- (c) A revised *regulatory proposal* must comply with the requirements of, and must contain or be accompanied by the information required by, any relevant *regulatory information instrument*.
- (d) Subject to the provisions of the Law and the *Rules* about the disclosure of *confidential information*, the *AER* must *publish* a *regulatory proposal* submitted by the *Distribution Network Service Provider* under paragraph (a), together with the accompanying information, as soon as practicable after receipt by the *AER*.
- (e) The *AER* may, but need not, invite written submissions on the revised *regulatory proposal*.

6.11 Distribution determination

6.11.1 Making of distribution determination

Subject to rule 6.14(a), the *AER* must consider any submissions made on the draft distribution determination, or on any revised *regulatory proposal* submitted to it under clause 6.10.3, and must make a distribution determination in relation to the *Distribution Network Service Provider*.

6.11.2 Notice of distribution determination

The *AER* must as soon as practicable, but not later than 2 months before the commencement of the relevant *regulatory control period*, *publish*:

- (1) notice of the making of the distribution determination; and
- (2) the distribution determination itself; and
- (3) the *AER*'s reasons for making the distribution determination in its final form including the constituent decisions i.e. the decisions made in accordance with rule 6.12 on which the distribution determination is predicated.

6.11.3 Commencement of distribution determination

- (a) A distribution determination takes effect at the commencement of the *regulatory control period* to which it relates.
- (b) If a period intervenes between the end of one *regulatory control period* and the commencement of a new distribution determination providing for the next *regulatory control period*:
 - (1) the previous distribution determination continues in force during the intervening period; and
 - (2) the last pricing proposal approved by the IPART or ICRC, as the case requires, in the previous *regulatory control period* continues in force (despite any contrary provision of these *Rules*) during the intervening period and the first *regulatory year* of the *regulatory control period*; and
 - (3) the later distribution determination is to make provision for appropriate adjustments to the *approved pricing proposals* for subsequent *regulatory years* of the *regulatory control period*.

6.12 Requirements relating to draft and final distribution determinations

6.12.1 Constituent decisions

A distribution determination is predicated on the following decisions by the *AER* (*constituent decisions*):

- (1) a decision on the classification of the services to be provided by the *Distribution Network Service Provider* during the course of the *regulatory control period*;
- (2) a decision on the *Distribution Network Service Provider's* current *building block proposal* in which the *AER* either approves or refuses to approve:
 - (i) the *annual revenue requirement* for the provider, as set out in the *building block proposal*, for each *regulatory year* of the *regulatory control period*; and
 - (ii) *****
- (3) a decision in which the *AER* either:
 - (i) acting in accordance with clause 6.5.7(c), accepts the total of the forecast capital expenditure for the *regulatory control period* that is included in the current *building block proposal*; or
 - (ii) acting in accordance with clause 6.5.7(d), does not accept the total of the forecast capital expenditure for the *regulatory control period* that is included in the current *building block proposal*, in which case the *AER* must set out its reasons for that decision and an estimate of the total of the *Distribution Network Service Provider's* required capital expenditure for the *regulatory control period* that the *AER* is satisfied reasonably reflects the *capital expenditure criteria*, taking into account the *capital expenditure factors*;
- (4) a decision in which the *AER* either:
 - (i) acting in accordance with clause 6.5.6(c), accepts the total of the forecast operating expenditure for the *regulatory control period* that is included in the current *building block proposal*; or
 - (ii) acting in accordance with clause 6.5.6(d), does not accept the total of the forecast operating expenditure for the *regulatory control period* that is included in the current *building block proposal*, in which case the *AER* must set out its reasons for that

decision and an estimate of the total of the *Distribution Network Service Provider's* required operating expenditure for the *regulatory control period* that the *AER* is satisfied reasonably reflects the *operating expenditure criteria*, taking into account the *operating expenditure factors*;

- (5) a decision in relation to the rate of return in accordance with clause 6.5.2;
- (6) a decision on the regulatory asset base as at the commencement of the *regulatory control period* in accordance with clause 6.5.1 and schedule 6.2;
- (7) a decision on the estimated cost of corporate income tax to the provider for each *regulatory year* of the *regulatory control period* in accordance with clause 6.5.3;
- (8) a decision on whether or not to approve the depreciation schedules submitted by the *Distribution Network Service Provider* and, if the *AER* decides against approving them, a decision determining depreciation schedules in accordance with clause 6.5.5(b);
- (9) a decision on how any applicable *efficiency benefit sharing scheme*, *service target performance incentive scheme*, or *demand management incentive scheme* is to apply to the *Distribution Network Service Provider*;
- (10) a decision in which the *AER* decides other appropriate amounts, values or inputs;
- (11) a decision on the control mechanism (including the X factor) for *standard control services*;
- (12) a decision on the control mechanism for *alternative control services*;
- (13) a decision on how compliance with a relevant control mechanism is to be demonstrated;
- (14) a decision on the additional *pass through events* that are to apply for the *regulatory control period*;
- (15) a decision on any *negotiating framework* that is to apply to the *Distribution Network Service Provider* for the *regulatory control period* (which may be the *negotiating framework* as proposed by the provider, some variant of it, or a framework substituted by the *AER*);
- (16) if relevant, a decision in which the *AER* decides the *Negotiated Distribution Service Criteria* for the *Distribution Network Service Provider*;

- (16A) a decision in which the *AER* decides which, if any, components of *direct control services* are negotiable components;
- (16B) if relevant, a decision in which the *AER* decides the negotiable component criteria for the *Distribution Network Service Provider*;
- (17) a decision on the procedures for assigning customers to *tariff classes*, or reassigning customers from one *tariff class* to another (including any applicable restrictions);
- (18) a decision on whether depreciation for establishing the regulatory asset base as at the commencement of the following *regulatory control period* is to be based on actual or forecast capital expenditure;
- (19) a decision on how the *Distribution Network Service Provider* is to report to the *AER* on its recovery of *Transmission Use of System* charges for each *regulatory year* of the *regulatory control period* and on the adjustments to be made to subsequent *pricing proposals* to account for over or under recovery of those charges;
- (20) for EnergyAustralia prescribed (transmission) standard control services – a decision on the proposed pricing methodology, in which the *AER* either approves or refuses to approve that methodology and sets out reasons for its decision.

6.12.1A Division of EnergyAustralia's revenue

- (a) The *AER* must, in the distribution determination for EnergyAustralia, divide the revenue calculated under Part C into the following two portions:
 - (1) a portion relevant to EnergyAustralia prescribed (transmission) standard control services;
 - (2) a portion relevant to other *standard control services* provided by EnergyAustralia,based on EnergyAustralia's approved Cost Allocation Method.
- (b) The pricing rules in Part J of Chapter 6A are to be applied to the portion referred to in paragraph (a)(1) instead of the pricing rules in Part I of transitional Chapter 6.
- (c) The pricing rules in Part I of transitional Chapter 6 are to be applied to the portion referred to in paragraph (a)(2).

6.12.2 Reasons for decisions

The reasons given by the *AER* for a draft distribution determination under rule 6.10 or a final distribution determination under rule 6.11 must set out the basis and rationale of the determination, including:

- (1) details of the qualitative and quantitative methods applied in any calculations and formulae made or used by the *AER*; and
- (2) the values adopted by the *AER* for each of the input variables in any calculations and formulae, including:
 - (i) whether those values have been taken or derived from the provider's current *building block proposal*; and
 - (ii) if not, the rationale for the adoption of those values; and
- (3) details of any assumptions made by the *AER* in undertaking any material qualitative and quantitative analyses; and
- (4) reasons for the making of any decisions, the giving or withholding of any approvals, and the exercise of any discretions, as referred to in this Chapter 6, for the purposes of the determination.

6.12.3 Extent of AER's discretion in making distribution determinations

- (a) Subject to this clause and other provisions of this Chapter 6 explicitly negating or limiting the *AER*'s discretion, the *AER* has a discretion to accept or approve, or to refuse to accept or approve, any element of a *regulatory proposal*.
- (b) *****
- (c) *****
- (d) The *AER* must approve the *total revenue requirement* for a *Distribution Network Service Provider* for a *regulatory control period*, and the *annual revenue requirement* for each *regulatory year* of the *regulatory control period*, as set out in the provider's current *building block proposal*, if the *AER* is satisfied that those amounts have been properly calculated using the *post-tax revenue model* on the basis of amounts calculated, determined or forecast in accordance with the requirements of Part C of this Chapter 6.
- (e) *****
- (f) If the *AER* refuses to approve an amount, value or methodology referred to in clause 6.12.1, the substitute amount, value or methodology on which the distribution determination is based must be:

- (1) determined on the basis of the current *regulatory proposal*; and
 - (2) amended from that basis only to the extent necessary to enable it to be approved in accordance with the *Rules*.
- (g) The *AER* must approve a proposed *negotiating framework* if the *AER* is satisfied that it adequately complies with the requirements of Part D or DA (as the case requires).
- (h) If the *AER* refuses to approve a proposed *negotiating framework*, any approved amended *negotiating framework* must be:
 - (1) determined on the basis of the current proposed *negotiating framework*; and
 - (2) amended from that basis only to the extent necessary to enable it to be approved in accordance with the *Rules*.
- (i) The *AER* must approve EnergyAustralia's proposed pricing methodology for EnergyAustralia prescribed (transmission) standard control services if the *AER* is satisfied that the methodology:
 - (1) gives effect to and is consistent with the *Pricing Principles for Prescribed Transmission Services*; and
 - (2) complies with the requirements of the *pricing methodology guidelines*.

6.13 Revocation and substitution of distribution determination for wrong information or error

- (a) The *AER* may (but is not required to) revoke a distribution determination during a *regulatory control period* if it appears to the *AER* that the determination is affected by a material error or deficiency of one or more of the following kinds:
 - (1) a clerical mistake or an accidental slip or omission;
 - (2) a miscalculation or misdescription;
 - (3) a defect in form;
 - (4) a deficiency resulting from the provision of false or materially misleading information to the *AER*.
- (b) If the *AER* revokes a distribution determination under paragraph (a), the *AER* must make a new distribution determination in substitution for the revoked determination to apply for the remainder of the *regulatory control period* for which the revoked determination was to apply.

- (c) If the *AER* revokes a distribution determination under paragraph (a), the substituted determination must only vary from the revoked determination to the extent necessary to correct the relevant error or deficiency.
- (d) The *AER* may only revoke and substitute a distribution determination under this rule 6.13, if it has first consulted with the relevant *Distribution Network Service Provider* and such other persons as it considers appropriate.

6.14 Miscellaneous

- (a) The *AER* may, but is not required to, consider any submission made pursuant to an invitation for submissions after the time for making the submission has expired.
- (b) Nothing in this Part E is to be construed as precluding the *AER* from *publishing* any issues, consultation and discussion papers, or holding any conferences and information sessions, that the *AER* considers appropriate.
- (c) Subject to paragraph (d), as soon as practicable after the *AER* receives a submission in response to an invitation referred to in clause 6.9.3(a)(2) or 6.10.2(a)(5) (whether or not the submission was made before the time for making it has expired), the *AER* must *publish* that submission.
- (d) The *AER* must not *publish* a submission referred to in paragraph (c) to the extent it contains information which has been clearly identified as confidential by the person making the submission.
- (e) The *AER* may give such weight to *confidential information* identified in accordance with paragraph (d) in a submission as it considers appropriate, having regard to the fact that such information has not been made publicly available.
- (f) Paragraph (d) does not apply to the extent that any other provision of the Law or the *Rules* permits or requires such information to be publicly released by the *AER*.

Part F Cost Allocation

6.15 Cost allocation

6.15.1 Duty to comply with Cost Allocation Method

- (a) A *Distribution Network Service Provider* must comply with the Cost Allocation Method that has been approved in respect of that provider from time to time by the *AER* under this rule 6.15 in respect of the regulatory control period 2009-2014.

- (b) A *Distribution Network Service Provider* is, during the regulatory control period 2009-2014, also subject to the requirements of Part F of general Chapter 6 but only for the purposes of and in connection with the distribution determination to be made for the subsequent *regulatory control period*.

6.15.2 *********

6.15.3 *********

6.15.4 *********

Provisions applicable to the NSW Distribution Network Service Providers

6.15.5 Cost Allocation Guidelines (NSW)

The Accounting Separation Code for Electricity Distributors in NSW prepared by the IPART and in force immediately before the start of the regulatory control period 2009-2014 in relation to the NSW Distribution Network Service Providers are deemed to be Cost Allocation Guidelines made by the *AER* for the regulatory control period 2009-2014.

6.15.6 Cost Allocation Method (NSW)

- (a) Each NSW Distribution Network Service Provider must submit to the *AER* for its approval a document setting out its proposed Cost Allocation Method for the regulatory control period 2009-2014 within 1 month after the commencement date.
- (b) The Cost Allocation Method proposed by a NSW Distribution Network Service Provider must:
 - (1) give effect to and be consistent with the Cost Allocation Guidelines; and
 - (2) be prepared using, as far as practicable but subject to subparagraph (1), the same cost allocation method as it last used when preparing its regulatory accounts for submission to the IPART.
- (c) The *AER* may approve or refuse to approve a Cost Allocation Method submitted under paragraph (a), but must approve it if the *AER* is satisfied that it:
 - (1) gives effect to and is consistent with the Cost Allocation Guidelines; and

- (2) has been prepared, as far as practicable but subject to subparagraph (1), using the cost allocation method the relevant *Distribution Network Service Provider* last used when preparing its regulatory accounts for submission to the IPART.
- (d) The *AER* must notify the relevant *Distribution Network Service Provider* of its decision to approve or refuse to approve the Cost Allocation Method submitted to it under paragraph (a) within 2 months of its submission, failing which the *AER* will be taken to have approved it.
- (e) As part of giving any approval referred to in paragraph (c), the *AER* may, after consulting with the relevant *Distribution Network Service Provider*, amend the Cost Allocation Method submitted to it, in which case the Cost Allocation Method as so amended will be taken to be approved by the *AER*.
- (f) A NSW Distribution Network Service Provider may, with the *AER*'s approval, amend its Cost Allocation Method from time to time but:
 - (1) the amendment:
 - (i) may be approved on condition that the *Distribution Network Service Provider* agree to incorporate into the amendment specified additional changes to the Cost Allocation Method the *AER* reasonably considers necessary or desirable as a result of the amendment as submitted; and
 - (ii) if approved on such a condition, does not take effect unless and until the *Distribution Network Service Provider* notifies the *AER* of its agreement;
 - (2) if 6 months elapse from the date of the submission of the amendment and the *AER* has not notified the *Distribution Network Service Provider* within that period of its approval or refusal to approve the amendment, the amendment is, at the end of that period, conclusively presumed to have been unconditionally approved.
- (g) A NSW Distribution Network Service Provider must maintain a current copy of its Cost Allocation Method on its website.

Provisions applicable to the ACT Distribution Network Service Provider

6.15.7 Cost Allocation Principles (ACT)

The following principles constitute the Cost Allocation Principles for the ACT Distribution Network Service Provider:

- (1) the detailed principles and policies used by the ACT Distribution Network Service Provider to allocate costs between different

categories of *distribution services* must be described in sufficient detail to enable the *AER* to replicate reported outcomes through the application of those principles and policies;

- (2) the allocation of costs must be determined according to the substance of a transaction or event rather than its legal form;
- (3) only the following costs may be allocated to a particular category of *distribution services*:
 - (i) costs which are directly attributable to the provision of those services; and
 - (ii) costs which are not directly attributable to the provision of those services but which are incurred in providing those services, in which case such costs must be allocated to the provision of those services using an appropriate allocator which should:
 - (A) except to the extent the cost is immaterial or a causal based method of allocation cannot be established without undue cost and effort, be causation based; and
 - (B) to the extent the cost is immaterial or a causal based method of allocation cannot be established without undue cost and effort, be an allocator that accords with a well accepted cost allocation method;
- (4) any cost allocation method which is used, the reasons for using that method and the numeric quantity (if any) of the chosen allocator must be clearly described;
- (5) the same cost must not be allocated more than once;
- (6) the principles, policies and approach used to allocate costs must be consistent with the Distribution Ring-Fencing Guidelines;
- (7) costs which have been allocated to a particular service cannot be reallocated to another service during the course of a *regulatory control period*.

6.15.8 Cost Allocation Method (ACT)

- (a) The ACT Distribution Network Service Provider must submit to the *AER* for its approval a document setting out its proposed Cost Allocation Method for the regulatory control period 2009-2014 within 1 month after the commencement date.
- (b) The Cost Allocation Method proposed by the ACT Distribution Network Service Provider must:

- (1) be prepared using, as far as practicable, the same cost allocation method as it last used when preparing its regulatory accounts for submission to the ICRC; and
 - (2) subject to subparagraph (1), be consistent with the Cost Allocation Principles.
- (c) The *AER* may approve or refuse to approve the Cost Allocation Method submitted under paragraph (a), but must approve it if the *AER* is satisfied that it:
 - (1) has been prepared, as far as practicable, using the cost allocation method the ACT Distribution Network Service Provider last used when preparing its regulatory accounts for submission to the ICRC; and
 - (2) subject to subparagraph (1), is consistent with the Cost Allocation Principles.
- (d) The *AER* must notify the ACT Distribution Network Service Provider of its decision to approve or refuse to approve the Cost Allocation Method submitted to it under paragraph (a) within 2 months of its submission, failing which the *AER* will be taken to have approved it.
- (e) As part of giving any approval referred to in paragraph (c), the *AER* may, after consulting with the ACT Distribution Network Service Provider, amend the Cost Allocation Method submitted to it, in which case the Cost Allocation Method as so amended will be taken to be approved by the *AER*.
- (f) The ACT Distribution Network Service Provider may, with the *AER*'s approval, amend its Cost Allocation Method from time to time but:
 - (1) the amendment:
 - (i) may be approved on condition that the provider agree to incorporate into the amendment specified additional changes to the Cost Allocation Method the *AER* reasonably considers necessary or desirable as a result of the amendment as submitted; and
 - (ii) if approved on such a condition, does not take effect unless and until the provider notifies the *AER* of its agreement;
 - (2) if 6 months elapse from the date of the submission of the amendment and the *AER* has not notified the provider within that period of its approval or refusal to approve the amendment, the amendment is, at the end of that period, conclusively presumed to have been unconditionally approved.

- (g) The ACT Distribution Network Service Provider must maintain a current copy of its Cost Allocation Method on its website.

Part G *****

Part H Ring-Fencing Arrangements for Distribution Network Service Providers

6.17 Distribution Ring-Fencing Guidelines

6.17.1 Compliance with Distribution Ring-Fencing Guidelines

- (a) All *Distribution Network Service Providers* must comply with the *Distribution Ring-Fencing Guidelines* prepared in accordance with clause 6.17.2.
- (b) Any Distribution Ring-Fencing Guidelines prepared by the IPART and in force immediately before the start of the regulatory control period 2009-2014 in relation to the NSW Distribution Network Service Providers are deemed to have been prepared by the *AER* under clause 6.17.2 and are to be complied with by the NSW Distribution Network Service Providers.
- (c) Any Distribution Ring-Fencing Guidelines prepared by the ICRC and in force immediately before the start of the regulatory control period 2009-2014 in relation to the ACT Distribution Network Service Provider are deemed to have been prepared by the *AER* under clause 6.17.2 and are to be complied with by the ACT Distribution Network Service Provider.
- (d) Any waiver granted by the IPART under clause 6.2 of the Distribution Ring-Fencing Guidelines prepared by the IPART in relation to the regulatory control period 2004-2009 and in force at the end of that period is deemed to have been given by the *AER* in relation to the regulatory control period 2009-2014.
- (e) For the purposes of paragraphs (b) and (c), the provisions of the guidelines prepared by the IPART and ICRC respectively and referred to in those paragraphs have effect as if references to the IPART and ICRC respectively were references to the *AER*, and with any other necessary modifications.
- (f) EnergyAustralia must, in respect of the EnergyAustralia transmission support network, comply with the *Distribution Ring-Fencing Guidelines* and the *Transmission Ring-Fencing Guidelines*.
- (g) The guidelines referred to in paragraphs (b) and (c) continue in force during and after the end of the regulatory control period 2009-2014 subject to amendment, revocation or replacement by guidelines made under the new regulatory regime as defined in clause 11.14.2.

6.17.2 Development of Distribution Ring-Fencing Guidelines

- (a) Subject to clause 6.17.1, guidelines may be developed by the AER for the accounting and functional separation of the provision of *direct control services* by *Distribution Network Service Providers* from the provision of other services by *Distribution Network Service Providers* (the *Distribution Ring-Fencing Guidelines*). The guidelines may vary in application as between different *participating jurisdictions*.

Note:

Clause 11.14.5 will, subject to clause 6.17.1, have a bearing on the application of these guidelines in certain cases.

- (b) The *Distribution Ring-Fencing Guidelines* may include, but are not limited to:
- (1) provisions defining the need for and extent of:
 - (i) legal separation of the entity through which a *Distribution Network Service Provider* provides *network services* from any other entity through which it conducts business; and
 - (ii) the establishment and maintenance of consolidated and separate accounts for *standard control services*, *alternative control services* and other services provided by the *Distribution Network Service Provider*; and
 - (iii) allocation of costs between *standard control services*, *alternative control services* and other services provided by the *Distribution Network Service Provider*; and
 - (iv) limitations on the flow of information between the *Distribution Network Service Provider* and any other person; and
 - (v) limitations on the flow of information where there is the potential for a competitive disadvantage between those parts of the *Distribution Network Service Provider's* business which provide *direct control services* and parts of the provider's business which provide any other services; and
 - (2) provisions allowing the AER to add to or to waive a *Distribution Network Service Provider's* obligations under the *Distribution Ring-Fencing Guidelines*.
- (c) In developing or amending the *Distribution Ring-Fencing Guidelines* the AER must consider, without limitation, the need, so far as practicable, for consistency between the *Distribution Ring-Fencing Guidelines* and the *Transmission Ring-Fencing Guidelines*.

- (d) In developing or amending the *Distribution Ring-Fencing Guidelines*, the AER must consult with *participating jurisdictions*, *Registered Participants*, *NEMMCO* and other *interested parties*, and such consultation must be otherwise in accordance with the *distribution consultation procedures* in Part G of general Chapter 6.

Part I Distribution Pricing Rules

6.18 Distribution Pricing Rules

6.18.1 Application of this Part

This Part applies to tariffs and *tariff classes* related to *direct control services*.

6.18.2 Pricing proposals

- (a) A *Distribution Network Service Provider* must:
 - (1) submit to the AER, as soon as practicable, and in any case within 15 *business days*, after *publication* of the distribution determination, a *pricing proposal* (the "*initial pricing proposal*") for the first *regulatory year* of the *regulatory control period*; and
 - (2) submit to the AER, at least 2 months before the commencement of the second and each subsequent *regulatory year* of the *regulatory control period*, a further *pricing proposal* (an "*annual pricing proposal*") for the relevant *regulatory year*.
- (b) A *pricing proposal* must:
 - (1) set out the *tariff classes* that are to apply for the relevant *regulatory year*; and
 - (2) set out the proposed tariffs for each *tariff class*; and
 - (3) set out, for each proposed tariff, the *charging parameters* and the elements of service to which each *charging parameter* relates; and
 - (4) set out, for each *tariff class* related to *standard control services*, the expected weighted average revenue for the relevant *regulatory year* and also for the current *regulatory year*; and
 - (5) set out the nature of any variation or adjustment to the tariff that could occur during the course of the *regulatory year* and the basis on which it could occur; and
 - (5A) in the case of a NSW Distribution Network Service Provider – set out the amount paid, or required by an order under the Energy and

Utilities Administration Act 1987 of New South Wales to be paid, by the provider to the Climate Change Fund in or in respect of the relevant *regulatory year* and reflect that amount in the expected revenue for the relevant *regulatory year*; and

- (6) set out how charges incurred by the *Distribution Network Service Provider* for *transmission use of system services* are to be passed on to customers and any adjustments to tariffs resulting from over or under recovery of those charges in the previous *regulatory year*; and
 - (7) demonstrate compliance with the *Rules* and any applicable distribution determination; and
 - (8) describe the nature and extent of change from the previous *regulatory year* and demonstrate that the changes comply with the *Rules* and any applicable distribution determination.
- (c) The *AER* must on receipt of a *pricing proposal* from a *Distribution Network Service Provider* publish the proposal.

6.18.3 Tariff classes

- (a) A *pricing proposal* must define the *tariff classes* into which customers for *direct control services* are divided.
- (b) Each customer for *direct control services* must be a member of 1 or more *tariff classes*.
- (c) Separate *tariff classes* must be constituted for customers to whom *standard control services* are supplied and customers to whom *alternative control services* are supplied (but a customer for both *standard control services* and *alternative control services* may be a member of 2 or more *tariff classes*).
- (d) A *tariff class* must be constituted with regard to:
 - (1) the need to group customers together on an economically efficient basis; and
 - (2) the need to avoid unnecessary transaction costs.

6.18.4 Principles governing assignment or re-assignment of customers to tariff classes and assessment and review of basis of charging

- (a) In formulating provisions of a distribution determination governing the assignment of customers to *tariff classes* or the re-assignment of customers from one *tariff class* to another, the *AER* must have regard to the following principles:

- (1) customers should be assigned to *tariff classes* on the basis of one or more of the following factors:
 - (i) the nature and extent of their usage;
 - (ii) the nature of their *connection* to the *network*;
 - (iii) whether remotely-read interval metering or other similar metering technology has been installed at the customer's premises as a result of a *regulatory obligation or requirement*;
- (2) customers with a similar *connection* and usage profile should be treated on an equal basis;
- (3) however, customers with micro-generation facilities should be treated no less favourably than customers without such facilities but with a similar load profile;
- (4) a *Distribution Network Service Provider's* decision to assign a customer to a particular *tariff class*, or to re-assign a customer from one *tariff class* to another should be subject to an effective system of assessment and review.

Note:

If (for example) a customer is assigned (or reassigned) to a tariff class on the basis of the customer's actual or assumed maximum demand, the system of assessment and review should allow for the reassignment of a customer who demonstrates a reduction or increase in maximum demand to a tariff class that is more appropriate to the customer's load profile.

- (b) If the *charging parameters* for a particular tariff result in a basis of charge that varies according to the usage or load profile of the customer, a distribution determination must contain provisions for an effective system of assessment and review of the basis on which a customer is charged.

6.18.5 Pricing principles

- (a) For each *tariff class*, the revenue expected to be recovered should lie on or between:
 - (1) an upper bound representing the stand alone cost of serving the customers who belong to that class; and
 - (2) a lower bound representing the avoidable cost of not serving those customers.
- (b) A tariff, and if it consists of 2 or more *charging parameters*, each *charging parameter* for a *tariff class*:

- (1) must take into account the long run marginal cost for the service or, in the case of a *charging parameter*, for the element of the service to which the *charging parameter* relates; and
- (2) must be determined having regard to:
 - (i) transaction costs associated with the tariff or each *charging parameter*; and
 - (ii) whether customers of the relevant *tariff class* are able or likely to respond to price signals.
- (c) If, however, as a result of the operation of paragraph (b), the *Distribution Network Service Provider* may not recover the expected revenue, the provider must adjust its tariffs so as to ensure recovery of expected revenue with minimum distortion to efficient patterns of consumption.

6.18.6 Side constraints on tariffs for standard control services

- (a) This clause applies only to *tariff classes* related to the provision of *standard control services*.
- (b) The expected weighted average revenue to be raised from a *tariff class* for a particular *regulatory year* of a *regulatory control period* must not exceed the corresponding expected weighted average revenue for the preceding *regulatory year* by more than the permissible percentage.
- (c) The permissible percentage is the greater of the following:
 - (1) the CPI-X limitation on any increase in the *Distribution Network Service Provider's* expected weighted average revenue between the two *regulatory years* plus 2%;

Note:

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

- (2) CPI plus 2%.

Note:

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

- (d) In deciding whether the permissible percentage has been exceeded in a particular *regulatory year*, the following are to be disregarded:
 - (1) the recovery of revenue to accommodate a variation to the distribution determination under rule 6.6 or 6.13;

- (2) the recovery of revenue to accommodate pass through of charges for *transmission use of system services* to customers.
- (e) This clause does not, however, limit the extent a tariff for customers with remotely-read interval metering or other similar metering technology may vary according to the time or other circumstances of the customer's usage.

6.18.7 Recovery of charges for transmission use of system services

- (a) A *pricing proposal* must provide for tariffs designed to pass on to customers the charges to be incurred by the *Distribution Network Service Provider* for *transmission use of system services*.
- (b) The amount to be passed on to customers for a particular *regulatory year* must not exceed the estimated amount of the *transmission use of system* charges for the relevant *regulatory year* adjusted for over or under recovery in the previous *regulatory year*.
- (c) The extent of the over or under recovery is the difference between:
 - (1) the amount actually paid by the *Distribution Network Service Provider* by way of *transmission use of system* charges in the previous *regulatory year*; and
 - (2) the amount passed on to customers by way of *transmission use of system* charges by the *Distribution Network Service Provider* in the previous *regulatory year*.

6.18.8 Approval of pricing proposal

- (a) The *AER* must approve a *pricing proposal* if the *AER* is satisfied that:
 - (1) the proposal complies with this Part and any applicable distribution determination; and
 - (2) all forecasts associated with the proposal are reasonable.
- (b) If the *AER* determines that a *pricing proposal* is deficient:
 - (1) the *AER* may require the *Distribution Network Service Provider*, within 10 *business days* after receiving notice of the determination, to re-submit the proposal with the amendments necessary to correct the deficiencies identified in the determination and (unless the *AER* permits further amendment) no further amendment; or
 - (2) the *AER* may itself make the amendments necessary to correct the deficiencies.

- (c) If the service provider fails to comply with a requirement under paragraph (b), or the resubmitted proposal fails to correct the deficiencies in the former proposal, the *AER* may itself amend the proposal to bring it into conformity with the requirements of this Part and any applicable distribution determination.
- (d) An *approved pricing proposal* takes effect:
 - (1) in the case of an initial *pricing proposal* – at the commencement of the first *regulatory year* of the *regulatory control period* for which the distribution determination is made; and
 - (2) in the case of an annual *pricing proposal* – at the commencement of the *regulatory year* to which the proposal relates.

Note:

The operation of this paragraph may, in some instances, be displaced or modified by clause 6.11.3(b).

6.18.9 Publication of information about tariffs and tariff classes

- (a) A *Distribution Network Service Provider* must maintain on its website:
 - (1) a statement of the provider's *tariff classes* and the tariffs applicable to each class; and
 - (2) for each tariff – the *charging parameters* and the elements of the service to which each *charging parameter* relates; and
 - (3) a statement of expected price trends (to be updated for each *regulatory year*) giving an indication of how the *Distribution Network Service Provider* expects prices to change over the *regulatory control period* and the reasons for the expected changes.
- (b) The information for a particular *regulatory year* must, if practicable, be posted on the website 20 *business days* before the commencement of the relevant *regulatory year* and, if that is not practicable, as soon as practicable thereafter.

6.19. Data Required for Distribution Service Pricing

6.19.1 Forecast use of networks by Distribution Customers and Embedded Generators

Any information required by *Distribution Network Service Providers* must be provided by *Service Applicants* as part of the *connection* and access requirements set out in Chapter 5.

6.19.2 Confidentiality of distribution network pricing information

- (a) Subject to the Law and the *Rules*, all information about a *Service Applicant* or *Distribution Network User* used by *Distribution Network Service Providers* for the purposes of *distribution service* pricing is confidential information and must be treated in accordance with rule 8.6.
- (b) No requirement in this Chapter 6 to publish information about a *tariff class* is to be construed as requiring publication of information about an individual customer.

Part J Billing and Settlements

6.20 Billing and Settlements Process

This clause describes the manner in which *Distribution Customers* and *Embedded Generators* are billed by *Distribution Network Service Providers* for *distribution services* and how payments for *distribution services* are settled.

6.20.1 Billing for distribution services

- (a) A *Distribution Network Service Provider* must bill *Distribution Network Users* for *distribution services* as follows:
 - (1) *Embedded Generators*:
 - (i) by applying the *entry charge* as a fixed annual charge to each *Embedded Generator*; and
 - (ii) by applying any other charge the *Distribution Network Service Provider* makes consistently with these *Rules* and the applicable distribution determination.
 - (2) *Distribution Customers*:

The charges to *Distribution Customers* must be determined according to use of the *distribution network* as determined in accordance with a *metrology procedure* or, in the absence of a *metrology procedure* allowing such a determination to be made, by *meter* or by agreement between the *Distribution Customer* and the *Distribution Network Service Provider* by applying one or more of the following measures:

- (i) demand-based prices to the *Distribution Customer's* metered or agreed half-hourly demand;
- (ii) energy-based prices to the *Distribution Customer's* metered or agreed energy;

- (iii) the *Distribution Customer* charge determined under this clause as a fixed periodic charge to each *Distribution Customer*;
 - (iv) a fixed periodic charge, a prepayment or other charge determined by agreement with the *Distribution Customer*;
 - (v) any other measure the *Distribution Network Service Provider* is authorised to apply by the applicable distribution determination.
- (b) Subject to paragraph (c), where a *Distribution Customer* (other than a *Market Customer*) incurs *distribution service* charges, the *Distribution Network Service Provider* must bill the *Market Customer* from whom the *Distribution Customer* purchases electricity directly or indirectly for such *distribution services* in accordance with paragraph (a)(2).
- (c) If a *Distribution Customer* and the *Market Customer* from whom it purchases electricity agree, the *Distribution Network Service Provider* may bill the *Distribution Customer* directly for *distribution services* used by that *Distribution Customer* in accordance with paragraph (a)(2).
- (d) *Distribution Network Service Providers* must:
 - (1) calculate *transmission service charges* and *distribution service charges* for all connection points in their *distribution network*; and
 - (2) pay to *Transmission Network Service Providers* the *transmission service charges* incurred in respect of use of a *transmission network* at each *connection point* on the relevant *transmission network*.
- (e) Charges for *distribution services* based on metered kW, kWh, kVA, or kVAh for:
 - (1) *Embedded Generators* that are *Market Generators*; and
 - (2) *Market Customer*; and
 - (3) *Second-Tier Customers*;

must be calculated by the *Distribution Network Service Provider* from:

- (1) *settlements ready data* obtained from NEMMCO's *metering database*, for those *Embedded Generators*, *Market Customers* and *Second-Tier Customers* with *connection points* that have a type 1, 2, 3 or 4 *metering installation*; and
- (2) *energy data*, in accordance with a *metrology procedure* that allows the *Distribution Network Service Provider* to use *energy data* for this purpose, or otherwise *settlements ready data* obtained from NEMMCO's *metering database*, for those *Embedded Generators*,

Market Customers and Second-Tier Customers with connection points that have a type 5, 6 or 7 metering installation.

- (f) Charges for *distribution services* based on metered kW, kWh, kVA or kVAh for:
 - (1) *Embedded Generators* that are not *Market Generators*; and
 - (2) *Non-Registered Customers*; and
 - (3) *franchise customers*,must be calculated by the *Distribution Network Service Provider* using data that is consistent with the *metering data* used by the relevant *Local Retailer* in determining *energy settlements*.
- (g) The *Distribution Network Service Provider* may bill the relevant *Local Retailer* for *distribution services* used by *Non-Registered Customers* and *franchise customers*.
- (h) Where the billing for a *Distribution Customer* for a particular *financial year* is based on quantities which are undefined until after the commencement of the *financial year*, charges must be estimated from the previous year's billing quantities with a reconciliation to be made when the actual billing quantities are known.
- (i) Where the previous year's billing quantities are unavailable or no longer suitable, nominated quantities may be used as agreed between the parties.

6.20.2 Minimum information to be provided in distribution network service bills

The following is the minimum information that must be provided with a bill for a *network coupling point* issued by a *Distribution Network Service Provider* directly to a *Registered Participant*:

- (1) the *network coupling point* identifier; and
- (2) the dates on which the billing period starts and ends; and
- (3) the identifier of the *distribution service* price from which the *network coupling point* charges are calculated; and
- (4) measured quantities, billed quantities, prices and amounts charged for each component of the total *distribution service* account.

6.20.3 Settlement between Distribution Network Service Providers

The billing and settlement process specified in this clause must be applied to all *Distribution Customers* including other *Distribution Network Service Providers*.

6.20.4 Obligation to pay

A *Distribution Network User* must pay *distribution service* charges properly charged to it and billed in accordance with this clause by the due date specified in the bill.

Part K Prudential requirements, capital contributions and prepayments

6.21 Distribution Network Service Provider Prudential Requirements

This clause sets out the arrangements by which *Distribution Network Service Providers* may minimise financial risks associated with investment in *network assets* and provides for adoption of cost-reflective payment options in conjunction with the use of average distribution prices. The clause also prevents *Distribution Network Service Providers* from receiving income twice for the same assets through prudential requirements and *distribution service* prices.

6.21.1 Prudential requirements for distribution network service

- (a) A *Distribution Network Service Provider* may require an *Embedded Generator* or *Distribution Customer* that requires a new *connection* or a modification in service for an existing *connection* to establish prudential requirements for *connection service* and/or *distribution use of system service*.
- (b) Prudential requirements for *connection service* and/or *distribution use of system service* are a matter for negotiation between the *Distribution Network Service Provider* and the *Embedded Generator* or *Distribution Customer* and the terms agreed must be set out in the *connection agreement* between the *Distribution Network Service Provider* and the *Embedded Generator* or *Distribution Customer*.
- (c) The *connection agreement* may include one or more of the following provisions:
 - (1) the conditions under which and the time frame within which other *Distribution Network Users* who use that part of the *distribution network* contribute to refunding all or part of the payments;
 - (2) the conditions under which financial arrangements may be terminated; and

- (3) the conditions applying in the event of default by the *Distribution Customer* or *Embedded Generator*.
- (d) The prudential requirements may incorporate, but are not limited to, one or more of the following arrangements:
 - (1) financial capital contributions;
 - (2) non-cash contributions;
 - (3) *distribution service* charge prepayments;
 - (4) guaranteed minimum *distribution service charges* for an agreed period;
 - (5) guaranteed minimum *distribution service* quantities for an agreed period;
 - (6) provision for financial guarantees for *distribution service charges*.

6.21.2 Capital contributions, prepayments and financial guarantees

Despite any other provision in this Chapter, in relation to capital contributions, prepayments and financial guarantees:

- (1) the *Distribution Network Service Provider* is not entitled to recover, under a mechanism for the economic regulation of *direct control services*, any component representing asset related costs for assets provided by *Distribution Network Users*; and
- (2) the *Distribution Network Service Provider* may receive a capital contribution, prepayment and/or financial guarantee up to the provider's future revenue related to the provision of *direct control services* for any new assets installed as part of a new *connection* or modification to an existing *connection*, including any *augmentation* to the *distribution network*; and
- (3) where assets have been the subject of a contribution or prepayment, the *Distribution Network Service Provider* must amend the provider's revenue related to the provision of *direct control services*.

6.21.3 Treatment of past prepayments and capital contributions

- (a) Payments made by *Distribution Customers* and *Embedded Generators* for *distribution service* prior to 13 December 1998 must be made in accordance with any contractual arrangements with the relevant *Distribution Network Service Providers* applicable at that time.

- (b) Where contractual arrangements referred to in clause 6.22.2(a) are not in place, past *distribution service* prepayments or capital contributions may be incorporated in the capital structure of the *Distribution Network Service Provider's* business.
- (c) The *AER* may intervene in and resolve any dispute under this clause which cannot be resolved between the relevant *Distribution Network Service Provider* and *Distribution Customer* or *Embedded Generator*.

6.21.4 Application of IPART and ICRC guidelines regarding capital contribution charges

- (a) Capital contribution charges by the NSW Distribution Network Service Providers in respect of the regulatory control period 2009-2014 are to be determined in accordance with Determination No 1 2002 made by the IPART under section 11(3) of the Independent Pricing and Regulatory Act 1992 (NSW) in 2002.
- (b) Capital contribution charges by the ACT Distribution Network Service Provider in respect of the regulatory control period 2009-2014 are to be determined in accordance with the Electricity Network Capital Contributions Code made by the ICRC in 2001.

Part L Dispute resolution

6.22 Dispute Resolution

6.22.1 Dispute Resolution by the AER

- (a) A dispute between a *Distribution Network Service Provider* and a *Service Applicant* as to the *terms and conditions of access* to a *direct control service* or to a *negotiated distribution service* is an access dispute for the purposes of Part 10 of the Law.
- (b) A dispute between a *Distribution Network Service Provider* and a *Service Applicant* about *access charges* is an access dispute for the purposes of Part 10 of the Law.
- (c) A dispute between a *Distribution Network Service Provider* and a *Connection Applicant* about matters referred to in clause 5.5(f) or clause 5.5(h) is an access dispute for the purposes of Part 10 of the Law.

6.22.2 Determination of dispute

- (a) In determining an access dispute about *terms and conditions of access* to a *direct control service* (other than a negotiable component), the *AER* must apply:

- (1) in relation to price, the *Distribution Network Service Provider's approved pricing proposal* or (in the case of an EnergyAustralia prescribed (transmission) standard control service) EnergyAustralia's approved pricing methodology, as the case requires; and
 - (2) in relation to other terms and conditions, Chapters 4, 5, this Chapter 6 and Chapter 7 of the *Rules* and any other *applicable regulatory instrument*; and
 - (3) in relation to all *terms and conditions of access* (including price) the decisions of *NEMMCO* or the *AER* where those decisions relate to those terms and conditions and are made under Chapters 4, 5, this Chapter 6 and Chapter 7 of the *Rules*.
- (a1) In determining an access dispute about *terms and conditions of access* to a negotiable component of a *direct control service*, the *AER* must apply:
- (1) in relation to price (including *access charges*), the negotiable component criteria that are applicable to the dispute in accordance with the relevant distribution determination; and
 - (2) in relation to other terms and conditions, the negotiable component criteria that are applicable to the dispute and Chapters 4, 5, this Chapter 6 and Chapter 7 of the *Rules*; and
 - (3) in relation to all *terms and conditions of access* (including price) the decisions of *NEMMCO* or the *AER* where those decisions relate to those terms and conditions and are made under Chapters 4, 5, this Chapter 6 and Chapter 7 of the *Rules*;
- and must have regard:
- (4) to the relevant *negotiating framework* prepared by the *Distribution Network Service Provider* and approved by the *AER*.
- (b) In determining an access dispute about the *terms and conditions of access* to a *direct control service* (including a negotiable component), the *AER* may:
- (1) have regard to other matters the *AER* considers relevant; and
 - (2) hear evidence or receive submissions from *NEMMCO* about *power system security* and from *Distribution Network Users* who may be adversely affected.

Note:

Section 130 of the Law requires the AER, in making an access determination, to give effect to a network revenue or pricing determination

applicable to the services that are the subject of the dispute even though the determination may not have been in force when the dispute arose.

- (c) In determining an access dispute about *terms and conditions of access* to a *negotiated distribution service*, the AER must apply:
 - (1) in relation to price (including *access charges*), the *Negotiated Distribution Service Criteria* that are applicable to the dispute in accordance with the relevant distribution determination; and
 - (2) in relation to other terms and conditions, the *Negotiated Distribution Service Criteria* that are applicable to the dispute and Chapters 4, 5, this Chapter 6 and Chapter 7 of the *Rules*; and
 - (3) in relation to all *terms and conditions of access* (including price) the decisions of NEMMCO or the AER where those decisions relate to those terms and conditions and are made under Chapters 4, 5, this Chapter 6 and Chapter 7 of the *Rules*;

and must have regard:

- (4) to the relevant *negotiating framework* prepared by the *Distribution Network Service Provider* and approved by the AER.
- (d) In determining an access dispute about the *terms and conditions of access* to a *negotiated distribution service*, the AER may:
 - (1) have regard to other matters the AER considers relevant; and
 - (2) hear evidence or receive submissions from NEMMCO and *Distribution Network Users* notified and consulted under the *Distribution Network Service Provider's negotiating framework*.
- (e) In determining an access dispute about *access charges*, or involving *access charges*, the AER must give effect to the following principle:

Access charges should be based on the costs reasonably incurred by the *Distribution Network Service Provider* in providing *distribution network user access* and, where they consist of compensation referred to in clause 5.5(f)(4)(ii) and (iii), on the revenue that is likely to be foregone and the costs that are likely to be incurred by a person referred to in those provisions where an event referred to in those provisions occurs.

6.22.3 Termination of access dispute without access determination

- (a) If the AER considers that an access dispute could be effectively resolved by some means other than an access determination, the AER may give the

parties to the dispute notice of the alternative means of resolving the dispute.

Example:

The AER might give such a notice if of the opinion that a particular dispute could be dealt with more efficiently, and with less expense, by a jurisdictional ombudsman.

- (b) The giving of such a notice is a specified dispute termination circumstance for the purposes of section 131(3) of the Law.

Note:

It follows that the AER may exercise its power to terminate the dispute without making an access determination (See section 131(1)(d) of the Law).

Part M Separate disclosure of transmission and distribution charges

6.23 Separate disclosure of transmission and distribution charges

- (a) *A Distribution Customer:*
 - (1) with a *load* greater than 10MW or 40GWh per annum; or
 - (2) with *metering* equipment capable of capturing relevant *transmission* and *distribution* system usage data,may make a request (a **TUOS/DUOS disclosure request**) to a *Distribution Network Service Provider* to provide the *Distribution Customer* with a statement (a **TUOS/DUOS disclosure statement**) identifying the separate components of the *transmission use of system* and *distribution use of system* charges comprised in the charges for electricity supplied to the *Distribution Customer's connection points*.
- (b) Within 10 *business days* of receipt of a *TUOS/DUOS disclosure request*, a *Distribution Network Service Provider* must notify the *Distribution Customer* of the estimated charge (including details of how the charge is calculated) for providing the *TUOS/DUOS disclosure statement*. The charge must be no greater than the reasonable costs directly incurred by the *Distribution Network Service Provider* in preparing the statement for the *Distribution Customer*.
- (c) If the *Distribution Customer* advises the *Distribution Network Service Provider* within 20 *business days* of receipt of the notice referred to in paragraph (b) that it still requires the requested *TUOS/DUOS disclosure statement*, the *Distribution Network Service Provider* must prepare the

statement and provide it to the *Distribution Customer* within 20 *business days* of being so advised. The *TUOS/DUOS disclosure statement* must include detailed information on the method used to determine the *distribution use of system* charges and the allocation of the *transmission use of system* charges to the *Distribution Customer* for electricity supplied to its *connection points*. The information must be sufficient to allow the *Distribution Customer* to assess the impact on its *network* charges of a change in its *network* use.

- (d) The *TUOS/DUOS disclosure statement* must also separately identify the amounts that have been allocated to the *Distribution Customer's connection points* under Part J of Chapter 6A in respect of each of the *categories of prescribed transmission services*, where the *Distribution Customer* requests this information.
- (e) Where the *Distribution Customer* requests the information referred to in paragraph (d), the *Distribution Network Service Provider* must separately identify the component of the charge notified under paragraph (b) that relates to the provision of the additional information.
- (f) Each *Distribution Network Service Provider* must publish information annually disclosing the *transmission use of system* and *distribution use of system* charges for each of the classes of *Distribution Customers* identified for this purpose by the *Distribution Network Service Provider*, or as required by the AER.

Schedule 6.1 Contents of building block proposals

S6.1.1 Information and matters relating to capital expenditure

A *building block proposal* must contain at least the following information and matters relating to capital expenditure:

- (1) a forecast of the required capital expenditure that complies with the requirements of clause 6.5.7 of the *Rules* and identifies the forecast capital expenditure by reference to well accepted categories such as:
 - (i) asset class (eg. *distribution lines, substations* etc); or
 - (ii) category driver (eg. *regulatory obligation or requirement, replacement, reliability, net market benefit, business support* etc),

and identifies, in respect of proposed material assets:

- (iii) the location of the proposed asset; and
- (iv) the anticipated or known cost of the proposed asset; and

- (v) the categories of *distribution services* which are to be provided by the proposed asset;
- (2) the method used for developing the capital expenditure forecast;
- (3) the forecasts of load growth relied upon to derive the capital expenditure forecasts and the method used for developing those forecasts of load growth;
- (4) the key assumptions that underlie the capital expenditure forecast;
- (5) a certification of the reasonableness of the key assumptions by the directors of the *Distribution Network Service Provider*;
- (6) capital expenditure for each of the past *regulatory years* of the previous and current *regulatory control period*, and the expected capital expenditure for each of the last two *regulatory years* of the current *regulatory control period*, categorised in the same way as for the capital expenditure forecast;
- (7) an explanation of any significant variations in the forecast capital expenditure from historical capital expenditure.

S6.1.2 Information and matters relating to operating expenditure

A *building block proposal* must contain at least the following information and matters relating to operating expenditure:

- (1) a forecast of the required operating expenditure that complies with the requirements of clause 6.5.6 of the *Rules* and identifies the forecast operating expenditure by reference to well accepted categories such as:
 - (i) particular programs; or
 - (ii) types of operating expenditure (eg. maintenance, payroll, materials etc),and identifies in respect of each such category:
 - (iii) to what extent that forecast expenditure is on costs that are fixed and to what extent it is on costs that are variable; and
 - (iv) the categories of *distribution services* to which that forecast expenditure relates;
- (2) the method used for developing the operating expenditure forecast;

- (3) the forecasts of key variables relied upon to derive the operating expenditure forecast and the method used for developing those forecasts of key variables;
- (4) the method used for determining the cost associated with planned maintenance programs designed to improve the performance of the relevant *distribution system* for the purposes of any *service target performance incentive scheme* that is to apply to the *Distribution Network Service Provider* in respect of the relevant *regulatory control period*;
- (5) the key assumptions that underlie the operating expenditure forecast;
- (6) a certification of the reasonableness of the key assumptions by the directors of the *Distribution Network Service Provider*;
- (7) operating expenditure for each of the past *regulatory years* of the previous and current *regulatory control period*, and the expected operating expenditure for each of the last two *regulatory years* of the current *regulatory control period*, categorised in the same way as for the operating expenditure forecast;
- (8) an explanation of any significant variations in the forecast operating expenditure from historical operating expenditure.

S6.1.3 Additional information and matters

A *building block proposal* must contain at least the following additional information and matters:

- (1) an identification and explanation of any significant interactions between the forecast capital expenditure and forecast operating expenditure programs;
- (2) a proposed pass through clause with a proposal as to the events that should be defined as *pass through events*;
- (3) a description, including relevant explanatory material, of how the *Distribution Network Service Provider* proposes the *efficiency benefit sharing scheme* should apply for the relevant *regulatory control period*;
- (4) a description, including relevant explanatory material, of how the *Distribution Network Service Provider* proposes the *service target performance incentive scheme* should apply for the relevant *regulatory control period*;

- (5) a description, including relevant explanatory material, of how the *Distribution Network Service Provider* proposes the *demand management incentive scheme* (if applicable) should apply for the relevant *regulatory control period*;
- (6) the provider's calculation of revenues or prices for the purposes of the control mechanism proposed by the provider together with:
 - (i) details of all amounts, values and inputs (including X factors) relevant to the calculation; and
 - (ii) an explanation of the calculation and the amounts, values and inputs involved in the calculation; and
 - (iii) a demonstration that the calculation and the amounts, values and inputs on which it is based comply with relevant requirements of the Law and the *Rules*;
- (7) the provider's calculation of the regulatory asset base for the relevant *distribution system* for each *regulatory year* of the relevant *regulatory control period* using the *roll forward model* referred to in clause 6.5.1 of transitional Chapter 6, together with:
 - (i) details of all amounts, values and other inputs used by the provider for that purpose; and
 - (ii) a demonstration that any such amounts, values and other inputs comply with the relevant requirements of Part C of transitional Chapter 6; and
 - (iii) an explanation of the calculation of the regulatory asset base for each *regulatory year* of the relevant *regulatory control period* and of the amounts, values and inputs referred to in subparagraph (i);
- (8) the commencement and length of the period nominated by the *Distribution Network Service Provider* for the purposes of clause 6.5.2(c)(2) of transitional Chapter 6;
- (9) the provider's calculation of the proposed rate of return;
- (10) the *post-tax revenue model* completed to show its application to the *Distribution Network Service Provider* and the completed *roll-forward model*;
- (11) the provider's estimate of the cost of corporate income tax for each *regulatory year* of the *regulatory control period*;

- (12) the depreciation schedules nominated by the *Distribution Network Service Provider* for the purposes of clause 6.5.5 of transitional Chapter 6, which categorise the relevant assets for these purposes by reference to well accepted categories such as:
 - (i) asset class (eg *distribution lines* and *substations*); or
 - (ii) category driver (eg *regulatory obligation or requirement*, replacement, *reliability*, net market benefit, and business support),together with:
 - (iii) details of all amounts, values and other inputs used by the provider to compile those depreciation schedules; and
 - (iv) a demonstration that those depreciation schedules conform with the requirements set out in clause 6.5.5(b) of transitional Chapter 6; and
 - (v) an explanation of the calculation of the amounts, values and inputs referred to in subparagraph (iii);
- (13) *****

Schedule 6.2 Regulatory Asset Base

S6.2.1 Establishment of opening regulatory asset base for a regulatory control period

- (a) Application of this clause

This clause S6.2.1:

- (1) applies to the establishment of the value of the regulatory asset base for a *distribution system* as at the beginning of a *regulatory control period* on the roll forward of the regulatory asset base to that *regulatory control period* from the previous *regulatory control period*; and
- (2) also applies to the establishment of the value of the regulatory asset base for a *distribution system* as at the beginning of a *regulatory control period* where the *distribution system* was not immediately before that time the subject of a *building block determination*.

- (b) Roll forward model to comply with this clause

The values to be used for completing the *roll forward model* must be established in accordance with this clause and clauses S6.2.2 and S6.2.3.

(c) Distribution systems of specific providers

- (1) In the case of a *distribution system* owned, controlled or operated by one of the following *Distribution Network Service Providers* as at the commencement of this schedule, the value of the regulatory asset base for that *distribution system* as at the beginning of that first *regulatory year* must be determined by rolling forward the regulatory asset base for that *distribution system*, as set out in the table below, in accordance with this schedule:

Jurisdiction	<i>Distribution Network Service Provider</i>	Regulatory Asset Base (\$m)
Australian Capital Territory	ActewAGL	510.54 (as at 1 July 2004 in July 2004 dollars)
New South Wales	Country Energy	2,440 (as at 1 July 2004 in July 2004 dollars)
	EnergyAustralia	4,116 (as at 1 July 2004 in July 2004 dollars); plus 635.6 (as at 1 July 2004 in July 2004 dollars) in respect of EnergyAustralia's transmission support network
	Integral Energy	2,283 (as at 1 July 2004 in July 2004 dollars)
*****	*****	*****

- (2) The values in the table above are to be adjusted for the difference between:
- (i) any estimated capital expenditure that is included in those values for any part of a previous *regulatory control period*; and
 - (ii) the actual capital expenditure for that part of the previous *regulatory control period*.

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

- (3) When rolling forward a regulatory asset base under subparagraph (1), the *AER* must take into account the derivation of the values in the

above table from past regulatory decisions and the consequent fact that they relate only to the regulatory asset base identified in those decisions.

(d) *****

(e) Method of adjustment of value of regulatory asset base

Except as otherwise provided in paragraph (c), the value of the regulatory asset base for a *distribution system* as at the beginning of the first *regulatory year* of a *regulatory control period* must be calculated by adjusting the value (the '**previous value**') of the regulatory asset base for that *distribution system* as at the beginning of the first *regulatory year* of the immediately preceding *regulatory control period* (the '**previous control period**') as follows:

- (1) The previous value of the regulatory asset base for each NSW Distribution Network Service Provider must be increased by the amount of all capital expenditure incurred during the previous control period.
- (1A) The previous value of the regulatory asset base for the ACT Distribution Network Service Provider must be increased by the amount of the capital expenditure incurred during the previous control period that is to be included under the ICRC approach referred to in clause 6.5.1(g) of the transitional Chapter 6.
- (2) The previous value of the regulatory asset base must be increased by the amount of the estimated capital expenditure approved by the *AER* for any part of the previous control period for which actual capital expenditure is not available.
- (3) The previous value of the regulatory asset base must be adjusted for the difference between:
 - (i) the estimated capital expenditure for any part of a previous *regulatory control period* where that estimated capital expenditure has been included in that value; and
 - (ii) the actual capital expenditure for that part of the previous *regulatory control period*.

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

- (4) The previous value of the regulatory asset base must only be increased by actual or estimated capital expenditure to the extent that all such capital expenditure is properly allocated to the provision of *standard*

control services in accordance with the Cost Allocation Method for the relevant *Distribution Network Service Provider*.

- (5) The previous value of the regulatory asset base for each NSW Distribution Network Service Provider must be reduced by the amount of actual depreciation of the regulatory asset base during the previous *regulatory control period*, calculated in accordance with the rates and methodologies allowed in the distribution determination for that period.
- (5A) The previous value of the regulatory asset base for the ACT Distribution Network Service Provider must be reduced by the amount of depreciation of the regulatory asset base during the previous *regulatory control period*, calculated in accordance with the distribution determination for that period.
- (6) The previous value of the regulatory asset base must be reduced by the disposal value of any asset where that asset has been disposed of during the previous *regulatory control period*.
- (7) The previous value of the regulatory asset base must be reduced by the value of an asset where the asset was previously used to provide *standard control services* (or their equivalent under the previous regulatory system) but, as a result of a change to the classification of a particular service under Part B, is not to be used for that purpose for the relevant *regulatory control period*.
- (8) The previous value of the regulatory asset base may be increased by the value of an asset to which this subparagraph applies to the extent that:
 - (i) the *AER* considers the asset to be reasonably required to achieve one or more of the *capital expenditure objectives*; and
 - (ii) the asset is properly allocated to *standard control services* in accordance with the principles and policies set out in the Cost Allocation Method for the relevant *Distribution Network Service Provider*; and
 - (iii) the value of the asset has not been otherwise recovered.

This subparagraph applies to an asset that:

- (i) was not used to provide *standard control services* (or their equivalent under the previous regulatory system) in the previous *regulatory control period* but, as a result of a change to the classification of a particular service under Part B, is to be used for that purpose for the relevant *regulatory control period*; or

- (ii) was never previously used to provide *standard control services* (or their equivalent under the previous regulatory system) but is to be used for that purpose for the relevant *regulatory control period*.
- (f) An increase or reduction in the value of the regulatory asset base under subparagraph (7) or (8) of paragraph (e) is to be based on the value of the relevant asset as shown in independently audited and published accounts.
- (g) Despite any other provision of this clause S6.2.1, the regulatory asset base for Country Energy at the beginning of the regulatory control period 2009-2014 should reflect the deferral of depreciation allowed for Country Energy in clause 7.3.2 of the IPART's Final Report (Other Paper No 23 - June 2004) relating to NSW Electricity Distribution Pricing 2004/05 to 2008/09.

S6.2.2 *****

S6.2.3 Roll forward of regulatory asset base within the same regulatory control period

- (a) Application of this clause

This clause applies to the establishment of the value of the regulatory asset base for a *distribution system* as at the beginning of one *regulatory year* in a *regulatory control period* on the roll forward of the regulatory asset base to that *regulatory year* from the immediately preceding *regulatory year* (if any) in that *regulatory control period*.

- (b) Roll forward model to comply with this clause

The *roll forward model* referred to in clause 6.5.1 of the *Rules* must provide for that value to be established in accordance with the requirements of this clause.

- (c) Method of adjustment of value of regulatory asset base

The value of the regulatory asset base for a *distribution system* as at the beginning of the second or a subsequent year ('the **later year**') in a *regulatory control period* must be calculated by adjusting the value ('the **previous value**') of the regulatory asset base for that *distribution system* as at the beginning of the immediately preceding *regulatory year* ('the **previous year**') in that *regulatory control period* as follows:

- (1) The previous value of the regulatory asset base must be increased by the amount of forecast capital expenditure accepted or substituted by the *AER* for the previous year in accordance with clause 6.5.7(c) or clause 6.12.1(3) (as the case may be).

- (2) The previous value of the regulatory asset base must be reduced by the amount of depreciation included in the *Distribution Network Service Provider's annual revenue requirement* for the previous year.
 - (3) The previous value of the regulatory asset base must be reduced by the disposal value of any asset included in that value where the asset is forecast to be disposed of during the previous year.
 - (4) The previous value of the regulatory asset base must be increased by an amount necessary to maintain the real value of the regulatory asset base as at the beginning of the later year by adjusting that value for inflation.
- (d) Allowance for working capital

If the *AER* determines that it is appropriate to do so, it may include an allowance for working capital in the regulatory asset base for a *distribution system* which is rolled forward in accordance with this clause.