National Electricity Rules Version 17

Status Information

This is a draft consolidation based on the latest electronically available version of the National Electricity Rules as at 25 October 2007.

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

National Electricity Amendment (Process for Region Change) Rule 2007 No.11

This version of the National Electricity Rules only contains the Chapters of the National Electricity Rules that are amended by Rule No.11.

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CHAPTER 2A			

2A. Regional Structure

Part A – Region change applications and region determinations by AEMC

2A.1 Introduction to Chapter 2A

2A.1.1 Definitions

Expressions in Chapter 2A are defined in Schedule 2A.1.

2A.1.2 **AEMC** determination of regions

- (a) For the purpose of conducting the *spot market*, the *market* is to be divided into *regions* determined by the *AEMC* in accordance with the *Rules*.
- (b) A region change may only be made by a region change application to the AEMC in accordance with this Chapter 2A.
- (c) Until the *AEMC* makes a *region* change in accordance with this Chapter 2A, for the purposes of the *Rules*, the *regions* are taken to be the *regions* defined in the *Regions Publication published* under clause 2A.1.3

2A.1.3 Publication of regions by NEMMCO

NEMMCO must maintain, review and, by 1 April each year, publish a list of all regions, regional reference nodes and the region to which each market connection point is assigned as determined or approved by the AEMC for alteration, under this Chapter 2A and rule 3.6 ('the Regions Publication').

2A.2 Region change applications

2A.2.1 A complete region change application

- (a) Subject to and in accordance with this Chapter 2A, a *Registered Participant* or NEMMCO ("an **applicant**") may make a *region* change application to the AEMC.
- (b) In order to be accepted by the *AEMC*, a *region* change application must comply with the requirements under this rule 2A.2 ("a **complete application"**).
- (c) In order to be a complete application, a *region* change application must:
 - (1) identify a congestion problem see clause 2A.2.2;
 - (2) present a preliminary case as to the economic efficiency of a proposed region solution see clause 2A.2.3;
 - (3) propose a *region* solution to the congestion problem that is technically competent see clause 2A.2.4;
 - (4) demonstrate that the proposed *region* solution is appropriate having regard to alternative means for managing the congestion problem see clause 2A.2.5;
 - (5) if the congestion problem has been considered within 5 years of the date of the *region* change application, demonstrate why it should be reconsidered see clause 2A.2.6; and

(6) propose an implementation period.

2A.2.2 Identifying a congestion problem

A region change application must demonstrate, with supporting economic analysis:

- (1) that there is a problem with the existing *region* configuration;
- (2) that the problem is attributable to the presence of material and enduring *network* congestion; and
- (3) that the problem has or will detract materially from economic efficiency, where economic efficiency includes (but is not limited to):
 - (i) efficiency in relation to the impact on efficiency of *dispatch*, including in respect of bidding incentives and *dispatch* outcomes;
 - (ii) efficiency in relation to the management of risk and the facilitation of forward contracting through contracts in the financial markets and the *spot market*; and
 - (iii) long term dynamic efficiency including in relation to making investment decisions,

("a congestion problem").

2A.2.3 Explanation of economic efficiency of proposed region solution

- (a) A region change application must explain how the proposed region solution would or would be likely to materially improve economic efficiency.
- (b) For the purposes of paragraph (a), economic efficiency includes (but is not limited to):
 - (1) efficiency in the relation to the impact on efficiency of *dispatch*, including in respect of bidding incentives and *dispatch* outcomes;
 - (2) efficiency in relation to the management of risk and the facilitation of forward contracting through contracts in the financial markets and the spot market; and
 - (3) long term dynamic efficiency including in relation to making investment decisions.

2A.2.4 Region change application must be technically competent

A region change application must:

- (1) demonstrate that the proposed *region* solution identified in the application satisfies the following technical requirements:
 - (i) each region must have a single regional reference node which is to be deemed to be a notional busbar at:
 - (A) a nominated major *transmission substation* located at or close to the largest *load centre* within the *region*; or
 - (B) where a region has no major load centre or there is some other reasonable cause for not defining a regional reference node at a particular major load centre, a nominated major transmission substation located at or close to the largest generation centre within the region;

- (ii) all *transmission connection points* affected by a proposed *region* solution must be identified;
- (iii) a transmission connection point may only be assigned to a single region;
- (iv) the boundary of a region must be closed and must enclose at least one significant load centre and/or generation centre;
- (v) the physical transmission elements that form the interconnection with adjacent regions must be described, including the points at which the boundary cuts through the transmission elements; and
- (vi) availability of revenue metering to measure the *energy* flow across each physical *transmission element* that forms the *interconnection* with other *regions*; and
- (2) where the application proposes an implementation period that is more or less than 3 years, specify the proposed implementation period and provide reasons why a different time period should be determined by the *AEMC*,

("a technically competent application").

2A.2.5 Alternative congestion management options

- (a) A region change application must demonstrate that the region solution proposed in the application is an appropriate and timely course of action in all the circumstances, having regard to alternative means of managing the congestion problem ("the alternative congestion management options").
- (b) The alternative congestion management options include:
 - (1) changes to the geographic distribution of generation and load over time;
 - (2) changes in the configuration of the *transmission network* such as a change which is a consequence of the application of the *last resort* planning power regime; or
 - (3) changes in capability of the *transmission network* arising under other arrangements such as *network* support agreements or *network control* ancillary services agreements.

2A.2.6 Previous application relating to congestion problem

Where a *region* change application (a **subsequent application**) addresses the same or substantially the same congestion problem as a previous *region* change application accepted by the *AEMC* within the previous 5 year period, the subsequent application must demonstrate, with supporting evidence, why it is appropriate for the *AEMC* to accept a subsequent application having regard to:

- (1) any material changes in circumstances since the previous *region* change application;
- (2) the general desirability of a stable *region* structure for the making of contracting and investment decisions:
 - (i) in the NEM; and
 - (ii) in financial markets;

- (3) the adequacy of the previous application; and
- (4) any other relevant consideration in the particular circumstances of the case.

2A.2.7 NEMMCO to provide information to intending applicants

- (a) An intending applicant (other than *NEMMCO*) or an alternative proponent may request information from *NEMMCO* in order to prepare a technically competent application.
- (b) A person making a request to *NEMMCO* under paragraph (a) must include in the request, details of the information sufficient for *NEMMCO* to identify the information sought.
- (c) Subject to paragraph (e), *NEMMCO* must on request from an intending applicant or an alternative proponent, as soon as practicable after receiving the request, furnish to the relevant person, such information that is:
 - (1) requested in accordance with paragraphs (a) and (b); and
 - (2) in *NEMMCO's* possession or provided to *NEMMCO* under paragraph (d).
- (d) For the purpose of furnishing information under paragraph (c), NEMMCO may direct a Transmission Network Service Provider to provide information to NEMMCO and the Transmission Network Service Provider must provide that information to NEMMCO as soon as reasonably practicable.
- (e) Information that *NEMMCO* is required to furnish under paragraph (c) does not include information that *NEMMCO* may be directed to provide under clause 2A.5.2.
- (f) *NEMMCO* must *publish*:
 - (1) requests made to *NEMMCO* under paragraph (a);
 - (2) information furnished by *NEMMCO* in accordance with paragraph (c) excluding information provided in accordance with clause 8.6.2(o); and
 - (3) details of the circumstances where *NEMMCO* has not provided information in accordance with paragraph (e),

as soon as practicable.

2A.2.8 AEMC may refuse to accept incomplete applications

If the *AEMC* considers that a *region* change application is not a complete application under this rule 2A.2, the *AEMC*:

- (a) must notify the applicant, including written reasons that set out the respects in which the application is not complete; and
- (b) is not required to further consider the application until it is satisfied that the application is a complete application.

2A.3 Acceptance of region change application by AEMC

2A.3.1 Acceptance of a region change application by AEMC

- (a) The AEMC must not accept a region change application unless it is satisfied that the application is a complete application in accordance with rule 2A.2.
- (b) Where the *AEMC*:
 - (1) is not satisfied that a *region* change application is a complete application in accordance with rule 2A.2; or
 - (2) considers, whether as a result of submissions received in preliminary consultation under clause 2A.3.2 or otherwise, that a *region* change application should not proceed,

it may make a decision not to accept the *region* change application, setting out the reasons for that decision.

- (c) The *AEMC* must without delay, notify the applicant of a decision not to accept a *region* change application, and publish that decision (including the reasons) on the *AEMC*'s website.
- (d) Where the AEMC is satisfied that a region change application:
 - (1) is a complete application in accordance with rule 2A.2;
 - (2) satisfactorily addresses any issues raised by preliminary consultation under clause 2A.3.2; and
 - (3) should, in all the circumstances, be consulted and considered under this Chapter 2A,

the *AEMC* must make a decision to accept a *region* change application and must take action in relation to the application in accordance with this Chapter <u>2A.</u>

(e) An applicant may not withdraw a *region* change application after the *AEMC* has accepted that application and has published a first round consultation notice under clause 2A.4.1.

2A.3.2 Preliminary consultation prior to acceptance of a region change application

- (a) After the *AEMC* decides that a *region* change application is a complete application in accordance with rule 2A.2, but prior to making a decision whether or not to accept the application under clause 2A.3.1, the *AEMC* must publish the proposed *region* change application (including all supporting evidence) on its website and invite written submissions from any person within 21 *business days* of the date of that publication.
- (b) The *AEMC* is not required to publish information provided to the *AEMC* under this clause 2A.3.2 that has been obtained by the applicant in accordance with clause 8.6.2(o).
- (c) Where the *AEMC* considers that submissions received under paragraph (a) raise issues that should be addressed in the *region* change application, it may:
 - (1) request the applicant to amend the *region* change application to address those issues; or

(2) decide not to accept the *region* change application under clause 2A.3.1.

2A.4 First round consultation on region change application

2A.4.1 Notice of first round consultation

- (a) As soon as practicable after accepting a *region* change application under clause 2A.3.1(d), the *AEMC* must publish on its website notice of the application ("the **first round consultation notice**").
- (b) Subject to clause 2A.3.2(b), the first round consultation notice must:
 - (1) contain the *region* change application and supporting information provided by the applicant;
 - (2) invite written submissions from any person within 75 business days of the date of the first round consultation notice ("the **first round** consultation period");
 - (3) specify that a person may put forward an alternative *region* solution in a written submission either:
 - (i) as an informal alternative *region* solution; or
 - (ii) as a formal alternative region solution under clause 2A.4.3;
 - and (in the case referred to in subparagraph (ii)), the notice must further specify that the person may be required to provide to the *AEMC* supplementary economic analysis to support the formal alternative *region* solution; and
 - (4) include a statement to the effect that any interested party may request, in writing within one week after the publication of the notice, the *AEMC* to hold a consultation meeting in accordance with clause 2A.9.2.

2A.4.2 Right to make written submissions during first round consultation period

Any person may, within the first round consultation period, make a written submission in relation to a *region* change application ("a **first round submission**").

2A.4.3 Alternative region solution put forward by third parties

- (a) A person who makes a first round submission may propose an alternative region solution to the solution proposed in the region change application ("a proposed alternative region solution").
- (b) A Registered Participant or NEMMCO ("an alternative proponent") who submits a proposed alternative region solution under paragraph (a) may request the AEMC to treat the solution as a formal alternative region solution by expressly requesting the AEMC to do so in the first round submission.
- (c) A proposed alternative *region* solution submitted by an alternative proponent under paragraph (b) must:
 - (1) demonstrate that the proposed alternative *region* solution relates to the congestion problem identified in the *region* change application and accepted by the *AEMC* under clause 2A.3.1;

- (2) meet the requirements of a technically competent application in accordance under clause 2A.2.4; and
- (3) explain how the proposed alternative *region* solution would or would be likely to materially improve economic efficiency in accordance with the requirements for a *region* change application under clause 2A.2.4,

("a complete alternative region solution").

2A.4.4 Acceptance as a formal alternative region solution by AEMC

- (a) The *AEMC* is not obliged to treat a proposed alternative *region* solution as a formal alternative *region* solution unless the *AEMC* is satisfied that it is a complete alternative *region* solution.
- (b) Where the *AEMC* is not satisfied that a proposed alternative *region* solution is a complete alternative *region* solution, the *AEMC* must decide not to treat it as a formal alternative *region* solution and must:
 - (1) set out the reasons for that decision;
 - (2) without delay, notify the alternative proponent of the decision;
 - (3) publish the decision (including the reasons) on the AEMC's website; and
 - (4) treat the proposed region solution as an informal alternative region solution.
- (c) Where the *AEMC* is satisfied that a proposed alternative *region* solution is a complete alternative *region* solution, the *AEMC* must:
 - (1) publish the proposed alternative *region* solution as a formal alternative *region* solution on the its website as soon as practicable after accepting the solution as a formal alternative *region* solution; and
 - (2) treat the proposed *region* solution as a formal alternative *region* solution.
- (d) An alternative proponent may not withdraw a proposed *region* solution after the *AEMC* has published it as a formal alternative *region* solution under paragraph (c)(1).

2A.5 Provision of supplementary economic analysis

2A.5.1 AEMC may direct provision of supplementary analysis

- (a) The *AEMC* may, in respect of a *region* change application accepted under rule 2A.3, direct an applicant to provide to the *AEMC* supplementary economic analysis to support the applicant's proposed *region* solution within a specified time.
- (b) The AEMC may, in respect of a formal alternative region solution, direct an alternative proponent to provide to the AEMC supplementary economic analysis to support the alternative region solution within a specified time.
- (c) An applicant or an alternative proponent directed under paragraphs (a) or (b) must provide the supplementary economic analysis to the *AEMC* within the period of time specified by the *AEMC* in the direction.

- (d) A direction under paragraphs (a) or (b) may be given at any time after the start of the first round consultation period.
- (e) Despite paragraphs (a) to (c), the *AEMC* or its *representative* may prepare supplementary economic analysis in respect of a *region* solution, whether proposed in a *region* change application, or in a formal alternative *region* solution or otherwise.

2A.5.2 AEMC may direct NEMMCO to provide information

- (a) Where the AEMC:
 - (1) directs an applicant or an alternative proponent to provide supplementary economic analysis under clause 2A.5.1; or
 - (2) decides that it or its *representative* will prepare supplementary economic analysis under clause 2A.5.1(e),

the AEMC may request NEMMCO to provide information (including constraint equations) to the applicant or to the alternative proponent, or directly to the AEMC (as the case may be), but only where such information is necessary to facilitate the provision of supplementary economic analysis to those persons or to the AEMC.

- (b) The request made by the *AEMC* to *NEMMCO* under paragraph (a) must include sufficient details of the information for *NEMMCO* to identify the information sought.
- (c) Where the *AEMC* requests *NEMMCO* to provide information under paragraph (a), *NEMMCO* must provide the information to the applicant, to the alternative proponent, or directly to the *AEMC* (as the case may be), as soon as practicable in all the circumstances.
- (d) NEMMCO may, in respect of a constraint on a network direct the Transmission Network Service Provider who owns, controls or operates the relevant network, to provide information to NEMMCO for the purpose referred to in paragraph (a) and the Transmission Network Service Provider must provide that information to NEMMCO as soon as reasonably practicable.
- (e) *NEMMCO* must *publish*:
 - (1) requests made to *NEMMCO* under paragraph (a); and
 - (2) information provided by *NEMMCO* in accordance with paragraph (c) excluding information provided in accordance with clause 8.6.2(o),
 - as soon as practicable.
- (f) The AEMC is not required to publish information provided to the AEMC under this clause 2A.5.2 that has been obtained by the applicant or alternative proponent in accordance with clause 8.6.2(o).

2A.6 Region determinations

2A.6.1 AEMC powers to make a region determination

- (a) In making a *region* determination in respect of a *region* change application, the <u>AEMC may:</u>
 - (1) accept or reject the *region* change solution proposed in the application;

- (2) accept or reject a formal alternative region solution;
- (3) determine that no region change should be made;
- (4) determine a *region* change solution that is different (including materially different) from the *region* change solution proposed in the application; or
- (5) determine a *region* change solution that is different (including materially different) from a formal alternative *region* solution.
- (b) In making a decision under paragraph (a), the *AEMC* may, subject to this rule 2A.6, adopt the *region* change solution that it considers provides the best available solution to the congestion problem identified in the *region* change application in all the circumstances.

2A.6.2 Matters for consideration in making region determination

In making a *region* determination to adopt a *region* change solution, the *AEMC* must be satisfied:

- (1) that there is a problem with the existing *region* configuration which is attributable to the presence of material and enduring *network* congestion ("a **congestion problem**");
- (2) that the *region* change solution is technically competent in accordance with the requirements of clause 2A.2.4(a);
- (3) that:
 - (i) the congestion problem will detract materially from economic efficiency; and
 - (ii) the *region* change solution will materially improve economic efficiency, where economic efficiency includes (but is not limited to):
 - (A) productive efficiency, being the impact on efficiency of dispatch, including in respect of bidding incentives and dispatch outcomes;
 - (B) efficiency in relation to the management of risk and the facilitation of forward contracting in the financial markets and the *spot market*; and
 - (C) long term dynamic efficiency including in relation to making investment decisions;
- (4) that the *region* change solution is an appropriate and timely course of action in all the circumstances, having regard to the alternative congestion management options;
- (5) that the *region* change solution is consistent with *power system security* and *reliability*; and
- (6) where the proposed implementation is greater than or less than 3 years, that the implementation period is reasonable in all the circumstances of the *region* determination.

2A.7 Draft region determination and second round consultation

2A.7.1 Publishing of draft region determination

- (a) Before making a final *region* determination, but within 60 *business days* of the end of the first round consultation period, the *AEMC* must publish a draft *region* determination in relation to an application.
- (b) A draft region determination must contain:
 - (1) the reasons of the *AEMC* as to its decision, with reference to the matters set out in rule 2A.6; and
 - (2) a proposed implementation period.

2A.7.2 Second round consultation

- (a) The AEMC must publish a notice on its website of a draft region determination on a complete application ("the second round consultation notice").
- (b) A second round consultation notice must:
 - (1) contain the draft region determination;
 - (2) invite written submissions from any person within 60 business days of the date of the second round consultation notice ("the second round consultation period"); and
 - (3) include a statement to the effect that any interested party may request, in writing within one week after the publication of the notice, the *AEMC* to hold a consultation meeting in accordance with clause 2A.9.2.

2A.7.3 Right to make written submissions during second round consultation

Any person, within the second round consultation period, may make a written submission in relation to a draft *region* determination.

2A.8 Final region determination

2A.8.1 Final determination for region change

- (a) The *AEMC* must publish on its website a final *region* determination in relation to a *region* change application within 40 *business days* of the end of the second round consultation period.
- (b) A final *region* determination must contain:
 - (1) the reasons of the *AEMC* as to its decision with reference to the matters set out in rule 2A.6; and
 - (2) the implementation period.

2A.8.2 Formal publication of region determination

- (a) If the *AEMC* in a final *region* determination, determines to make a *region* change, the *AEMC* must publish a notice of the making of the *region* change in the South Australian Government Gazette and on its website.
- (b) A notice referred to in paragraph (a) must include:

- (1) the date of publication of the final *region* determination under clause 2A.8.1;
- (2) the implementation period; and
- (3) the start date.

2A.9 Miscellaneous matters for region change process

2A.9.1 AEMC may extend periods of time specified in Chapter 2A

- (a) Despite anything to the contrary in this Chapter 2A, the *AEMC* may, by notice published on its website, extend a period of time specified in Chapter 2A, if the *AEMC* considers that a *region* change application raises issues of sufficient complexity or difficulty or there is a material change in circumstances such that it is necessary that the relevant period of time specified in Chapter 2A be extended.
- (b) A notice under paragraph (a) must identify the period of time under Chapter 2A to be extended, and specify the new time that is to apply.
- (c) The *AEMC* may only extend a period of time in accordance with this clause 2A.9.1 before the expiry of that time.

2A.9.2 Consultation meeting in relation to region change application

- (a) Any person may request, in writing, within one week of the publication of a first round consultation notice or second round consultation notice (as the case may be), the *AEMC* to hold a consultation meeting in relation to a *region* change application or a draft *region* determination.
- (b) Despite paragraph (a), the *AEMC* may decide not to hold a consultation meeting, and if so, must give the person that made the request, its reasons, in writing, for declining to hold a consultation meeting.
- (c) The AEMC may on its own initiative, hold a consultation meeting.
- (d) If the AEMC decides to hold a consultation meeting under this clause 2A.9.2, it must:
 - (1) appoint a date (being not later than the close of the first round consultation period or the second round consultation period (as the case may be), time and place for the meeting; and
 - (2) publish on its website, a notice advising of:
 - (i) the intention to hold such a meeting; and
 - (ii) the date, time and place for the holding of the meeting.

Part B – Implementation of region determination

2A.10 Purpose and application of Part B

2A.10.1 Purpose of Part B

The purpose of this Part B of Chapter 2A is to enable the efficient and effective implementation of a *region* determination made by the *AEMC* under Part A of Chapter 2A during an implementation period, and to support a smooth market transition from old *region* boundaries to new *region* boundaries.

2A.10.2 Application of Part B

Part B of Chapter 2A applies despite any other provision of the *Rules* (including any guideline or procedure made under the *Rules*), and to the extent of any inconsistency prevails during an implementation period for the purpose of the implementation functions described in rule 2A.12.

2A.11 Region Change Implementation Procedure

2A.11.1 Submission of draft Region Change Implementation Procedure

- (a) If the *AEMC* in a draft *region* determination, determines to make a *region* change, *NEMMCO* must prepare a draft Region Change Implementation Procedure in respect of the *region* solution adopted by the *AEMC* in that draft *region* determination.
- (b) A draft Region Change Implementation Procedure must set out:
 - (1) the proposed implementation period as included in the draft *region* determination under clause 2A.7.1(b);
 - (2) an implementation plan that identifies the key implementation steps to be taken during the implementation period; and
 - (3) the implementation functions referred to in rule 2A.12 that *NEMMCO* proposes to exercise to implement the *region* solution proposed by the draft *region* determination.
- (c) NEMMCO must submit the draft Region Change Implementation Procedure to the AEMC no later than the close of the second round consultation period.
- (d) NEMMCO may in consultation with the AEMC, make amendments to the draft Region Change Implementation Procedure submitted under paragraph (c) that are necessary to implement a final region determination.
- (e) The AEMC must approve a Region Change Implementation Procedure submitted under paragraph (c) and amended in accordance with paragraph (d) (as the case may be), in respect of a final region determination that determines to make a region change.

2A.11.2 Approved Region Change Implementation Procedure

- (a) NEMMCO must, as soon as practicable after the date of the final region determination publish the approved Region Change Implementation Procedure.
- (b) NEMMCO may, during the implementation period, amend the approved Region Change Implementation Procedure as necessary, and must *publish* any such amended procedure, giving reasons why the amendment is necessary.

2A.12 NEMMCO region change implementation functions

2A.12.1 General implementation functions

Subject to other functions *NEMMCO* is required to exercise in accordance with this Chapter 2A, *NEMMCO* may, during the implementation period, make a decision or take action (including the power to refrain from making a decision or taking action) that is necessary for the implementation of a final *region* determination.

2A.12.2 Implementation functions referable to published implementation procedure

The exercise of the *region* change implementation functions by *NEMMCO* referred to in clause 2A.12.1 must be referable to and consistent with, the key implementation steps set out in the current *published* Region Change Implementation Procedure.

2A.12.3 Amendment of current or subsequent Regions and Loss Factors Publication

- (a) NEMMCO must, as an implementation function, in respect of the current or subsequent Regions Publication or Loss Factors Publication, amend those publications as necessary for the effective implementation of a final region determination that determines to make a region change.
- (b) For the avoidance of doubt, in relation to the publications referred to in paragraph (a), nothing prevents *NEMMCO*:
 - (1) amending those publications to:
 - (i) implement future region determinations under the Rules; or
 - (ii) deal with future physical changes to the *network*; or
 - (2) publishing the annual *Regions Publication* and the Loss Factors Publication in a single document.

2A.13 Continuity of regions

On and from a start date:

- (1) the unmodified regions continue and are taken to be *regions* for all purposes under the Rules; and
- (2) the modified regions continue and are taken to be *regions* for all purposes under the *Rules*.

Schedule 2A.1 – Glossary for Chapter 2A

<u>alternative congestion management options</u>

The alternative means of managing the congestion problem identified in clause 2A.2.2 as referred to in clause 2A.2.5.

alternative proponent

A Registered Participant or NEMMCO who requests the AEMC in a first round submission, to treat a proposed alternative region solution as a formal alternative region solution in accordance with clause 2A.4.3(b).

applicant

A Registered Participant or NEMMCO who makes a region change application to the AEMC under rule 2A.2

complete alternative region solution

A proposed alternative region solution that satisfies the requirements of clause 2A.4.3(c).

complete application

A region change application that meets the requirements of rule 2A.2.

congestion problem

The problem identified in clause 2A.2.2.

first round consultation notice

The notice published by the *AEMC* in accordance with clause 2A.4.1.

first round consultation period

The period of time referred to in clause 2A.4.1(b)(2) that is within 75 business days of the date of the first round consultation notice.

first round submission

A written submission made within the first round consultation period in accordance with clause 2A.4.2.

formal alternative region solution

A proposed alternative *region* solution that the *AEMC* has decided is a complete alternative *region* solution under clause 2A.4.4(c).

implementation period

The period commencing on the date of a final *region* determination made in accordance with clause 2A.8.1 and ending on the start date.

Loss Factors Publication

The document *published* by *NEMMCO* from time to time under clauses 3.6.1(f) and 3.6.2(f1) that sets out *marginal loss factors*.

modified regions

The regions identified in the current Regions Publication modified as a result of a region determination taking effect that determines to make a change to existing regions.

new regions

The unmodified *regions* and the modified *regions*.

old regions

The regions identified in the current Regions Publication immediately prior to the start date.

Proposed alternative region solution

An alternative <u>region</u> solution proposed by an alternative proponent in a first round <u>submission</u> as an alternative to the solution proposed in the <u>region</u> change <u>application</u>.

region change application

An application for a *region* change lodged under rule 2A.2.

region change implementation function

A function referred to in rule 2A.12.

region change implementation procedure

A procedure referred to in rule 2A.11 approved by the *AEMC* in a *region* determination, as amended from time to time in accordance with Part B of Chapter 2A.

region determination

A determination made by the *AEMC* under Chapter 2A and includes a draft *region* determination or a final *region* determination as the context requires.

second round consultation notice

The notice published by the *AEMC* in accordance with clause 2A.7.2.

second round consultation period

The period of time referred to in clause 2A.7.2(b)(2) that is within 60 business days of the date of the second round consultation notice

second round submission

A written submission made within the second round consultation period in accordance with clause 2A.7.3.

start date

The date nominated by the *AEMC* in a final *region* determination on which a change to the existing *regions* comes into effect.

technically competent application

A region change application that meets the technical requirements in clause 2A.2.4(a).

unmodified regions

The regions whose boundaries are not affected by a region determination.

CHAPTER 3			

3. Market Rules

3.1 Introduction to Market Rules

3.1.1 Purpose

This Chapter sets out the procedures which govern the operation of the *market* relating to the wholesale trading of electricity and the provision of *ancillary* services and includes provisions relating to:

- (a) prudential requirements to be met for participation in the market;
- (b) the operation of the *spot market*;
- (c) bidding and *dispatch*;
- (d) *spot price* determination;
- (d1) the determination of *ancillary service prices*;
- (e) *NEMMCO* clearing house and trading functions;
- (f) *market* information requirements and obligations;
- (g) the conditions and procedures for market suspension; and
- (h) settlements.

3.1.2 [Deleted]

3.1.3 [Deleted]

3.1.4 Market design principles

- (a) This Chapter is intended to give effect to the following market design principles:
 - (1) minimisation of *NEMMCO* decision-making to allow *Market Participants* the greatest amount of commercial freedom to decide how they will operate in the *market*;
 - (2) maximum level of *market* transparency in the interests of achieving a very high degree of *market* efficiency;
 - (3) avoidance of any special treatment in respect of different technologies used by *Market Participants*;
 - (4) consistency between *central dispatch* and pricing;
 - (5) equal access to the market for existing and prospective *Market Participants*;
 - (6) *ancillary services* should, to the extent that it is efficient, be acquired through competitive market arrangements and as far as practicable determined on a dynamic basis. Where dynamic determination is not

- practicable, competitive commercial contracts between *NEMMCO* and service providers should be used in preference to bilaterally negotiated arrangements;
- (7) the power of direction to provide *ancillary services* as a last resort to ensure system security should not be affected by the competitive market arrangements;
- (8) where arrangements require participants to pay a proportion of *NEMMCO* costs for *ancillary services*, charges should where possible be allocated to provide incentives to lower overall costs of the national electricity market. Costs unable to be reasonably allocated this way should be apportioned as broadly as possible whilst minimising distortions to production, consumption and investment decisions; and
- (9) where arrangements provide for *NEMMCO* to *dispatch* or procure an *ancillary service*, *NEMMCO* should be responsible for settlement of the service.
- (a1) *NEMMCO* must review, prepare and publish a report on:
 - (1) [Deleted]
 - (2) the operation and effectiveness of the *spot market* for *market ancillary services* within the overall *central dispatch* and any recommendations for their improvement, including:
 - (i) simplification of the arrangements for the provision of *market ancillary services*; and
 - (ii) improving the determination of *market ancillary services* requirements;
 - (3) the potential future implementation of a usage market for *market* ancillary services whilst retaining an enabling market to assist *NEMMCO* with its obligations with respect to system security; and
 - (4) the provision of *network control ancillary services* including:
 - (i) a review of the responsibilities of *NEMMCO* and *Transmission Network Service Providers* for the provision of *reactive power support*;
 - (ii) a review of the formulation of those generic *network constraints* within *central dispatch* that are dependant on the provision of *network control ancillary services*; and
 - (iii) a program to assess the potential implementation of market mechanisms for the recruitment and *dispatch* of *NCAS*.
- (a2) In conducting the reviews under clause 3.1.4(a1), *NEMMCO* must:
 - (1) seek and take account of the opinion of the *Reliability Panel* on matters to be considered in, and the draft conclusions of, the review set out in clause 3.1.4(a1)(1);

(2) [Deleted]

- (3) *publish* a program for the conduct of the reviews within three months of the *market ancillary services commencement date*;
- (4) take into account when setting the program of the reviews the need to balance the benefit of utilising the results of other reviews or *market* experience and the need to progress *market* development;
- (5) use the *Rules consultation procedures* in conducting each review;
- (6) *publish* a review outline and indicative timelines at the commencement of each review;
- (7) complete each review and deliver to the *AEMC* a report of the findings and recommendations of the review within 12 months of the commencement of the review; and
- (8) deliver to the *AEMC* within 3 months of the conclusion of each review any proposed *Rule* changes required to implement the recommendations of the review.
- (b) This Chapter is not intended to regulate anti-competitive behaviour by *Market Participants* which, as in all other markets, is subject to the relevant provisions of the Trade Practices Act, 1974 and the Competition Codes of *participating jurisdictions*.

3.1.5 Time for undertaking action

The provisions of clause 1.7.1(1) do not apply to this Chapter and, under the provisions of this Chapter, an event which is required to occur on or by a stipulated *day* must occur on or by that *day* whether or not a *business day*.

3.2 **NEMMCO's Market Responsibilities**

3.2.1 Market functions of NEMMCO

- (a) *NEMMCO* must operate and administer the *market* in accordance with this Chapter.
- (b) *NEMMCO* must establish, maintain and *publish* a register of all current *Market Participants*.
- (c) NEMMCO must:
 - (1) establish procedures for consultation with *Registered Participants* in respect of the manner in which *NEMMCO* fulfils its functions and obligations under the *Rules*; and
 - (2) *publish* annually performance indicators to monitor *NEMMCO's* performance in respect of its *market* management functions.

3.2.2 Spot market

NEMMCO must do all things necessary to operate and administer a *spot market* for the sale and purchase of electricity and *market ancillary services* in accordance with this Chapter including:

- (a) the provision of facilities for the receipt and processing of *dispatch bids*, *dispatch offers* and *market ancillary service offers* for the *spot market*;
- (b) the management of a centralised national *dispatch* process, including the publication of *pre-dispatch schedules* and *spot price forecasts*;
- (c) the determination and publication of *spot prices* at each *regional reference node* for each *trading interval*;
- (c1) the determination and publication of *ancillary service prices* at each *regional reference node* for each *dispatch interval*;
- (d) the compilation and publication of *spot market* trading statistics;
- (e) the identification of *regions* and *regional reference nodes* for *spot price* and *ancillary service price* determination;
- (f) the determination and publication of *inter-regional loss factors* and *intra-regional loss factors*;
- (g) the suspension of the *spot market* under conditions prescribed in rule 3.14; and
- (h) the collection and dissemination of information necessary to enable the *market* to operate efficiently.

3.2.3 Power system operations

- (a) Subject to Chapter 4, *NEMMCO* must manage the day to day operation of the *power system*, using its reasonable endeavours to maintain *power system security* in accordance with this Chapter.
- (b) NEMMCO must perform projected assessment of system adequacy processes ("PASA") in accordance with rule 3.7, publish the details of these assessments in accordance with rule 3.13 and implement an escalating series of market interventions in accordance with this Chapter to maintain power system security.

3.2.4 Ancillary services function

- (a) *NEMMCO* must determine the *market's* requirements for *non-market* ancillary services in accordance with rule 3.11.
- (b) *NEMMCO* must use reasonable endeavours to ensure adequate *non-market* ancillary services are available in accordance with rule 3.11.

3.2.5 Reserves

NEMMCO must trade in *reserves* by negotiating and entering into contracts to secure the availability of *plant* for *reserves* in accordance with rule 3.12.

3.2.6 Settlements

NEMMCO must provide a financial *settlements* service in accordance with rule 3.15, including billing and clearance for all *market* trading.

3.3 Prudential Requirements

3.3.1 Market Participant criteria

Each *Market Participant* must whilst participating in the *market*:

- (a) be resident in, or have a permanent establishment in, Australia;
- (b) not be under external administration (as defined in the Corporations Act) or under a similar form of administration under any laws applicable to it in any jurisdiction;
- (c) not be immune from suit in respect of the obligations of the *Market Participant* under the *Rules*; and
- (d) be capable of being sued in its own name in a court of Australia.

3.3.2 Credit support

Where at any time a *Market Participant* does not meet the *acceptable credit criteria*, the *Market Participant* must procure that *NEMMCO* holds the benefit of *credit support* in respect of that *Market Participant*. A *credit support* is an obligation in writing which:

- (a) is from an entity (the "Credit Support Provider") which meets the acceptable credit criteria and which is not itself a Market Participant;
- (b) is a guarantee or bank letter of credit in a form prescribed by *NEMMCO*;
- (c) is duly executed by the *Credit Support Provider* and delivered unconditionally to *NEMMCO*;
- (d) constitutes valid and binding unsubordinated obligations of the *Credit Support Provider* to pay to *NEMMCO* amounts in accordance with its terms which relate to obligations of the relevant *Market Participant* under the *Rules*; and
- (e) permits drawings or claims by *NEMMCO* to a stated certain amount.

3.3.3 Acceptable credit criteria

Where the *Rules* require that an entity meet the *acceptable credit criteria*, this means that the entity must:

- (a) be either:
 - (1) any entity under the prudential supervision of the Australian Prudential Regulation Authority; or
 - (2) a central borrowing authority of an Australian State or Territory which has been established by an Act of Parliament of that State or Territory;

- (b) be resident in, or have a permanent establishment in, Australia;
- (c) not be an externally administered body corporate (as defined in the Corporations Act) or under a similar form of administration under any laws applicable to it in any jurisdiction;
- (d) not be immune from suit;
- (e) be capable of being sued in its own name in a court of Australia; and
- (f) have an acceptable credit rating.

3.3.4 Acceptable credit rating

- (a) *NEMMCO* may from time to time, after complying with the *Rules consultation procedures*, determine what constitutes an *acceptable credit rating* for the purposes of the *Rules*, including (without limitation) determining which organisations publishing ratings will be used for this purpose, which of the type of ratings issued will be used for this purpose, and which level of rating is to be acceptable.
- (b) Until varied by determination of *NEMMCO*, an *acceptable credit rating* is either:
 - (1) a rating of A-1 or higher for short term unsecured counterparty obligations of the entity, as rated by Standard and Poor's (Australia) Pty. Limited; or
 - (2) a rating of P-1 or higher for short term unsecured counterparty obligations of the entity, as rated by Moodys Investor Service Pty. Limited.
- (c) Any determination of *NEMMCO* which varies what constitutes an *acceptable credit rating* will take effect from such date (not being earlier than 30 *business days* after the date of notification of the determination to *Market Participants*) as *NEMMCO* specifies by notice to the *Market Participants*.

3.3.5 Amount of credit support

A Market Participant which does not meet the acceptable credit criteria must procure that at all times the aggregate undrawn or unclaimed amounts of then current and valid credit support held by NEMMCO in respect of the Market Participant is not less than the current maximum credit limit for that Market Participant.

3.3.6 Changes to credit support

- (a) If:
 - (1) a *credit support* provided to *NEMMCO* by a *Market Participant* under this rule 3.3 (called the "existing *credit support"*), is due to expire or terminate; and

(2) after that *credit support* expires or terminates the total *credit support* held by *NEMMCO* in respect of that *Market Participant* will be less than the *Market Participant's maximum credit limit*,

then at least 10 business days prior to the time at which the existing credit support is due to expire or terminate the Market Participant must procure a replacement credit support which will become effective upon expiry of the existing credit support such that it complies with the requirements of this rule 3.3.

(b) Where a *credit support* otherwise ceases to be current or valid, whether by reason of the *Credit Support Provider* ceasing to meet the *acceptable credit criteria* or any other reason, the *Market Participant* must procure the replacement of that *credit support* so as to comply with its obligation to maintain aggregate undrawn current and valid *credit support* of not less than the current *maximum credit limit* for that *Market Participant*. The *Market Participant* must procure that the replacement *credit support* is issued to *NEMMCO* within 24 hours after the *Market Participant* first becomes aware that the *credit support* has ceased to be current or valid (whether by reason of the *Market Participant's* own knowledge or a notification by *NEMMCO*).

3.3.7 Drawings on credit support

- (a) If *NEMMCO* exercises its rights under a *credit support* provided by a *Market Participant* under this rule 3.3 in accordance with clause 3.15.21(b)(2), then *NEMMCO* must notify the *Market Participant*.
- (b) If, as a result of *NEMMCO* exercising its rights under a *credit support* provided by a *Market Participant* under this rule 3.3 in accordance with clause 3.15.21(b)(2), the remaining *credit support* held by *NEMMCO* in respect of that *Market Participant* is less than the *Market Participant's maximum credit limit* then, within 24 hours of receiving a notice under clause 3.3.7(a), the *Market Participant* must procure for *NEMMCO* additional *credit support* complying with the requirements of this rule 3.3, such that the aggregate undrawn and valid *credit support* held by *NEMMCO* in respect of the *Market Participant* is not less than the amount of *credit support* which that *Market Participant* is required to provide under this rule 3.3.

3.3.8 Maximum credit limit and prudential margin

- (a) NEMMCO must determine for each Market Participant a maximum credit limit and prudential margin.
- (b) The maximum credit limit for a Market Participant is a dollar amount determined by NEMMCO applying the principles set out in schedule 3.3, being an amount determined by NEMMCO on the basis of a reasonable worst case estimate of the aggregate payments for trading amounts (after reallocation) to be made by the Market Participant to NEMMCO over a period of up to the credit period applicable to that Market Participant.

- (c) The *prudential margin* for a *Market Participant* is a dollar amount to be determined by *NEMMCO* applying the principles set out in schedule 3.3, being an amount determined by *NEMMCO* on the basis of a *reasonable worst case* estimate of the aggregate of the expected *trading amount* and the *reallocation amount* owing by the *Market Participant* to *NEMMCO* in respect of the *reaction period*.
- (d) *NEMMCO* must *publish* details of the methodology used in determining *maximum credit limits* and *prudential margins*.
- (e) NEMMCO shall review the maximum credit limit and prudential margin of each Market Participant not less than once each year.
- (f) NEMMCO may change either or both of the maximum credit limit or prudential margin for a Market Participant at any time (whether by reason of an annual review or otherwise), provided that any change to the maximum credit limit or prudential margin will apply with effect from such time (not being earlier than the time of notification of the changed maximum credit limit or prudential margin, as the case may be, to the Market Participant) as NEMMCO specifies.
- (g) NEMMCO must notify the Market Participant of any determination or change under this clause 3.3.8 of that Market Participant's maximum credit limit or prudential margin (as the case may be) and, on request from that Market Participant, provide details of the basis for that determination or change, including the trading, price, volatility and prospective reallocation assumptions and the average spot prices and ancillary service prices and average trading amounts.

3.3.8A Security Deposits

At any time, a *Market Participant* may provide a security deposit to *NEMMCO* to secure payment of any amount which may become payable in respect of a *billing period*.

3.3.9 Outstandings

At any time the *outstandings* of a *Market Participant* is the dollar amount determined by the formula:

$$OS = -(A + B + SDA)$$

where:

- OS is the amount of the *outstandings* of the *Market Participant*;
- A is the aggregate of the net *settlement amounts* payable in respect of *billing periods* prior to the current *billing period* which remain unpaid by, or to, the *Market Participant* whether or not the *payment date* has yet been reached;
- B is the net *settlement amount* payable by, or to, the *Market Participant* in respect of *transactions* for *trading intervals* that have already occurred in the current *billing period*; and

SDA is the balance (if any) of the *Market Participant* in the security deposit fund, in which case a credit balance will be a positive amount and a debit balance will be a negative amount.

The amounts to be used in this calculation will be the actual *settlement amounts* for *billing periods* where *final statements* have been issued by *NEMMCO* or *NEMMCO*'s reasonable estimate of the *settlement amounts* for *billing periods* (where *final statements* have not been issued by *NEMMCO*).

Note: Where the value of *outstandings* of a *Market Participant* is a negative amount the absolute value of the *outstandings* amount will, for the purposes of rule 3.3, be treated as if it were an amount payable by *NEMMCO* to the *Market Participant*.

3.3.10 Trading limit

The trading limit for a *Market Participant* is the dollar amount determined by *NEMMCO* on the basis of a *reasonable worst case* estimate by *NEMMCO* applying the principles in schedule 3.3 and determined using the following formula:

TL = CS - PM

where:

TL is the *trading limit*;

CS is the *credit support* provided by the *Market Participant*; and

PM is the *prudential margin* determined in accordance with clause 3.3.8(c).

Note: If the *prudential margin* exceeds the *credit support* the *trading limit* will have a negative value.

3.3.11 Call notices

- (a) If at any time the *outstandings* of a *Market Participant* is greater than the *trading limit* for that *Market Participant*, *NEMMCO* may do either or both of the following:
 - (1) give the *Market Participant* an "interim statement" covering any transactions for trading intervals not already the subject of issued preliminary or final statements or another interim statement, notwithstanding that the usual time for the issue of a preliminary or final statement for those trading intervals has not been reached; and
 - (2) give the *Market Participant* a notice (a "call notice") that specifies an invoiced amount, the current maximum credit limit for the Market Participant, the current trading limit for the Market Participant, and the call amount, where:

Call Amount = OS - TypA

except where the formula produces a negative result, in which case the *call amount* is zero,

where:

OS is the *outstandings* for the *Market Participant* as at the date of the issue of the *call notice*; and

TypAis the *typical accrual* for the *Market Participant* as at the date of the issue of the *call notice*.

Note: If the value of *outstandings* of a *Market Participant* has a negative value and the *trading limit* also has a negative value, the *outstandings* will be greater than the *trading limit* if the absolute value of the *trading limit* is greater than the absolute value of the *outstandings*, in which case *NEMMCO* may exercise its powers under either or both of clauses 3.3.11(a)(1) or 3.3.11(a)(2).

(b) NEMMCO may, in its absolute discretion, cancel a *call notice* or *interim statement* issued under this clause at any time. The cancellation of a *call notice* or *interim statement* does not affect NEMMCO's rights to issue a further *call notice* or *interim statement* on the same grounds that gave rise to NEMMCO issuing the cancelled *call notice* or *interim statement*.

3.3.12 Typical accrual

(a) The typical accrual for a Market Participant at any time is the amount which NEMMCO determines would have been the outstandings of the Market Participant at that time had the spot prices and ancillary service prices and the trading amounts of the Market Participant been at the level of the average spot price and ancillary service prices and average trading amounts of the Market Participant used by NEMMCO for the purposes of the most recent determination of the maximum credit limit of the Market Participant.

Note: The value of the *typical accrual* of a *Market Participant* will be a negative amount if the average *settlement amount* of the *Market Participant* is a positive amount.

(b) *NEMMCO* must, on request from a *Market Participant*, provide that *Market Participant* with details of any *typical accrual* for that *Market Participant*.

3.3.13 Response to Call Notices

- (a) Subject to clause 3.3.13(b), where *NEMMCO* has given a *call notice* to a *Market Participant*, the *Market Participant* must before 11.00 am (*Sydney time*) on the next *business day* following the issue of the *call notice* either:
 - (1) agree with *NEMMCO* to an increase in the *Market Participant's* maximum credit limit by an amount not less than the call amount, and provide to *NEMMCO* additional credit support where, by virtue of the increase in the maximum credit limit, the Market Participant no longer complies with its obligations under clause 3.3.5;
 - (2) (where clause 3.3.13(a)(1) is not satisfied) pay to *NEMMCO* in cleared funds a security deposit of an amount not less than the *call amount*;
 - (3) lodge a *reallocation request* of an amount which is not less than the *call amount* and which is accepted by *NEMMCO*; or

- (4) provide to *NEMMCO* any combination of clauses 3.3.13(a)(1), (2) and (3) such that the aggregate of the amount which can be drawn under the additional *credit support* provided and the amount of the security deposit paid and the amount of the *reallocation request* accepted by *NEMMCO* is not less than the *call amount*.
- (b) If *NEMMCO* gives a *call notice* to a *Market Participant* after noon (*Sydney time*), then *NEMMCO* is deemed to have given that *call notice* on the next *business day* for the purposes of this clause.

3.3.13A Application of monies in the security deposit fund

- (a) Subject to clauses 3.3.13A(b) and (e), *NEMMCO* may apply money from the security deposit fund recorded as a credit balance in the name of a *Market Participant* in payment of monies owing by that *Market Participant* to *NEMMCO*:
 - (1) in respect of any *final statement* previously given to that *Market Participant* which has not been fully paid by the appointed time on the due date and remains unpaid; or
 - (2) at the time of issuing any final statement,

in which case *NEMMCO* may set off all, or part of, any amount by which a *Market Participant* is in credit in the security deposit fund at that time against any amounts owing to *NEMMCO* under the *final statement*.

- (b) Subject to clause 3.3.13A(c):
 - (1) a *Market Participant* may, by giving notice at least one *business day* prior to the due time for the issue of a *final statement*, seek agreement with *NEMMCO* on the arrangements to apply to the application of security deposits paid by that *Market Participant* under clause 3.3.8A against amounts owing to *NEMMCO* under a particular *final statement* or *final statements*; and
 - (2) *NEMMCO* must apply the security deposits in accordance with an agreement reached under clause 3.3.13A(b)(1).

If agreement is not reached between *NEMMCO* and the *Market Participant* under this clause, then *NEMMCO* has a discretion to apply the security deposit funds of that *Market Participant* in payment of moneys that the *Market Participant* owes *NEMMCO* as set out in clauses 3.3.13A(a)(1) and (2).

(c) Despite any agreement under clause 3.3.13A(b), if a *default event* occurs in relation to a *Market Participant*, then *NEMMCO* has a discretion as to which amounts owing to *NEMMCO* under *final statements* it applies or partially applies security deposits paid by that *Market Participant* under clause 3.3.8A.

- (d) In the case of security deposits paid by a *Market Participant* in the security deposit fund under clause 3.3.13, *NEMMCO* has a discretion as to which *final statements* it applies or partially applies those monies against.
- (e) However, in exercising its discretion in clauses 3.3.13A(b), (c) or (d), if a *Market Participant* pays *NEMMCO* a security deposit, then *NEMMCO* must apply any remaining portion of the security deposit (taking into account deductions for any liabilities or expenses of the security deposit fund) against the longest outstanding amounts owing to *NEMMCO* under *final statements* issued not later than the *final statement* for the *billing period* in which the security deposit was paid to *NEMMCO*. If, for any reason, *NEMMCO* has not fully applied such security deposit within this time, then *NEMMCO* must apply the remainder to amounts owing to *NEMMCO* under the next *final statement* or *statements* until it has been fully applied.
- (f) If:
 - (1) a *Market Participant* has a credit balance in the security deposit fund and ceases, or intends to cease, being a *Market Participant*; and
 - (2) that *Market Participant* has paid all money owing to *NEMMCO* and *NEMMCO* reasonably considers that the *Market Participant* will not owe any money to *NEMMCO* in the future arising from that person's activities as a *Market Participant*,

then *NEMMCO* must return any credit balance for that *Market Participant* in the security deposit fund to that *Market Participant* (subject to deduction for any liabilities and expenses of the security deposit fund).

- (g) If, for any reason, there is a debit balance in the security deposit fund for a *Market Participant*, then the *Market Participant* must pay that amount to *NEMMCO*. For this purpose, *NEMMCO* may:
 - (1) include that amount in the next *final statement*; or
 - (2) issue an account to that *Market Participant* for payment of that debit balance and the *Market Participant* must pay that amount within 2 *business days*.

3.3.14 Potential value of a transaction

At any time, the *potential value* of a *transaction*, or of any bid or offer by a *Market Participant* to effect a *transaction*, under which the *trading amount* payable to *NEMMCO* is determined by reference to one or more specified *regional reference prices* or *ancillary service prices*, is the dollar amount determined by this procedure:

(a) the *transaction* is first tested to determine the *trading amount* which would result for the *Market Participant* if the *regional reference price* or *ancillary service price* applicable to the *transaction* was equal to the *scheduled high price*;

- (b) the *transaction* is then tested to determine the *trading amount* which would result for the *Market Participant* if the *regional reference price* or *ancillary service price* applicable to the *transaction* was equal to the *scheduled low price*;
- (c) if the *trading amount* resulting for both tests is a positive amount or zero, then the *potential value* of the *transaction* is zero;
- (d) if the *trading amount* resulting for either test is a negative amount, then the *potential value* of the *transaction* is the absolute value of the negative amount (or, where both tests produce a negative amount, the *potential value* of the *transaction* is the absolute value of the most negative amount).

3.3.15 Trading margin

At any time, the *trading margin* for a *Market Participant* is a dollar amount equal to the amount by which its *trading limit* exceeds its current *outstandings* due to *NEMMCO* and if the *outstandings* are equal to or exceed the *trading limit*, the *trading margin* is zero.

3.3.16 Limitation on entry of transactions

- (a) A *Market Participant* must not submit any bid or offer to effect any *transaction* with *NEMMCO* where the *potential value* of that *transaction*, plus the *potential value* of all other *uncompleted transactions*, exceeds the *trading margin* for the *Market Participant*.
- (b) A transaction is an uncompleted transaction if some or all of the trading intervals to which that transaction relates have not yet occurred.

3.3.17 Scheduled prices

- (a) The *scheduled high price* and the *scheduled low price* are amounts determined by *NEMMCO* in its absolute discretion from time to time as a basis upon which to determine the *potential value* of a *transaction* in accordance with clause 3.3.14.
- (b) NEMMCO may determine different scheduled high prices and scheduled low prices for each region.
- (c) The *scheduled high price* for *energy* and *market ancillary services* cannot be greater than *VoLL* and the *scheduled low price* for:
 - (i) energy, cannot be less than the market floor price; and
 - (ii) *market ancillary services*, cannot be less than zero.
- (d) *NEMMCO* must notify all *Market Participants* without delay of any determination of *scheduled high prices* and *scheduled low prices*.
- (e) For *Market Participants* who do not trade in the *spot market*, the *scheduled high price* shall be *VoLL* and the *scheduled low price* shall be zero.

3.3.18 Additional credit support

- (a) Where at any time the aggregate potential value of a Market Participant's uncompleted transactions exceeds the trading margin for the Market Participant (including without limitation where this is a result of a redetermination of scheduled high prices or scheduled low prices) the Market Participant must provide to NEMMCO additional credit support satisfying the criteria in clause 3.3.2 for an amount not less than the amount by which the trading margin is exceeded. The Market Participant must procure that the additional credit support is provided to NEMMCO within 24 hours after NEMMCO has notified the Market Participant that additional credit support is required.
- (b) *Credit support* required pursuant to this clause 3.3.18 is in addition to and not inclusive of the *credit support* which a *Market Participant* is required to procure pursuant to other provisions of the *Rules*.

3.3.19 Consideration of other Market Participant transactions

- (a) For the purposes of determining the *prudential requirements* to be satisfied by *Market Participants* in accordance with this rule 3.3, *NEMMCO* must consult with *Market Participants* and any other person *NEMMCO* considers appropriate.
- (b) *NEMMCO* is not required to meet its obligations under clause 3.3.19(a) in any way which increases *NEMMCO*'s risks in the collection of moneys owed to it in accordance with any of the provisions of the *Rules*.

3.4 Spot Market

3.4.1 Establishment of spot market

- (a) *NEMMCO* must establish and operate a *spot market* as a mechanism for:
 - (1) balancing electricity *supply* and demand;
 - (2) acquiring market ancillary services; and
 - (3) setting a spot price for electricity at each regional reference node and market connection point for each trading interval and ancillary service prices at each regional reference node for each dispatch interval.
- (b) *NEMMCO* must determine and *publish* in accordance with rule 3.9:
 - (1) a spot price for energy to apply at each regional reference node in each trading interval; and
 - (2) ancillary service prices to apply at each regional reference node for each dispatch interval.

3.4.2 Trading day and trading interval

- (a) A *trading interval* is a 30 minute period ending on the hour or on the half hour
- (b) A trading interval is identified by the time at which it ends.
- (c) The *trading day* in the *spot market* will be the 24 hour period commencing at 4.00 am Eastern Standard Time.

3.4.3 Spot market operations timetable

- (a) *NEMMCO* must operate the *spot market* according to the *timetable* which must be approved by the *AEMC* and *published* by *NEMMCO* following compliance with the *Rules consultation procedures*.
- (b) If *NEMMCO* wishes to change the *timetable* at any time, it may do so following compliance with the *Rules consultation procedures*.

3.5 Regions

3.5.1 [Deleted]

Determination of regions and regional reference nodes

- (a) For the purpose of conducting the spot market, the market is to be divided into regions recommended by NEMMCO and approved by the AEMC in accordance with this clause 3.5.1. A region is an area served by a particular part of the transmission network containing one or more major load centres or generation centres or both.
- (b) In formulating its recommendations under clause 3.5.1(a), 3.5.2 or 3.5.3 NEMMCO must:
- (1) consult with *Market Participants* in accordance with the *Rules* consultation procedures; and
- (2) base its recommendations on the following principles (provided that these principles are listed in order of priority and the definition of a region's boundaries may not satisfy all principles):
- (i) The boundary of a region will be closed and will enclose at least one significant load centre and/or generation centre.
- (ii) Where practicable significant generation and/or load centres separated by network constraints should be located in separate regions where those network constraints are likely to influence the optimal dispatch of generation and/or scheduled load in the order of 50 hours or

more in the financial year for which the intra-regional loss factors were pre-determined. The region boundaries should be located so that transfer limits between regions can be clearly defined, and transfer flows across regions easily measured, at the region boundary. The application of pre-determined static intra-regional loss factors within the proposed region and the application of a predetermined inter-regional loss factor equation will not impact significantly on the central dispatch of generation and/or scheduled load that would result from a fully optimised dispatch process taking into account the effect of losses. NEMMCO must aim to minimise the variation between the set of pre-determined loss factors and the resultant averaged intra-regional loss factors, and also any errors in the inter-regional loss factor equation across the trading intervals in the financial year for which the intraregional loss factors were pre-determined. (vi) Where a connection point can be assigned to more than one region such that the criteria set out in clause 3.5.1(b)(2)(ii), (iii) and (iv) can each be met in either region, then the transmission network connection point will be assigned to the region such that the variation between the set of pre-determined intra-regional loss factors and the resultant averaged loss factors is minimised. (vii) Within the requirements of clauses 3.5.1(b)(2)(i) to 3.5.1(b)(2)(v), the number of regions created should be minimised. (c) Each region must have a single regional reference node which is to be deemed by NEMMCO to be a notional busbar at: (1) a nominated major transmission substation located at or close to the largest load centre within the region; or where a region has no major load centre or there is some other reasonable cause for not defining a regional reference node at a particular major load centre, a nominated major transmission substation located at the largest generation centre within the region. Each transmission network connection point will be assigned by NEMMCO to a single region in a manner consistent with this clause **3.5.**

(e) [Deleted]

(f) [Deleted]

3.5.2 [Deleted]

Revision of boundaries and regional reference nodes

If, within a region, circumstances change so that the criteria set out in clause 3.5.1(b)(2) are no longer achieved, then the boundaries of the region must be reviewed by NEMMCO and, if necessary, the boundaries may be altered and/or a new region may be formed in accordance with clause 3.5.1.

3.5.3 [Deleted]

Alteration and notification of regions

- (a) If NEMMCO in its reasonable discretion determines that the current definition of a region or location of a regional reference node materially fails to satisfy the criteria specified in clause 3.5.1 and is likely to continue to do so, NEMMCO may alter the boundary of a region or the location of a regional reference node:
- (1) after consulting with Market Participants in accordance with the Rules consultation procedures;
- (2) with the approval of the AEMC; and
- (3) in accordance with this clause 3.5.
- (b) A change in the boundaries of any region or the location of a regional reference node will not take effect until the date determined by NEMMCO, which must be a minimum of one year after the date the AEMC approves such a change.
- (c) [Deleted]

3.5.4 [Deleted]

Commencement of clauses 3.5.2 and 3.5.3

Clauses 3.5.2 and 3.5.3 do not come into operation until declared to do so by the AEMC in a written notice published in the South Australian Government Gazette.

3.5.5 [Deleted]

Publication of regions by NEMMCO

NEMMCO must maintain, review and, by 1 April each year, publish a list of all regions, regional reference nodes and the region to which each market connection point is assigned as determined or approved by the AEMC for alteration, under this rule 3.5 and rule 3.6 ('the Regions Publication').

3.5.6 Abolition of Snowy region

(a) In this clause 3.5.6:

current *Regions Publication* means the document published by *NEMMCO* entitled "List of Regional Boundaries and Marginal Loss Factors for the 2007/08 Financial Year".

New South Wales *region* comprises the *region* as identified in the current *Regions Publication*.

Snowy *region* comprises the *region* as identified in the current *Regions Publication*.

Victoria *region* comprises the *region* as identified in the current *Regions Publication*.

- (b) Despite any other provision of the *Rules*, at 00:00 hours *EST* on 1 July 2008:
 - (1) the Snowy *region* is abolished;
 - (2) the *regional reference node* known as the Murray 330kV node is abolished;
 - (3) the New South Wales *region* and the Victoria *region* are modified by the allocation of the *loads* and *generators* to each *region* as set out in clause 11.13.8; and
 - (4) the location of the *region* boundary between the New South Wales *region* and the Victoria *region* is as set out in clause 11.13.9.
- (c) For the avoidance of doubt:
 - (1) the *regional reference node* (known as the Sydney West 330kV node) for the New South Wales *region*; and
 - (2) the *regional reference* node (known as the Thomastown 66kV node) for the Victoria *region*,

are not affected by the abolition of the *regional reference node* known as the Murray 330kV node for the Snowy *region*.

3.6 Network Losses and Constraints

3.6.1 Inter-regional losses

- (a) Inter-regional losses are electrical energy losses due to a notional transfer of electricity through regulated interconnectors from the regional reference node in one region to the regional reference node in an adjacent region.
- (b) Inter-regional loss factors:
 - (1) describe the *marginal electrical energy losses* for electricity transmitted through *regulated interconnectors* from a *regional reference node* in one *region* to the *regional reference node* in an adjacent *region* for a particular time period and a defined range of operating conditions;
 - (2) to apply between each pair of adjacent *regional reference nodes* are to be determined as part of the *central dispatch* process using *inter-regional loss factor* equations derived in accordance with the methodology determined by *NEMMCO* pursuant to clause 3.6.1(c); and
 - (3) are to be used in the *central dispatch* process as a notional adjustment to relate the prices of electricity at *regional reference nodes* in adjacent *regions* so as to reflect the cost of *inter-regional losses*.
- (c) NEMMCO must determine, publish and maintain, in accordance with the Rules consultation procedures, a methodology for the determination of inter-regional loss factor equations for a financial year, describing inter-regional loss factors between each pair of adjacent regional reference nodes in terms of significant variables.
- (d) In preparing the methodology for the determination of *inter-regional loss* factor equations referred to in clause 3.6.1(c), NEMMCO must implement the following principles:
 - (1) *Inter-regional loss factor* equations are to apply for a *financial year*.
 - (2) *Inter-regional loss factor* equations must be suitable for use in *central dispatch*.
 - (3) Inter-regional loss factors are determined as part of the central dispatch process using inter-regional loss factor equations. The interregional loss factors must:
 - (i) as closely as is reasonably practicable, describe the *marginal* electrical energy losses for electricity transmitted through the relevant regulated interconnector between the 2 relevant regional reference nodes in adjacent regions for each trading interval of the financial year in respect of which the relevant inter-regional loss factor equations apply; and
 - (ii) aim to minimise the impact on the *central dispatch* process of *generation* and *scheduled load* as compared to the *dispatch* of

generation and scheduled load which would result from a fully optimised dispatch process taking into account the effect of losses.

- (4) Inter-regional loss factor equations are determined using forecast load and generation data and, if required, modelled load and generation data for the financial year in which the inter-regional loss factor equations are to apply. The forecast load and generation data and modelled load and generation data, if any, used must be that load and generation data prepared by NEMMCO pursuant to clause 3.6.2A.
- (5) *Inter-regional loss factor* equations are determined by applying regression analysis to the *load* and *generation* data referred to in clause 3.6.1(d)(4) to determine:
 - (i) the variables which have a significant effect on the *marginal* electrical energy losses for electricity transmitted through each regulated interconnector for both directions of flow on those regulated interconnectors; and
 - (ii) the parameters that represent the relationship between each of those variables and the *marginal electrical energy losses*.
- (e) *NEMMCO* must determine the *inter-regional loss factor* equations used to calculate *inter-regional loss factors* in each *financial year* in accordance with the methodology prepared and *published* by *NEMMCO* under clause 3.6.1(c).
- (f) *NEMMCO* must *publish* the *inter-regional loss factor* equations determined under clause 3.6.1(e) by 1 April prior to the *financial year* in which they are to apply.

3.6.2 Intra-regional losses

- (a) Intra-regional losses are electrical energy losses that occur due to the transfer of electricity between a regional reference node and transmission network connection points in the same region.
- (b) Intra-regional loss factors:
 - (1) notionally describe the *marginal electrical energy losses* for electricity transmitted between a *regional reference node* and a *transmission network connection point* in the same *region* for a defined time period and associated set of operating conditions;
 - (2) will be a single static *intra-regional loss factor* that applies for a *financial year* derived in accordance with the methodology determined by *NEMMCO* pursuant to clause 3.6.2(d) for each *transmission network connection point*; and
 - (3) may, with the agreement of the *Jurisdictional Regulator*, be averaged over an adjacent group of *transmission network connection points* within a single *region*. If averaging is used, the relevant *transmission*

network connection points will be collectively defined as a virtual transmission node with a loss factor calculated as the volume weighted average of the transmission loss factors of the constituent transmission network connection points.

- (c) An *intra-regional loss factor* is to be used as a price multiplier that can be applied to the *regional reference price* to determine the *local spot price* at each *transmission network connection point* and *virtual transmission node*.
- (d) NEMMCO must determine, publish and maintain, in accordance with Rules consultation procedures, a methodology for the determination of intraregional loss factors to apply for a financial year for each transmission network connection point.
- (e) In preparing the methodology referred to in clause 3.6.2(d), *NEMMCO* must implement the following principles:
 - (1) *Intra-regional loss factors* are to apply for a *financial year*.
 - (2) An *intra-regional loss factor* must, as closely as is reasonably practicable, describe the average of the *marginal electrical energy losses* for electricity transmitted between a *transmission network connection point* and the *regional reference node* in the same *region* for each *trading interval* of the *financial year* in which the *intra-regional loss factor* applies.
 - (2A) *Intra-regional loss factors* must aim to minimise the impact on the *central dispatch* process of *generation* and *scheduled load* compared to that which would result from a fully optimised dispatch process taking into account the effect of losses.
 - (3) Forecast *load* and *generation* data for the *financial year* for which the *intra-regional loss factor* is to apply must be used. The forecast *load* and *generation* data used must be that *load* and *generation* data prepared by *NEMMCO* pursuant to clause 3.6.2A.
 - (4) The *load* and *generation* data referred to in clause 3.6.2(e)(3) must be used to determine *marginal loss factors* for each *transmission network* connection point for each *trading interval* in the *financial year* to which the *load* and *generation* data relates.
 - (5) The *intra-regional loss factor* for each *transmission network* connection point is determined using a volume weighted average of the *marginal loss factors* for the *transmission network connection* point.
 - (6) In determining the *intra-regional loss factor* for a *transmission network connection point*, flows in *network elements* that solely or principally provide *market network services* will be treated as invariant, as the methodology is not seeking to calculate the *marginal losses* within such *network elements*.

- (f) NEMMCO must calculate *intra-regional loss factors* for each *transmission network connection point* for each *financial year* in accordance with the methodology prepared and published by NEMMCO under clause 3.6.2(d).
- (f1) By 1 April in each year, *NEMMCO* must *publish* the *intra-regional loss* factors revised under clause 3.6.2(f) and to apply for the next financial year.
- (g) NEMMCO must, in accordance with the Rules consultation procedures, determine, publish and maintain the methodology which is to apply to the calculation of average transmission loss factors, determined in accordance with clause 3.6.2(b)(3), for each virtual transmission node proposed by a Distribution Network Service Provider.
- (h) As soon as practicable after the *publication* of the methodology referred to in clause 3.6.2(g), and thereafter by 1 April in each year, *NEMMCO* must calculate and *publish* the *transmission loss factors* for each *virtual transmission node*, determined in accordance with clause 3.6.2(b)(3), that are to apply for the next *financial year*.
- (i) Notwithstanding clauses 3.6.2(a) to (f1), *NEMMCO* must:
 - (1) determine an *intra-regional loss factor* in the *financial year* in which the *intra-regional loss factor* is to apply for a *transmission network* connection point which is established in that *financial year* in accordance with the procedure for establishing connection set out in rule 5.3, provided that *NEMMCO* did not determine an *intra-regional* loss factor for the transmission network connection point pursuant to clause 3.6.2(f1) in the *financial year* preceding that in which the connection point is established; or
 - (2) revise an *intra-regional loss factor* in the *financial year* in which the *intra-regional loss factor* is to apply for a *transmission network* connection point which is modified in that *financial year* in accordance with the procedure for modifying connection set out in rule 5.3, provided that, in *NEMMCO*'s reasonable opinion, the modification to that *connection point* results in a material change in the capacity of the *connection point*.
- (j) NEMMCO must, where required to determine the *intra-regional loss factor* for an established or modified *transmission network connection point* under clause 3.6.2(i), do so as far as practicable in accordance with the methodology *published* by NEMMCO pursuant to clause 3.6.2(d).
- (k) For the purposes of clause 3.6.2(j), the forecast *load* and *generation* data used to calculate the *intra-regional loss factor* for the *transmission network* connection point must be determined using the forecast *load* and *generation* data determined by *NEMMCO* under clause 3.6.2A for other *transmission* network connection points in the same region for that financial year adjusted to take into account the effect of the established or modified connection point. Notwithstanding this clause 3.6.2(k), Registered Participants must comply with their obligations with respect to the provision of information to *NEMMCO*, for the purpose of determining new

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

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

(a) NEMMCO must prepare load and generation data for each financial year to be used in both the determination of inter-regional loss factor equations under clause 3.6.1 and intra-regional loss factors under clause 3.6.2 in accordance with the methodology determined, published and maintained by NEMMCO for this purpose, under clause 3.6.2A(b).

- (b) *NEMMCO* must determine, *publish* and maintain, in accordance with the *Rules consultation procedures*, a methodology for:
 - (1) forecasting the *load* and *generation* data to be used in both the determination of *inter-regional loss factor* equations and *intra-regional loss factors*, including new or revised *intra-regional loss factors* for *connection points* that are established or modified, respectively, during the *financial year* in which the *intra-regional loss factors* are to apply;
 - (2) modelling additional *load* and *generation* data, where required, to be used in determining *inter-regional loss factor* equations; and
 - (3) the collection of relevant data from *Registered Participants*, including without limitation deadlines for the provision of that data by *Registered Participants*.
- (c) The methodology developed and *published* by *NEMMCO* under clause 3.6.2A(b) must specify information reasonably required by *NEMMCO* to fulfil its obligations under clause 3.6.2A, including without limitation historic *load* and *generation* data, forecast *energy* and *maximum demand* data for a *connection point* and forecast data for any new *loads*. In particular, the methodology must specify information to be provided by *Registered Participants* that is in addition to the information provided by those *Registered Participants* under other provisions of the *Rules*.
- (d) In preparing the methodology for forecasting and modelling *load* and *generation* data under clause 3.6.2A(b), *NEMMCO* must implement the following principles:
 - (1) The forecast *load* and *generation* data must be representative of expected *load* and *generation* in the *financial year* in which the *interregional loss factor* equations or *intra-regional loss factors* are to apply having regard to:
 - (i) actual *load* and *generation* data available for a 12 month period defined by the methodology with the objective to use the most recent *load* and *generation* data practicable;
 - (ii) projected *load* growth between each calendar month to which the actual *load* and *generation* data referred to in clause 3.6.2A(d)(1)(i) relates and the same calendar month in the *financial year* for which the forecast *load* and *generation* data is determined; and
 - (iii) the projected *network* configuration and projected *network* performance for the *financial year* in which the *inter-regional loss factor* equation or *intra-regional loss factor*, as the case may be, is to apply.
 - (2) Additional modelled *load* and *generation* data sets must only be used:

- (i) in the determination of *inter-regional loss factor* equations under clause 3.6.1; and
- (ii) where the range of forecast *load* and *generation* data is not sufficient to derive *inter-regional loss factor* equations to apply over the full range of transfer capability of the *regulated interconnector*.
- (e) Registered Participants must comply with the obligations to provide information set out in the methodology developed and published by NEMMCO under this clause 3.6.2A, including the deadlines for the provision of that information and any other obligations with respect to the provision of that information set out in the methodology.

3.6.3 Distribution losses

- (a) Distribution losses are electrical energy losses incurred in the conveyance of electricity over a distribution network.
- (b) Distribution loss factors:
 - (1) notionally describe the average electrical energy losses for electricity transmitted on a distribution network between a distribution network connection point and a transmission network connection point or virtual transmission node for the financial year in which they apply;
 - (2) will be either:
 - (i) a site specific *distribution loss factor* derived in accordance with the methodology determined by the *Jurisdictional Regulator* or the *Distribution Network Service Provider* pursuant to clause 3.6.3(h), for each *distribution network connection point* of the following types:
 - (A) a connection point for an embedded generating unit with actual generation of more than 10MW, based on the most recent data available for a consecutive 12 month period at the time of determining the distribution loss factor. Where relevant data is not available for a consecutive 12 month period as a distribution network connection point is newly established or has been modified, a Network Service Provider may determine whether an embedded generating unit has generation of more than 10MW, based on its best projection of generation in the financial year in which the distribution loss factor is to apply, taking into account the terms of the relevant connection agreement;
 - (B) a *connection point* for an end-user with actual or forecast *load* of more than 40GWh or an electrical demand of more than 10MW, based on the most recent data available for a consecutive 12 month period at the time of determining the *distribution loss factor*. Where relevant data is not

- available for a consecutive 12 month period as a distribution network connection point is newly established or has been modified, a Network Service Provider may determine whether an end-user has load of more than 40GWh or forecast peak load of more than 10MW, based on its best projection of load in the financial year in which the distribution loss factor is to apply, taking into account the terms of the relevant connection agreement;
- (C) a connection point for a market network service provider; and
- (D) a connection point between two or more distribution networks; or
- (ii) derived, in accordance with the methodology determined by the Jurisdictional Regulator or the Distribution Network Service Provider pursuant to clause 3.6.3(h), using the volume weighted average of the average electrical energy loss between the transmission network connection point or virtual transmission node to which it is assigned and each distribution network connection point in the relevant voltage class (determined in accordance with clause 3.6.3(d)(2)) assigned to that transmission network connection point or virtual transmission node, for all connection points on a distribution network not of a type described in clause 3.6.3(b)(2)(i);
- (1)(3) are to be used in the settlement process as a notional adjustment to the electrical energy, expressed in MWh, flowing at a distribution network connection point in a trading interval to determine the adjusted gross energy amount for that connection point in that trading interval, in accordance with clause 3.15.4.
- (b1) Where a *Generator* meets the reasonable cost of the *Distribution Network Service Provider* in performing the necessary calculation in respect of a *generating unit* of up to 10MW or 40GWh per annum capacity, the *Distribution Network Service Provider* must calculate a site specific *distribution loss factor* that, notwithstanding any other provision of the *Rules* to the contrary, for the purposes of the *Rules* is to apply in respect of that *generating unit* on the same basis as applies for a *generating unit* of more than 10MW or 40GWh per annum capacity as though the *generating unit* were a unit of more than 10MW or 40GWh per annum capacity.
- (c) Each *Distribution Network Service Provider* must assign each *connection point* on its *distribution network*, of a type described in clause 3.6.3(b)(2)(i), to a single *transmission network connection point* taking into account normal *network* configurations and predominant *load* flows.
- (d) Each *Distribution Network Service Provider* must assign each *connection point* on its *distribution network*, not of a type described in clause 3.6.3(b)(2)(i):

- (1) where practicable, to a single *transmission network connection point* or otherwise, to a *virtual transmission node*, taking into account normal network configurations and predominant *load* flows; and
- (2) to a class of distribution network connection points based on the location of, voltage of and pattern of electrical energy flows at the distribution network connection point.
- (e) So far as practicable, the assignment of *connection points* on the *distribution network* to:
 - (1) transmission network connection points under clause 3.6.3(c); or
 - (2) transmission network connection points or virtual transmission nodes and a class of distribution network connection points under clause 3.6.3(d),

must be consistent with the geographic boundaries of the *pricing zones* determined in accordance with clause 6.5.2 for use in *distribution service* pricing, and the *voltage* levels incorporated within those *pricing zones*.

- (f) The assignment of *connection points* on a *distribution network*:
 - (1) to a single *transmission network connection point* under clause 3.6.3(c); or
 - (2) to a transmission network connection point or virtual transmission node and a class of distribution network connection points under clause 3.6.3(d),

is subject to the approval of the relevant *Jurisdictional Regulator* and the *Distribution Network Service Provider* must inform *NEMMCO* of such approved assignments.

- (g) Distribution loss factors must be determined by a Distribution Network Service Provider for all connection points on its distribution network either individually, for all connection points assigned to a single transmission network connection point under clause 3.6.3(c), or collectively, for all connection points assigned to a transmission network connection point or a virtual transmission node and a particular distribution network connection point class under clause 3.6.3(d), in accordance with:
 - (1) the methodology developed, *published* and maintained by the *Jurisdictional Regulator* for the determination of *distribution loss factors*; or
 - (2) where the *Jurisdictional Regulator* has not *published* a methodology under clause 3.6.3(g)(1), the methodology developed, *published* and maintained by the *Distribution Network Service Provider* for the determination of *distribution loss factors*.
- (h) The methodology for the determination of *distribution loss factors* referred to in clause 3.6.3(g) must be developed having regard to the following principles:

- (1) The aggregate of the *adjusted gross energy* amounts for a *distribution network*, determined in accordance with clause 3.15.4 using the *distribution loss factors* for the *financial year* in which the *distribution loss factors* are to apply should equal, as closely as is reasonably practicable, the sum of:
 - A. the amount of electrical *energy*, expressed in MWh, flowing at all *connection points* in the *distribution network* in the *financial year* in which the *distribution loss factors* are to apply; and
 - B. the total *electrical energy losses* incurred on the *distribution network* in the *financial year* in which the *distribution loss factors* are to apply.
- (2) The methodology used to determine distribution loss factors for a financial year should incorporate provisions requiring a Distribution Network Service Provider to undertake a reconciliation between the aggregate of the adjusted gross energy amounts for its distribution network for the previous financial year determined in accordance with clause 3.15.4 using the distribution loss factors that applied for connection points in that distribution network in the previous financial year and the sum of:
 - (i) the amount of electrical *energy*, expressed in MWh flowing, at all *connection points* in its *distribution network* in the previous *financial year*; and
 - (ii) the total *electrical energy losses* incurred on its *distribution network* in the previous *financial year*.
- (3) The distribution loss factor for a distribution network connection point, other than those described in clause 3.6.3(b)(2)(i), is determined using a volume weighted average of the average electrical energy loss between the transmission network connection point or virtual transmission node to which it is assigned and each distribution network connection point in the relevant class of distribution network connection points assigned to that transmission network connection point or virtual transmission node for the financial year in which the distribution loss factor is to apply.
- (4) The distribution loss factor for a distribution network connection point described in clause 3.6.3(b)(2)(i) is determined using the average electrical energy loss between the distribution network connection point and the transmission network connection point to which it is assigned in the financial year in which the distribution loss factor is to apply.
- (5) In determining the average electrical energy losses referred to in clauses 3.6.3(h)(3) and (4), the Distribution Network Service Provider must use the most recent actual load and generation data available for a consecutive 12 month period but may adjust this load and

- generation data to take into account projected load and / or generation growth in the financial year in which the distribution loss factors are to apply.
- (6) In determining *distribution loss factors*, flows in *network elements* that solely or principally provide *market network services* will be treated as invariant, as the methodology is not seeking to calculate the *marginal losses* within such *network elements*.
- (i) Each year the *Distribution Network Service Provider* must determine the *distribution loss factors* to apply in the next *financial year* in accordance with clause 3.6.3(g) and provide these to *NEMMCO* for *publication* by 1 April. Before providing the *distribution loss factors* to *NEMMCO* for *publication*, the *Distribution Network Service Provider* must obtain the approval of the relevant *Jurisdictional Regulator* for the *distribution loss factors* it has determined for the next *financial year*.

3.6.4 Network constraints

- (a) Conveyance of electricity between *regions* through a *regulated interconnector* is *constrained* when for operational reasons it is not acceptable for the *regulated interconnector* to transfer the level of electricity between *regions* that would be transferred if the limitation was removed and the condition impacts on the *dispatch* of other *regulated interconnectors*, *generation*, *scheduled network services* or *loads*.
- (a1) Conveyance of electricity between *regions* by means of a *scheduled network service* is *constrained* when the *dispatch* of the relevant *scheduled network service* is limited by the notified available capacity or *ramp rate* and the limitation impacts on the *dispatch* of *generation*, *regulated interconnectors*, other *scheduled network services* or *loads*.
- (b) Conveyance of electricity within a *region* is *constrained* when for operational reasons it is not acceptable for a *network* to transfer the level of electricity between different parts of the *region* that would be transferred if the limitation was removed and the condition impacts on the *dispatch* of *generation*, *scheduled network services* or *loads*.
- (c) For every *trading interval NEMMCO* must record any *constraints* including a description and the duration of the *constraint*.
- (d) Any *constraints* which occur within a *region* or between *regions* must be taken into account in the *dispatch* process under clause 3.8.10.

3.6.5 Settlements residue due to network losses and constraints

- (a) Settlements residue will be allocated, and distributed or recovered by NEMMCO in accordance with the following principles:
 - (1) full effect is to be given to the *jurisdictional derogations* contained in Chapter 9 relating to *settlements residue*;

- (2) the portion of the *settlements residue* attributable to *regulated interconnectors* (as adjusted to take into account the effect of any applicable *jurisdictional derogations* referred to in clause 3.6.5(a)(1)) will be distributed or recovered in accordance with rule 3.18:
- (3) the remaining settlements residue, including the portion of settlements residue due to intra-regional loss factors, will be distributed to or recovered from the appropriate Transmission Network Service Providers (which will not include Market Network Service Providers);
- (4) subject to clause 3.6.5(c), if the *settlements residue* arising in respect of a *trading interval*, after taking into account any adjustment in accordance with clauses 5.7.7(aa)(3) or (ab), is a negative amount, then the amount may be recovered:
 - (i) to the extent to which the *settlements residue* would have been distributed in accordance with clause 3.6.5(a)(2), from *eligible persons* participating in the *auctions* conducted under rule 3.18 either from positive *settlements residue* amounts arising in the same *billing period* or otherwise as part of future *auction expense fees*; and
 - (ii) from the *Network Service Provider* to which the *settlements* residue would have been distributed had it been a positive amount; and
- (4A) subject to clause 3.6.5(c), if the *settlements residue* arising in respect of a *trading interval*, after taking into account any adjustment in accordance with clause 5.7.7(aa)(3) or (ab), is a negative amount, then:
 - (i) the whole or any part of the amount may be recovered from positive *settlements residue* amounts arising in the *billing period* in which the negative *settlements residue* arose; and
 - (ii) if the whole or a part of the amount is not recoverable under clause 3.6.5(a)(4A)(i), the unrecovered amount may be recovered from the proceeds of the first *auction* after that *billing period*; and
 - (iii) if the whole or a part of the amount is recoverable under neither clause 3.6.5(a)(4A)(i) nor clause 3.6.5(a)(4A)(ii), the unrecovered amount may be recovered from the proceeds of successive *auctions* until the negative amount is recovered.
- (4B) subject to clause 3.6.5(a)(4A), interest costs incurred by *NEMMCO* in relation to any unrecovered negative *settlements residue* amounts referred to in clause 3.6.5(a)(4A) may be recovered:
 - (i) from proceeds of the first *auction* after the *billing period* in which the interest costs arose; and

- (ii) if the whole or a part of the interest costs are not recoverable under clause 3.6.5(a)(4B)(i), unrecovered interest costs may be recovered from the proceeds of successive *auctions* until all the interests costs are recovered.
- (5) for the purposes of the distribution or recovery of *settlements residue* that is attributable to *regulated interconnectors*:
 - (i) all of the *settlements residue* relating to electricity that is transferred from one *region* (the "exporting region") to another *region* (the "importing region") must be allocated to *Network Service Providers* in respect of a *network* located in the importing region (or part of a *network* located in the importing region);
 - (ii) the importing region must, in respect of the period from *market* commencement until the expiry date referred to in subparagraph (iv), pay a charge to the exporting region reflecting the extent of the use of a network located in the exporting region (or part of a network located in the exporting region) to transfer the electricity from the exporting region to the importing region;
 - (iii) the amount of the charge described in subparagraph (ii) must not exceed the amount of the *settlements residue* referred to in subparagraph (i), and must be agreed between the *participating jurisdictions* in which the importing region and the exporting region are located; and
 - (iv) the expiry date referred to in subparagraph (ii), means 1 July 2009 or the date of commencement of rules which make alternative provision in the *Rules* for inter-regional *settlements*, whichever is the earlier date; and
- (6) any portion of *settlements residue* distributed to a *Network Service Provider* or amount paid on that portion under clause 3.15.10A (if any), or rule 3.18 to a *Network Service Provider*, including any such payments as adjusted by a *routine revised statement* or *special revised statement* issued under rule 3.15, net of any portion of *settlements residue* recovered from the *Network Service Provider* in accordance with clause 3.6.5(a)(4), will be used to offset *network service* charges.
- (b) A *Transmission Network Service Provider* or its jurisdictional delegate is a *Market Participant* for the purposes of clause 3.3.1 and rule 3.15 (excluding clause 3.15.1(b)) but not otherwise.
- (c) Subject to clauses 11.1.1 and 11.1.2:
 - (i) clause 3.6.5(a)(4) does not have effect during the period commencing on 1 July 2006 and ending at the last moment of 30 June 2009 but comes into effect again at the end of that period; and
 - (ii) clauses 3.6.5(a)(4A) and (4B) expire at the end of that period.

3.7 Projected Assessment of System Adequacy

3.7.1 Administration of PASA

- (a) NEMMCO must administer medium term and short term projected assessment of system adequacy processes to be known as PASA.
- (b) The *PASA* is a comprehensive program of information collection, analysis, and disclosure of medium term and short term *power system security* prospects so that *Scheduled Generators* and *Market Participants* are properly informed to enable them to make decisions about *supply*, demand and *outages* of *transmission networks* in respect of periods up to 2 years in advance.
- (c) On a weekly basis *NEMMCO* must:
 - (1) collect and analyse information from all Scheduled Generators, Market Customers, Transmission Network Service Providers and Market Network Service Providers about their intentions for:
 - (i) generation, transmission and Market Network Service maintenance scheduling;
 - (ii) intended *plant* availabilities;
 - (iii) energy constraints;
 - (iv) other *plant* conditions which could materially impact upon *power system security*; and
 - (v) significant changes to *load* forecasts previously notified to *NEMMCO*,

for the following 24 months; and

- (2) following analysis and assessment, *publish* information that will:
 - (i) assist *Scheduled Generators* and *Market Participants* to plan any scheduled work on *plant*; and
 - (ii) inform the *market* of possible *power system security* problems.
- (d) NEMMCO must use its reasonable endeavours to ensure that it provides to Scheduled Generators and Market Participants sufficient information to allow Scheduled Generators and Market Participants to undertake maintenance and outage planning without violating power system security and to allow the market to operate effectively with a minimal amount of intervention by NEMMCO.

3.7.2 Medium term PASA

(a) The *medium term PASA* covers the 24 month period commencing from the *day* 8 *days* after the *day* of publication with a daily resolution, and must be reviewed and issued every week by *NEMMCO* in accordance with the *timetable*.

- (b) *NEMMCO* may publish additional updated versions of the *medium term PASA* in the event of *changes* which, in the judgment of *NEMMCO*, are materially significant and should be communicated to *Scheduled Generators* and *Market Participants*.
- (c) The following *PASA* inputs are to be prepared by *NEMMCO*:
 - (1) forecast *load* which is:
 - (i) to indicate for each *region* the most probable *peak load*, time of the peak, and daily *energy* on the basis of past trends, day type and special events including all anticipated *scheduled load* and other *load* except pumped storage *loads*;
 - (ii) subsequently to be adjusted by an amount anticipated in the forecast as *scheduled load* by *load* bidders;
 - (iii) an indicative half hourly *load* profile for each day type for each *region* for each month of the year;
 - (2) reserve requirements of each *region* determined in accordance with the *medium term capacity reserve standards* set out in the *power system security and reliability standards*; and
 - (3) forecast *inter-regional network constraints* and *intra-regional network constraints* known to *NEMMCO* at the time.
- (d) The following *medium term PASA* inputs must be submitted by each relevant *Scheduled Generator* or *Market Participant* in accordance with the *timetable*:
 - (1) PASA availability of each scheduled generating unit, scheduled load or scheduled network service for each day; and
 - (2) weekly *energy constraints* applying to each *generating unit* or *scheduled load*.
- (e) Network Service Providers must provide to NEMMCO an outline of planned network outages in accordance with the timetable and provide to NEMMCO any other information on planned network outages that is reasonably requested by NEMMCO to assist NEMMCO to meet its obligations under clause 3.7.2(f)(4).
- (f) *NEMMCO* must prepare and *publish* the following information in respect of each day covered by the *medium term PASA* in accordance with clause 3.13.4:
 - (1) forecasts of the most probable peak *power system load* plus required *reserve*, adjusted to make allowance for *scheduled load*, for each *region* and for the total *power system*;
 - (1A) the aggregated MW allowance (if any) made by *NEMMCO* for *generation* from *non-scheduled generating systems* in each forecast of the most probable peak *power system load* referred to in clause 3.7.2(f)(1);

- (1B) in respect of each forecast of the most probable peak *power system load* referred to in clause 3.7.2(f)(1), a value that is the sum of that forecast and the relevant aggregated MW allowance referred to in clause 3.7.2(f)(1A);
- (2) forecasts of the most probable *energy* consumption for each *region* and for the total *power system*;
- (3) aggregate *generating unit PASA availability* for each *region*, calculated by adding the following two categories:
 - (i) the capacity of *generating units* which are able to operate at full capacity on a continuous basis to meet forecast *load*; and
 - (ii) an allocation of *generation* which cannot be *generated* continuously at the nominated capacity of the *generating unit* for the period covered due to specified *energy constraints*;
- (4) identification and quantification of:
 - (i) any projected *violations* of *power system security*;
 - (ii) any days on which low reserve or lack of reserve conditions are forecast to apply;
 - (iii) where a projected *supply* deficit in one *region* can be supplemented by a surplus in another *region* (dependent on forecast *interconnector* transfer capabilities);
 - (iv) forecast *interconnector* transfer capabilities and the discrepancy between forecast *interconnector* transfer capabilities and the forecast capacity of the relevant *interconnector* in the absence of *outages* on the relevant *interconnector* only; and
 - (v) when and where *network constraints* may become binding on the *dispatch* of *generation* or *load*.
- (g) NEMMCO must document the procedure it uses for preparation of the medium term PASA and make it available to all Scheduled Generators and Market Participants on a cost recovery basis.

3.7.3 Short term PASA

- (a) The *short term PASA* must be issued at least daily by *NEMMCO* in accordance with the *timetable*.
- (b) The *short term PASA* covers the period of six *trading days* starting from the end of the *trading day* covered by the most recently *published pre-dispatch schedule* with a half hourly resolution.
- (c) NEMMCO may publish additional updated versions of the short term PASA in the event of changes which, in the judgement of NEMMCO, are materially significant and should be communicated to Scheduled Generators and Market Participants.
- (d) The following *short term PASA inputs* are to be prepared by *NEMMCO*:

- (1) forecast *load* which is to include:
 - (i) the most probable half hourly *profile* on the basis of past trends, day type, and special events; and
 - (ii) all *scheduled load* and other *load* except for pumped storage *loads*,

which must subsequently be adjusted in accordance with *dispatch* offers for scheduled load;

- (2) reserve requirements for each region determined in accordance with the short term capacity reserve standards; and
- (3) anticipated *inter-regional network constraints* and *intra-regional network constraints* known to *NEMMCO* at the time.
- (e) The following *short term PASA* inputs must be submitted by each relevant *Scheduled Generator* and *Market Participant* in accordance with the *timetable* and must represent the *Scheduled Generator's* or *Market Participant's* current intentions and best estimates:
 - (1) availability of each scheduled generating unit, scheduled load or scheduled network service for each trading interval under expected market conditions;
 - (1A) PASA availability of each scheduled generating unit, scheduled load or scheduled network service for each trading interval;
 - (2) generating unit synchronisation/de-synchronisation times for slow start generating units;
 - (3) projected daily *energy* availability for *energy constrained scheduled* generating units and loads; and
 - (4) anticipated self-dispatch level for each scheduled generating unit or scheduled load for each trading interval.
- (f) If *NEMMCO* considers it reasonably necessary for adequate *power system* operation and the maintenance of *power system security*, *Registered Participants* who may otherwise be exempted from providing inputs for the *PASA* process must do so to the extent specified by *NEMMCO*.
- (g) Network Service Providers must provide to NEMMCO an outline of planned network outages in accordance with the timetable and provide to NEMMCO any other information on planned network outages that is reasonably requested by NEMMCO to assist NEMMCO to meet its obligations under clause 3.7.3(h)(5).
- (h) *NEMMCO* must prepare and *publish* the following information as *short* term *PASA* outputs for each trading interval in the period covered in accordance with clause 3.13.4(c):
 - (1) forecasts of the most probable *power system load* plus required *reserve* adjusted to make allowance for *scheduled load*, for each *region* and for the total *power system*;

- (2) forecasts of *power system load* for each *region* with 10% and 90% probability of exceedence;
- (3) forecasts of the most probable *energy* consumption for each *region* and for the total *power system*;
- (4) aggregate *generating unit* availability for each *region* calculated by adding the following two categories:
 - (i) the capacity of *generating units* which are able to operate at full capacity on a continuous basis to meet forecast *power system load*; and
 - (ii) an allocation of *generation* which cannot be *generated* continuously at the offered capacity of the *generating unit* for the period covered due to specified *energy constraints*;
- (4A) aggregate generating unit PASA availability for each region;
- (4B) the aggregated MW allowance (if any) made by *NEMMCO* for generation from *non-scheduled generating systems* in each forecast:
 - (i) of the most probable peak *power system load* referred to in clause 3.7.3(h)(1); and
 - (ii)referred to in clauses 3.7.3(h)(2), (3), (4) and (4A);
- (4C) in respect of each forecast:
 - (i) of the most probable peak *power system load* referred to in clause 3.7.3(h)(1);
 - (ii) referred to in clauses 3.7.3(h)(2), (3), (4) and (4A),
 - a value that is the sum of that forecast and the relevant aggregated MW allowance (if any) referred to in clause 3.7.3(4B); and
- (5) identification and quantification of:
 - (i) any projected *violations* of *power system security*;
 - (ii) any *trading intervals* for which *low reserve* or *lack of reserve* conditions are forecast to apply;
 - (iii) where a projected *supply* deficit in one *region* can be supplemented by a surplus in another *region* (dependent on forecast *interconnector* transfer capabilities);
 - (iv) forecast *interconnector* transfer capabilities and the discrepancy between forecast *interconnector* transfer capabilities and the forecast capacity of the relevant *interconnector* in the absence of outages on the relevant *interconnector* only; and
 - (v) when and where *network constraints* may become binding on the *dispatch* of *generation* or *load*.
- (i) In the event that in performing the *short-term PASA NEMMCO* identifies any projected *low reserve* or *lack of reserve* conditions in respect of a

- participating jurisdiction, then NEMMCO must use its reasonable endeavours to advise the Jurisdictional Co-ordinator for that participating jurisdiction of any potential requirements during such conditions to shed sensitive loads.
- (j) NEMMCO must document the procedure it uses for preparation of the short term PASA and make it available to all Scheduled Generators and Market Participants on a cost recovery basis.

3.7A Market Information on planned network outages

- (a) The objective of this rule 3.7A is to provide *Market Participants* with the information on planned *network outages* required so that *Market Participants* are properly informed to enable them to make projections of *market* outcomes, including projections of *settlement residue auction* outcomes, and decisions with respect to *hedge contracts* and other financial risk management tools. Information on planned *network outages* made available to *Market Participants* by *NEMMCO* and *Transmission Network Service Providers* under this rule 3.7A, however, represents a *Transmission Network Service Provider's* current intentions and best estimates regarding planned *network outages* at the time the information is made available. Further, a *Transmission Network Service Provider* may not be bound to comply with an advised *outage* program. A planned *outage* program may be subject to change due to unforeseen circumstances outside the control of the *Transmission Network Service Provider*. Accordingly, information on planned *network outages* may be subject to change.
- (b) In addition to the obligations imposed on *Transmission Network Service Providers* and *NEMMCO* by rule 3.7 to provide information on planned *network outages* for the purpose of *PASA*, *Transmission Network Service Providers* must provide to *NEMMCO* and *publish*, and *NEMMCO* must determine and *publish*, the information required under this rule 3.7A with respect to planned *network outages*.
- (c) Each month, in accordance with the *timetable* for the provision of information to *medium term PASA*, each *Transmission Network Service Provider* must provide to *NEMMCO* and *publish*:
 - (1) details of the forecast timing and the factors affecting the timing of planned *network outages* and the likelihood that the planned timing will vary;
 - (2) details of the reason for the planned *network outage*, including the nature and extent of works required, if any; and
 - (3) any other information with respect to planned *network outages* that is reasonably requested by *NEMMCO* with a view to achieving the objective set out in rule 3.7A(a),

for those *network outages* planned for the following thirteen months that, in the reasonable opinion of the *Transmission Network Service Provider*, will have or are likely to have a material effect on transfer capabilities.

- (d) Each month, in accordance with the *timetable* for the provision of information to *medium term PASA*, *NEMMCO* must determine and *publish*:
 - (1) an assessment of the projected impact on *intra-regional power* transfer capabilities, the accuracy of which must be appropriate to meet the objective in rule 3.7A(a) in a cost effective manner;
 - (2) an assessment of the projected impact on *inter-regional power* transfer capabilities, the accuracy of which must be appropriate to meet the objective in rule 3.7A(a) in a cost effective manner; and
 - (3) any other information with respect to planned *network outages* that, in *NEMMCO*'s opinion, would assist in achieving the objective set out in rule 3.7A(a),

for those planned *network outages* in respect of which a *Transmission Network Service Provider* has provided information to *NEMMCO* under rule 3.7A(c).

3.8 Central Dispatch and Spot Market Operation

3.8.1 Central Dispatch

- (a) NEMMCO must operate a central dispatch process to dispatch scheduled generating units, scheduled loads, scheduled network services and market ancillary services in order to balance power system supply and demand, using its reasonable endeavours to maintain power system security in accordance with Chapter 4 and to maximise the value of spot market trading on the basis of dispatch offers and dispatch bids.
- (b) The central dispatch process should aim to maximise the value of spot market trading i.e. to maximise the value of dispatched load based on dispatch bids less the combined cost of dispatched generation based on generation dispatch offers, dispatched network services based on network dispatch offers, and dispatched market ancillary services based on market ancillary service offers subject to:
 - (1) dispatch offers, dispatch bids and market ancillary service offers;
 - (2) constraints due to availability and commitment;
 - (3) non-scheduled load requirements in each region;
 - (4) *power system security* requirements determined as described in Chapter 4 and the *power system security and reliability standards*;
 - (5) intra-regional network constraints and intra-regional losses;
 - (6) inter-regional network constraints and inter-regional losses;
 - (7) constraints consistent with registered bid and offer data;
 - (8) current levels of dispatched generation, load and market network services;
 - (9) constraints imposed by ancillary services requirements;

- (10) arrangements designed to ensure pro-rata loading of tied *registered* bid and offer data; and
- (11) ensuring that as far as reasonably practical, in relation to a *direction* or *dispatch* of *plant* under a *reserve contract*:
 - (A) the number of Affected Participants is minimised; and
 - (B) the effect on *interconnector flows* is minimised.
- (c) *NEMMCO* must establish procedures to allow relaxation of *power system* constraints listed in clause 3.8.1(b) in order to resolve infeasible dispatch solutions, subject to the following principles:
 - (1) the procedures are developed in consultation with *Registered Participants* to achieve a reasonable *dispatch* outcome while maintaining consistency with *NEMMCO's* obligations to maintain *power system security* and the pricing principles listed in clause 3.9.1; and
 - (2) *NEMMCO* must report to *Registered Participants* any events requiring the relaxation of these *constraints*.
- (d) *NEMMCO* must develop and *publish* a *dispatch* algorithm to be used by *NEMMCO* for the purpose of *central dispatch* and pricing in accordance with rules 3.8 and 3.9.
- (e) NEMMCO must use the dispatch algorithm to determine the loading level in MW for each scheduled generating unit, scheduled network service or scheduled load in each dispatch interval in accordance with the principles set out in clause 3.8.1(b).
- (e1) *NEMMCO* must use the *dispatch algorithm* to determine the quantity of each *market ancillary service* which will be *enabled* for each *ancillary service generating unit* or *ancillary service load*.
- (e2) When *NEMMCO* determines the quantity of each *market ancillary service* which will be *enabled*, *NEMMCO* must determine:
 - (1) the required quantity of each *market ancillary service* that may be sourced from any *region* (referred to as the "*global market ancillary service requirement*"); and
 - (2) any required quantity of such *market ancillary service* which must only be sourced from one or more nominated *regions* (referred to as a "*local market ancillary service requirement*").
- (f) *NEMMCO* may investigate from time to time:
 - (1) the scope for further development of the *dispatch algorithm* beyond the minimum requirements specified in clause 3.8.1(b); and
 - (2) the sufficiency of the *dispatch algorithm* in meeting the minimum requirements specified in clause 3.8.1(b),

and following compliance with the *Rules consultation procedures*, *publish* a report setting out its recommendations.

3.8.2 Participation in central dispatch

- (a) A Scheduled Generator must submit generation dispatch offers in respect of each of its scheduled generating units for each trading day in accordance with clause 3.8.6.
- (b) Generation dispatch offers for a scheduled generating unit must include a specified self-dispatch level and may include prices and MW quantities for increased or decreased levels of generation above or below this self-dispatch level.
- (b1) A Scheduled Network Service Provider must submit network dispatch offers in respect of each of its scheduled network services for each trading day in accordance with clause 3.8.6A.
- (c) Subject to clause 3.8.2(d), dispatch bids may be submitted by Market Participants in respect of scheduled loads, in accordance with clause 3.8.7, and may specify prices and MW quantities for any trading interval either for reductions or increases in load.
- (c1) Market ancillary service offers may be submitted by Ancillary Service Providers in respect of market ancillary services in accordance with clause 3.8.7A.
- (d) Dispatch bids and market ancillary service offers will only be included in the central dispatch process by NEMMCO if it is satisfied that adequate communication and/or telemetry is available to support the issuing of dispatch instructions and the audit of responses.
- (e) If *NEMMCO* considers it reasonably necessary for adequate system operation and the maintenance of *power system security*, *Registered Participants* who may otherwise be exempted from participating in the *central dispatch* process must do so to the extent and in the capacity specified by *NEMMCO*.

3.8.3 Bid and offer aggregation guidelines

- (a) Scheduled Generators or Market Participants who wish to aggregate their scheduled generating units, scheduled network services or scheduled loads for the purpose of central dispatch and settlements must apply to NEMMCO to do so.
- (b) *NEMMCO* must approve applications for aggregation if the following conditions are fulfilled by the *Scheduled Generator* or *Market Participant*:
 - (1) aggregated *generating units* or *loads* must be *connected* at a single site with the same *intra-regional loss factor* and be operated by a single *Scheduled Generator* or *Market Participant*;
 - (1a) aggregated *scheduled network services* must be *connected* at the same two sites, have the same *intra-regional loss factors*, have the same

- distribution loss factors where applicable and be operated by the same Scheduled Generator or Market Participant;
- (2) *power system security* must not be materially affected by the proposed aggregation;
- (3) control systems such as automatic generation control systems must satisfy the Rules after aggregation;
- (4) communication protocols for operational control between *NEMMCO* and the aggregated *generating units*, *scheduled network services* or *loads* must satisfy the *Rules* after aggregation; and
- (5) *metering systems* for *settlements* purposes must satisfy the *Rules* after aggregation.
- (c) Notwithstanding that one or more of the conditions set out in clause 3.8.3(b) may not have been fulfilled by the *Scheduled Generator* or *Market Participant*, *NEMMCO* may approve an application for aggregation provided that such aggregation would not materially distort *central dispatch*.
- (d) All requirements in the *Rules* applying to *generating units*, *scheduled network services* and *scheduled loads* are to apply equally to aggregated *generating units*, aggregated *scheduled network services* and aggregated *scheduled loads*.
- (e) *NEMMCO* must evaluate applications for aggregation and reply within 20 *business days* of receipt of the application setting out whether the application is to be approved and the conditions that apply to the proposed approval.
- (f) Scheduled Generators and Market Participants that have been granted aggregated status must, if required by NEMMCO, declare individual generating unit, scheduled network service or scheduled load availability and operating status to NEMMCO in the PASA process under rule 3.7 to allow power system security to be effectively monitored.
- (g) NEMMCO must provide reasons to a Scheduled Generator or Market Participant whose application for aggregation is denied by NEMMCO.
- (h) [Deleted]
- (i) NEMMCO must notify Scheduled Generators and Market Participants of newly approved aggregations.
- (j) NEMMCO must maintain a database of aggregated scheduled generating units, scheduled network services and scheduled loads and their components.

3.8.4 Notification of scheduled capacity

All Scheduled Generators and Market Participants with scheduled generating units, scheduled network services and/or scheduled loads must inform NEMMCO of their available capacity as follows in accordance with the timetable:

- (a) Scheduled Generators and Market Participants must notify NEMMCO of the available capacity of each scheduled generating unit, scheduled network service and/or scheduled load for each trading interval of the trading day;
- (b) subsequent *changes* may only be made to the information provided under clause 3.8.4(c), (d) and (e) in accordance with clause 3.8.22;
- (c) for Scheduled Generators, two days ahead of each trading day:
 - (1) a MW capacity profile that specifies the MW available for each of the 48 trading intervals in the trading day;
 - (2) estimated *commitment* or *decommitment* times;
 - (3) daily energy availability for energy constrained generating units; and
 - (4) ramp rate constraints;
- (d) for scheduled loads, two days ahead of each trading day:
 - (1) a MW capacity profile that specifies the MW available for *dispatch* for each of the 48 *trading intervals* in the *trading day*;
 - (2) daily energy availability for energy constrained scheduled load; and
 - (3) ramp rate constraints;
- (e) for scheduled network services, two days ahead of each trading day:
 - (1) a MW capacity profile that specifies the *power transfer capability* in each direction available for each of the 48 *trading intervals* in the *trading day*; and
 - (2) ramp rate constraints.

3.8.5 Submission timing

- (a) To be valid for inclusion in the *central dispatch* process, a *dispatch bid* or *dispatch offer* or *market ancillary service offer* must be submitted according to the *timetable*.
- (b) Subject to clause 3.8.22, changes to the:
 - (1) MW quantities in the dispatch bids;
 - (2) MW quantities and off-loading prices in the generation dispatch offers; and
 - (3) MW quantities in the *network dispatch offers*,
 - may be made after the relevant deadline in the timetable.
- (c) The submission of dispatch bids, dispatch offers and market ancillary service offers to NEMMCO must be made using the electronic communication system unless otherwise approved by NEMMCO.

3.8.6 Generating unit offers for dispatch

The following requirements apply to all *dispatch offers* for *scheduled generating units*:

- (a) dispatch offers must contain the Scheduled Generator's intended self-dispatch level for each trading interval, and may contain up to 10 price bands which may be either for possible dispatch above the intended self-dispatch level or for possible off-loading below the intended self-dispatch level by dispatch instruction;
- (b) the *dispatch offer* must specify for each of the 48 *trading intervals* in the *trading day*:
 - (1) a MW capacity for the intended self-dispatch level;
 - (2) an incremental MW amount for each *price band* specified in the *dispatch offer*; and
 - (3) a MW/min ramp rate capability;
- (c) the MW quantities specified are to apply at the terminals of the *scheduled* generating unit or, with *NEMMCO*'s agreement, at any other point in the *Scheduled Generator*'s electrical installation or on the *network*;
- (d) a dispatch offer which specifies a self-dispatch level of more than zero must specify at least one price band for off-loading below the intended self-dispatch level and the total MW quantity in price bands specified for off-loading in each trading interval must equal the MW quantity of the self-dispatch level for that trading interval to enable possible off-loading to a zero dispatch level;
- (e) the *dispatch offer* must specify a *loading price* or an *off-loading price* for each *price band* specified in the *dispatch offer*, in dollars and whole cents per MWh, and this price is to apply to the *price band* throughout the *trading day*;
- (f) prices specified for each *price band* specified in the *dispatch offer* must increase monotonically with an increase in available MWs;
- (g) prices specified are to apply at the *scheduled generating unit's connection point* and for the purposes of *central dispatch* shall be referred to the *regional reference node* to which that *connection point* is assigned as follows:

$$RP = DOP \div LF$$

where

RP is the price specified in the *dispatch offer* when referred to the appropriate *regional reference node*;

DOPis the price as specified in the *dispatch offer*; and

LF where the scheduled generating unit's connection point is a transmission network connection point, is the intra-regional loss

factor at that connection point, or where the scheduled generating unit's connection point is a distribution network connection point, is the product of the distribution loss factor at that connection point multiplied by the intra-regional loss factor at the transmission network connection point to which it is assigned;

- (h) *loading prices* offered must be equal to or greater than \$0/MWh and may not exceed the product of *VoLL* multiplied by the *intra-regional loss factor* at the *Scheduled Generator's transmission network connection point* for the *generating unit*;
- (i) off-loading prices must be less than \$0/MWh, i.e. negative in sign and may not be less than the product of the market floor price multiplied by the intra-regional loss factor at the Scheduled Generator's transmission network connection point for the generating unit;
- (j) a *loading price* specified for a *price band* is to be interpreted as the minimum price at which up to the specified MW increment is to be loaded in the *central dispatch* process;

(k) [Deleted]

- (l) an *off-loading price* specified for a *price band* is to be interpreted as the maximum price payable to *NEMMCO* by the *Scheduled Generator* in respect of the *generating unit*'s *sent out generation* with the *generating unit*'s output reduced below its specified *self-dispatch level* in the *central dispatch* process by an amount less than the specified MW increment;
- (m) the MW quantity specified in each *price band* in each *trading interval* must be specified in whole MW; and
- (n) the *dispatch offer* may specify the daily *energy* available for *energy* constrained generating units.

3.8.6A Scheduled network service offers for dispatch

The following requirements apply to a *network dispatch offer* to provide scheduled network services:

- (a) the *network dispatch offer* may contain up to a maximum of ten *price bands* for each direction of power flow for the *scheduled network service*;
- (b) the *network dispatch offer* must specify for each of the 48 *trading intervals* in the *trading day*:
 - (1) an incremental power delivery range for each *price band* specified in the *network dispatch offer*; and
 - (2) a MW/min ramp rate capability;
- (c) the *network dispatch offer* must specify a price for each *price band* in dollars and whole cents per MWh and this price is to apply to the *price band* throughout the *trading day*;

- (d) within the set of *price bands* applying to a particular direction of power flow, prices specified for each *price band* specified in the *network dispatch* offer must increase monotonically with an increase in available MWs;
- (e) if negative prices are employed, the absolute value of the most negative price in one direction cannot exceed the price for the first *price band* in the opposite direction, after adjustment for losses;
- (f) the price specified in a *price band* for power transfer from the *scheduled network service's connection point* A to *connection point* B is to be interpreted in the *central dispatch* process as meaning that the *Scheduled Network Service Provider* is willing to deliver an increment of power to *connection point* B, within the power delivery range of the power band, provided that the net revenue which is expected to be derived from that increment per MWh delivered to *connection point* B is not less than the specified price;
- (g) for the purposes of this clause 3.8.6A, the net revenue that a *Scheduled Network Service Provider* expects to receive for energy delivered by the *scheduled network service* to *connection point* B is to be determined as follows:

net revenue = $PB \times FB - PA \times FA$

where

PA and PB are the prices at the scheduled network service's

connection points A and B, which are assumed not to

change as a result of the incremental transfer;

FA and FB are the energy transfers scheduled by *central dispatch* for

receipt by the *scheduled network service* at *connection* point A and delivery at *connection point* B respectively;

and

FA and FB are deemed to be related by the loss vs flow relationship

notified in accordance with schedule 3.1;

(h) for the purposes of this clause 3.8.6A, the price at a *connection point* will be deemed to be related as follows to the price at the *regional reference node* to which that *connection point* is assigned:

 $P = RP \times LF$

where

Pis the price at the *connection point*;

RPis the price at the appropriate regional reference node; and

LF where the scheduled network service's connection point is a transmission network connection point, is the intra-regional loss factor at that connection point, or where the scheduled network service's connection point is a distribution network connection point, is the product of the distribution loss factor at that connection point

multiplied by the *intra-regional loss factor* at the *transmission network connection point* to which it is assigned;

- (i) prices specified in the *network dispatch offer* must not exceed *VoLL*; and
- (j) the power delivery range specified in each *price band* in each *trading interval* must be specified in whole MW.

3.8.7 Bids for scheduled load

The following requirements apply to a dispatch bid for scheduled loads:

- (a) the *dispatch bid* must specify whether the *scheduled load* is to be considered as *normally on* or *normally off*;
- (b) the dispatch bid may contain up to a maximum of ten price bands;
- (c) the *dispatch bid* must specify for each of the 48 *trading intervals* in the *trading day*:
 - (1) an incremental MW amount for each *price band* specified in the *dispatch bid*; and
 - (2) a MW/min ramp rate capability;
- (d) the *dispatch bid* must specify a price for each *price band* in dollars and whole cents per MWh and this price is to apply to the *price band* throughout the *trading day*;
- (e) prices specified for each *price band* specified in the *dispatch bid* must increase monotonically with an increase in available MWs;
- (f) prices specified are to apply at the *scheduled load's connection point* and for the purposes of *central dispatch* shall be referred to the *regional reference node* to which that *connection point* is assigned as follows:

$$RP = DOP \div LF$$

where

RP is the price specified in the *dispatch bid* when referred to the appropriate *regional reference node*;

DOP is the price as specified in the dispatch bid; and

- LF where the scheduled load's connection point is a transmission network connection point, is the intra-regional loss factor at that connection point, or where the scheduled load's connection point is a distribution network connection point, is the product of the distribution loss factor at that connection point multiplied by the intra-regional loss factor at the transmission network connection point to which it is assigned;
- (g) MW quantities specified for a *price band* are to apply at the *scheduled load's connection point* or at any other point in the *Market Participant's* electrical installation or on the *network* as agreed to by *NEMMCO*;
- (h) prices specified must be:

- (1) more than the product of the *market floor price* multiplied by the *intra-regional loss factor* at the *scheduled load's transmission network connection point*; and
- (2) less than the product of *VoLL* multiplied by the *intra-regional loss* factor at the scheduled load's transmission network connection point;
- (i) for a *scheduled load* specified in the *dispatch bid* as being *normally on*, the price specified for a *price band* is to be interpreted in the *central dispatch* process as the price at or above which the *scheduled load* will reduce electricity consumed by up to the MW increment specified in that *price band*;
- (j) for a *scheduled load* specified in the *dispatch bid* as being *normally off*, the price specified for a *price band* is to be interpreted in the *central dispatch* process as the price at or below which the *scheduled load* will increase electricity consumed by up to the MW increment specified in that *price band*;
- (k) the MW capacity quantity specified in each *price band* in each *trading interval* must be specified in whole MW;
- (l) the sum of the MW quantities specified in each *price band* in any *trading interval* must not exceed the maximum capacity of the *scheduled load*; and
- (m) the *dispatch bid* may specify the daily *energy* available for *energy* constrained scheduled loads.

3.8.7A Market ancillary services offers

The following requirements apply to all *market ancillary service offers* for each type of *market ancillary service*:

- (a) the market ancillary service offer may contain up to 10 price bands;
- (b) the *market ancillary service offer* must specify for each of the 48 *trading intervals* in the *trading day* an incremental MW amount for each *price band* specified in the *market ancillary service offer*;
- (c) the MW quantities specified are to apply at the nominated *connection point* of the *Market Participant* or, with *NEMMCO's* agreement, at any other point in the *Market Participant's* electrical installation or on the *network*;
- (d) the *ancillary service offer* must specify a price for each *price band* specified in the *market ancillary service offer*, in dollars and whole cents per MW per hour (an 'enabling price'), and this price is to apply to the *price band* throughout the *trading day*;
- (e) *enabling prices* for each *price band* specified in the *market ancillary service offer* must increase monotonically with an increase in available MWs;
- (f) enabling prices are to apply at the nominated connection point of the Market Participant or, with NEMMCO's agreement, at any other point in the Market Participant's electrical installation or on the network;

- (g) *enabling prices* offered must be equal to or greater than \$0 per MW per hour and may not exceed *VoLL*;
- (h) the *enabling price* for a *price band* is to be interpreted as the minimum price at which up to the specified MW response is to be enabled in the *central dispatch* process;
- (i) the MW quantity in each *price band* in each *trading interval* must be specified in whole MW;
- (j) the *market ancillary service offer* must include the following values:
 - (1) the response breakpoint;
 - (2) the upper and lower *enablement limits*; and
 - (3) the response capability; and
- (k) an Ancillary Service Provider that submits a market ancillary service offer must ensure that the ancillary service generating unit or ancillary service load, as the case may be, is at all times capable of responding in the manner contemplated by the market ancillary service specification.

3.8.8 Validation of dispatch bids and offers

- (a) If a dispatch offer, dispatch bid or market ancillary service offer is made in accordance with clauses 3.8.6, 3.8.6A, 3.8.7 or 3.8.7A (whichever is applicable), NEMMCO must make available to the Scheduled Generator or Market Participant who submitted the dispatch offer, dispatch bid or market ancillary service offer the following information without delay:
 - (1) acknowledgement of receipt of a valid *dispatch offer, dispatch bid* or *market ancillary service offer*; and
 - (2) the data contained in the *dispatch offer*, *dispatch bid* or *market ancillary service offer* as it will be used by *NEMMCO* in the *central dispatch* process.
- (b) It is the responsibility of each Scheduled Generator and Market Participant to check that the data contained in its dispatch offer, dispatch bid or market ancillary service offer as received and to be used by NEMMCO in the central dispatch process is correct.
- (c) If a dispatch offer, dispatch bid or market ancillary service offer is not made in accordance with clauses 3.8.6, 3.8.6A, 3.8.7 or 3.8.7A (whichever is applicable), NEMMCO must not include that dispatch offer, dispatch bid or market ancillary service offer in the central dispatch process and must without delay notify the Scheduled Generator or Market Participant submitting the dispatch offer, dispatch bid or market ancillary service offer of its invalidity and provide to that Scheduled Generator or Market Participant details of the invalid data.
- (d) If any details contained within a dispatch offer, dispatch bid or market ancillary service offer are inconsistent with the registered bid and offer data provided by the relevant Scheduled Generator or Market Participant then

NEMMCO has the right to treat that dispatch offer, dispatch bid or market ancillary service offer as invalid and if it does so must notify the Scheduled Generator or Market Participant without delay.

3.8.9 Default offers and bids

- (a) Scheduled Generators and Market Participants may, at any time, submit a dispatch offer, a dispatch bid or a market ancillary service offer in respect of a scheduled generating unit, scheduled load, scheduled network service, ancillary service generating unit or ancillary service load to apply from a specified future trading day.
- (b) A Scheduled Generator or Market Participant may vary or withdraw a default dispatch bid, default dispatch offer or market ancillary service offer at any time prior to the deadline for submissions of dispatch offers, dispatch bids and market ancillary service offers for a trading day in accordance with the timetable.
- (c) Subject to any procedures *published* in accordance with clause 3.8.9(d), *default dispatch offer*, *default dispatch bid* or *market ancillary service offer* applicable to a *trading day* must be included by *NEMMCO* in the *central dispatch* process when the deadline for submission of *dispatch offers*, *dispatch bids* and *market ancillary service offers* for that *trading day* arrives in accordance with the *timetable* if, and only if, no later valid *dispatch offer*, *dispatch bid* or *market ancillary service offer* has been submitted pursuant to clauses 3.8.6, 3.8.6A, 3.8.7, 3.8.7A or 3.8.9(b).
- (d) NEMMCO, in consultation with Scheduled Generators and Market Participants in accordance with the Rules consultation procedures, must develop and publish procedures to determine the circumstances when NEMMCO may use a prior dispatch offer or dispatch bid lodged by a Scheduled Generator or Market Participant as a substitute for a default dispatch offer or default dispatch bid.
- (e) NEMMCO may disregard a default dispatch offer or a default dispatch bid and substitute a prior dispatch offer or dispatch bid or market ancillary service offer lodged by a Scheduled Generator or a Market Participant determined in accordance with a procedure developed under clause 3.8.9(d) as input to PASA, pre-dispatch and central dispatch.

3.8.10 Network constraints

- (a) In accordance with the NEMMCO power system security responsibilities and any other standards set out in Chapter 4, NEMMCO must determine any constraints on the dispatch of scheduled generating units, scheduled network services, scheduled loads, ancillary service generating units or ancillary service loads which may result from planned network outages.
- (b) NEMMCO must represent intra-regional network constraints and interregional network constraints as inputs to the dispatch process in a form that can be reviewed after the trading interval in which they occurred.

(c) The process used by *NEMMCO* to derive the *network constraints* must be clearly documented and made available to *Scheduled Generators* and *Market Participants*.

3.8.11 Ancillary services constraints

- (a) *NEMMCO* must determine the quantity and nature of *ancillary services* which:
 - (1) have been provided or procured in accordance with the *NEMMCO* power system security responsibilities set out in clause 4.3.1 or are otherwise available;
 - (2) are required to be managed in conjunction with *dispatch*; and
 - (3) may impose constraints on *central dispatch*.
- (a1) For each dispatch interval NEMMCO must impose constraints upon the dispatch algorithm to determine the quantity of each global market ancillary service requirement and any local market ancillary service requirements.

3.8.12 System reserve constraints

NEMMCO must use its reasonable endeavours to ensure that the *dispatch* process meets all requirements for *reserves* as described in Chapter 4.

3.8.13 Notification of constraints

NEMMCO must *publish* the parameters used in the *dispatch algorithm* for the modelling of *network constraints*, *regulating capability constraints*, *power system reserve constraints* and *ancillary services*.

3.8.14 Dispatch under conditions of supply scarcity

NEMMCO must ensure that, during times of *supply* scarcity, the actions set out below occur in the following sequence:

- (a) subject to any adjustments which may be necessary to implement action under clause 3.8.14(c), all valid *dispatch bids* and *dispatch offers* submitted by *Scheduled Generators* or *Market Participants* are *dispatched*, including those priced at *VoLL*;
- (b) subject to any adjustments which may be necessary to implement action under clause 3.8.14(c), after all valid dispatch bids and dispatch offers submitted by Scheduled Generators and Market Participants have been exhausted, dispatch bids or dispatch offers submitted by NEMMCO in respect of plant or scheduled network services under contracts for the provision of reserves are dispatched; and
- (c) any further corrective actions required are implemented in accordance with clauses 4.8.5B and 4.8.9.

3.8.15 [Deleted]

3.8.16 Equal priced dispatch bids and dispatch offers

If there are scheduled generating units or scheduled loads, in the same region, for which the prices submitted in dispatch bids or dispatch offers for a particular trading interval result in identical prices at their regional reference node, then the MW quantities specified in the relevant price bands of those dispatch bids or dispatch offers must be dispatched on a pro-rata basis, where this can be achieved without imposing undue costs on any party, or violating other constraints.

3.8.17 Self-commitment

- (a) Slow start generating units are generating units which are unable to synchronise and increase generation within 30 minutes of receiving an instruction from NEMMCO.
- (b) *Slow start generating units* must *self-commit* to be eligible for *dispatch*.
- (c) A Generator may only self-commit a scheduled generating unit in accordance with this clause.
- (d) A Scheduled Generator has a right to synchronise its generating unit to the power system and have NEMMCO dispatch that generating unit subject to the dispatch procedures as set out in this rule 3.8.
- (e) A Scheduled Generator must advise NEMMCO of its intention to synchronise a generating unit in the PASA process. The Scheduled Generator advises this intention by submitting a capacity profile of the generating unit into the market information bulletin board.
- (f) The exact time of *synchronisation* will be subject to directions from *NEMMCO* in accordance with Chapter 4.
- (g) Scheduled Generators and Market Participants must notify NEMMCO of any changes to self-commitment decisions without delay.
- (h) NEMMCO must notify all Scheduled Generators and Market Participants of any changes to commitment decisions without delay.

3.8.18 Self-decommitment

- (a) A Generator may only self-decommit a scheduled generating unit in accordance with this clause.
- (b) Scheduled Generators must notify NEMMCO of their planned self-decommitment decisions in relation to slow start generating units at least 2 days in advance of dispatch.
- (c) Scheduled Generators and Market Participants must notify NEMMCO as soon as practicable of any changes in their self-decommitment decisions.
- (d) *NEMMCO* must notify all *Scheduled Generators* and *Market Participants* of any changes to *de-commitment* decisions as soon as practicable.

3.8.19 Dispatch inflexibilities

- (a) If a Scheduled Generator or Market Participant reasonably expects one or more of its scheduled generating units, scheduled network services or scheduled loads to be unable to operate in accordance with dispatch instructions in any trading interval, due to abnormal plant conditions or other abnormal operating requirements in respect of that scheduled generating unit, scheduled network service or scheduled load, it must advise NEMMCO through the PASA process or in its dispatch offer or dispatch bid in respect of that scheduled generating unit, scheduled network service or scheduled load, as appropriate under this Chapter, that the scheduled generating unit, scheduled network service or scheduled load is inflexible in that trading interval and must specify a fixed loading level at which the scheduled generating unit, scheduled network service or scheduled load is to be operated in that trading interval.
- (b) Where a *Scheduled Generator* or *Market Participant* advises *NEMMCO* that a *scheduled generating unit, scheduled network service* or *scheduled load* is *inflexible* in accordance with clause 3.8.19(a) the *Scheduled Generator* or *Market Participant* must:
 - (1) provide *NEMMCO* with a brief, verifiable and specific reason why the scheduled generating unit, scheduled network service or scheduled load is inflexible at the same time as it advises *NEMMCO* of the inflexibility; and
 - (2) provide to the *AER*, upon written request, in accordance with the guidelines issued by the *AER* from time to time in accordance with the *Rules consultation procedures* such additional information to substantiate and verify the reason for such *inflexibility* as the *AER* may require from time to time. The *AER* must provide information provided to it in accordance with this clause 3.8.19(b)(2) to any *Market Participant* that requests such information, except to the extent that the information can be reasonably claimed to be *confidential information*.
- (c) Other than in trading intervals for which it has been specified by a Scheduled Generator or Market Participant in the relevant dispatch offer or dispatch bid for a scheduled generating unit, scheduled network service or scheduled load that the scheduled generating unit, scheduled network service or scheduled load is inflexible, then NEMMCO will dispatch the scheduled generating unit, scheduled network service or scheduled load in accordance with the prices and price bands specified in the relevant dispatch offer or dispatch bid.
- (d) In respect of scheduled loads or scheduled generating units which are not slow start generating units, Scheduled Generators and Market Participants may provide NEMMCO, as part of the registered bid and offer data in respect of those scheduled loads or generating units, with a dispatch inflexibility profile.

- (e) A dispatch inflexibility profile for a generating unit must contain the following parameters to indicate its MW capacity and time related inflexibilities:
 - (1) The time, T1, in minutes, following the issue of a *dispatch instruction* by *NEMMCO* to increase its loading from 0 MW, which is required for the *plant* to begin to vary its *dispatch* level from 0 MW in accordance with the instruction;
 - (2) The time, T2, in minutes, that the *plant* requires after T1 (as specified in clause 3.8.19(e)(1)) to reach a specified minimum MW *loading level*;
 - (3) The time, T3, in minutes, that the *plant* requires to be operated at or above its minimum *loading level* before it can be reduced below that level:
 - (4) The time, T4, in minutes, following the issue of a *dispatch instruction* by *NEMMCO* to reduce loading from the minimum *loading level* (specified under clause 3.8.19(e)(2)) to zero, that the *plant* requires to completely comply with that instruction.
 - (5) T1, T2, T3 and T4 must all be equal to or greater than zero.
 - (6) The sum (T1 + T2) must be less than or equal to 30 minutes.
 - (7) The sum (T1 + T2 + T3 + T4) must be less than 60 minutes.
- (e1) A dispatch inflexibility profile for a scheduled load must contain parameters to indicate its MW capacity and time related inflexibilities.
- (f) NEMMCO must use reasonable endeavours not to issue a dispatch instruction which is inconsistent with a Scheduled Generator's or Market Participant's dispatch inflexibility profile.

3.8.20 Pre-dispatch schedule

- (a) Each day, in accordance with the timetable, NEMMCO must prepare and publish a pre-dispatch schedule covering each trading interval of the period commencing from the next trading interval after the current trading interval up to and including the final trading interval of the last trading day for which all valid dispatch bids and dispatch offers have been received in accordance with the timetable and applied by the pre-dispatch process.
- (b) The *pre-dispatch* process is to have a resolution of one *trading interval* and no analysis will be made of operations within the *trading interval*, other than to ensure that *contingency capacity reserves* are adequate as set out in Chapter 4.
- (c) NEMMCO must determine the pre-dispatch schedule for each trading interval on the basis of dispatch bids, dispatch offers and market ancillary service offers submitted for that trading interval and NEMMCO's forecast power system load for each region for that trading interval, and by using a

- process consistent with the principles for *central dispatch* as set out in clause 3.8.1.
- (d) In determining the *pre-dispatch schedule NEMMCO* shall not take account of any *dispatch inflexibility profile* submitted in accordance with clause 3.8.19.
- (e) Any inputs made to the *pre-dispatch* process by *NEMMCO* for the purpose of achieving a physically realisable schedule or to satisfy *power system security* requirements must be made prior to release of the *pre-dispatch schedule* and recorded by *NEMMCO* in a manner suitable for audit.
- (f) The *pre-dispatch schedule* must include the details set out in clause 3.13.4(f).
- (g) Each Scheduled Generator, Scheduled Network Service Provider and Market Customer which has classified a scheduled load and Market Participant (which has classified an ancillary service generating unit or ancillary service load) must ensure that it is able to dispatch its plant as required under the pre-dispatch schedule and is responsible for changing inputs to the central dispatch process, if necessary to achieve this, via the rebidding provisions under clause 3.8.22.
- (h) The *pre-dispatch schedule* must be re-calculated and the results re-*published* by *NEMMCO* regularly in accordance with the *timetable*, or more often if a change in circumstances is deemed by *NEMMCO* to be likely to have a significant effect on the operation of the *market*.
- (i) NEMMCO must fully document the operation of the *pre-dispatch* process, including the principles adopted in making calculations required to be included and all such documentation must be made available to *Scheduled Generators* and *Market Participants* at a fee to be set by NEMMCO to cover its costs of supplying such documentation.
- (j) The following *pre-dispatch* outputs relating specifically to a *generating* unit, scheduled network service, scheduled load or ancillary service load operated by a Scheduled Generator or Market Participant must be made available electronically to that Scheduled Generator or Market Participant on a confidential basis:
 - (1) the scheduled times of *commitment* and *de-commitment* of individual *slow start generating units*;
 - (2) scheduled half hourly *loading* for each scheduled entity;
 - (3) scheduled provision of ancillary services;
 - (4) scheduled *constraints* for the provision of *ancillary services*; and
 - (5) scheduled *constraints* due to *network* limitations.
- (k) Where the *pre-dispatch schedule* may have failed to maximise the joint value of *energy* and *ancillary services pre-dispatch* outputs of a *scheduled generating unit*, due to the *scheduled generating unit* operating outside its

enablement limit, NEMMCO must notify the Scheduled Generator or Market Participant operating the scheduled generating unit, electronically on a confidential basis.

3.8.21 On-line dispatch process

- (a) Dispatch bids and dispatch offers must be centrally dispatched by NEMMCO using the dispatch algorithm.
- (a1) A dispatch interval is to be five minutes in duration.
- (b) The *dispatch algorithm* is to be run by *NEMMCO* for each *dispatch interval*. If the *dispatch algorithm* is not successfully run for any *dispatch interval* then the values of the last successful run of the *dispatch algorithm* must be used for that *dispatch interval*.
- (c) Central dispatch results in the setting of dispatch prices and ancillary services prices for each dispatch interval and spot prices for each trading interval in accordance with rule 3.9.
- (d) Where possible, dispatch instructions will be issued electronically via the automatic generation control system or via an electronic display in the Scheduled Generator's or Market Participant's plant control room. NEMMCO may issue dispatch instructions in some other form if in its reasonable opinion the methods described in this clause 3.8.21(d) are not possible.
- (e) A Scheduled Generator or Market Participant must ensure it has facilities to receive dispatch instructions in the manner described in this clause.
- (f) Dispatch instructions that are issued via the automatic generation control system are to be issued progressively at intervals of no more than 5 minutes following re-evaluation of central dispatch to achieve a prompt and smooth implementation of the outcomes of each central dispatch update.
- (g) With the exception of instructions issued by telephone, all *dispatch instructions* and the times at which they are issued are to be logged automatically and *dispatch instructions* that are issued by telephone must be recorded by *NEMMCO*.
- (h) *NEMMCO* may modify or override the *dispatch algorithm* outcome in accordance with the requirements of clause 4.8.9 or due to *plant* not conforming to *dispatch instructions* and in such circumstances *NEMMCO* must record the details of the event and the reasons for its action for audit purposes.

(i) [Deleted]

(j) If a scheduled load or scheduled generating unit, in respect of which a dispatch inflexibility profile has been notified to NEMMCO in accordance with clause 3.8.19, is dispatched from 0 MW in any dispatch interval by the central dispatch process, then the specified dispatch inflexibility profile

- must be used by *NEMMCO* as a *constraint* on the *dispatch* of that *plant* for the relevant subsequent *dispatch intervals*.
- (k) A scheduled load or generating unit whose dispatch is constrained in any dispatch interval due to a dispatch inflexibility profile submitted under clause 3.8.19 cannot be used as the basis for setting the dispatch price in that dispatch interval at any location.
- (l) *NEMMCO* must fully document the operation of the process described in this clause 3.8.21, including the software, algorithms, and the principles adopted in making judgments where they are required in the process and all such documentation must be made available to *Scheduled Generators* and *Market Participants* at a price reflective of costs incurred by *NEMMCO* in providing such documentation.
- (m) Where the *central dispatch* process may have failed to *dispatch* a *scheduled generating unit* to maximise the joint value of *energy* and *ancillary services* due to the *scheduled generating unit* operating outside its *enablement limit*, *NEMMCO* must notify the *Scheduled Generator* or *Market Participant* operating the *scheduled generating unit* on a confidential basis.

3.8.22 Rebidding

- (a) Prices for each *price band* that are specified in *dispatch bids*, *dispatch offers* and *market ancillary service offers* are firm and no changes to the price for any *price band* are to be accepted under any circumstances.
- (b) Subject to clauses 3.8.22(c) and 3.8.22A, a Scheduled Generator or Market Participant may vary its available capacity, daily energy constraints, dispatch inflexibilities and ramp rates of generating units, scheduled network services and scheduled loads, and the response breakpoints, enablement limits and response limits of market ancillary services.
- (c) A Scheduled Generator or Market Participant must provide:
 - (1) all *rebids* to *NEMMCO* electronically unless otherwise approved by *NEMMCO*:
 - (2) to *NEMMCO*, at the same time as the *rebid* is made:
 - (i) a brief, verifiable and specific reason for the *rebid*; and
 - (ii) the time at which the event(s) or other occurrence(s) adduced by the *Scheduled Generator* or *Market Participant* as the reason for the *rebid* occurred;
 - (3) to the *AER*, upon written request, in accordance with guidelines published by the *AER* from time to time under this clause 3.8.22 in accordance with the *Rules consultation procedures* such additional information to substantiate and verify the reason for a *rebid* as the *AER* may require from time to time. The *AER* must provide information provided to it in accordance with this clause 3.8.22(c)(3) to any *Scheduled Generator* or *Market Participant* that requests such

information, except to the extent that the information can be reasonably claimed to be *confidential information*. The guidelines developed by the *AER* under this clause 3.8.22(c)(3) must include:

- (i) the amount of detail to be included in the information provided to *NEMMCO* under clause 3.8.22(c)(2); and
- (ii) procedures for handling claims by *Scheduled Generators* or *Market Participants* in accordance with clause 3.8.22(c)(3) or 3.8.19(b)(2) that information provided to the *AER* by such *Scheduled Generators* or *Market Participants* under those clauses is *confidential information*.

The *AER* must publish the guidelines developed under this clause 3.8.22 and may amend such guidelines from time to time.

(d) NEMMCO must:

- (1) subject to the *Scheduled Generator* or *Market Participant* complying with clause 3.8.22(c)(1) and (c)(2)(i) and (ii), accept the *rebid*; and
- (2) *publish*, in accordance with clause 3.13.4(p), the time the *rebid* was made and the reason provided by the *Scheduled Generator* or *Market Participant* under clause 3.8.22(c)(2)(i).

3.8.22A Variation of offer, bid or rebid

- (a) Scheduled Generators and Market Participants must make dispatch offers, dispatch bids and rebids in good faith.
- (b) In clause 3.8.22A(a) a *dispatch offer*, *dispatch bid* or *rebid* is taken to be made in good faith if, at the time of making such an offer, bid or *rebid*, a *Scheduled Generator* or *Market Participant* has a genuine intention to honour that offer, bid or *rebid*, if the material conditions and circumstances upon which the offer, bid or *rebid* were based remain unchanged until the relevant *dispatch interval*.
- (c) A Scheduled Generator or Market Participant may be taken to have contravened clause 3.8.22A(a) notwithstanding that, after all the evidence has been considered, the intention of the Scheduled Generator or Market Participant is ascertainable only by inference from the conduct of the Scheduled Generator or Market Participant, or of any other person, or from relevant circumstances.

3.8.23 Failure to conform to dispatch instructions

- (a) If a scheduled generating unit, scheduled network service or scheduled load fails to respond to a dispatch instruction within a tolerable time and accuracy (as determined in NEMMCO's reasonable opinion), then:
 - (1) the scheduled generating unit, scheduled network service or scheduled load (as the case may be) is to be declared and identified as non-conforming; and

(2) the scheduled generating unit, scheduled network service or scheduled load (as the case may be) cannot be used as the basis for setting spot prices.

(3) [Deleted]

- (b) If a scheduled generating unit, scheduled network service or scheduled load is identified as non-conforming under clause 3.8.23(a):
 - (1) NEMMCO must advise the Scheduled Generator, Scheduled Network Service Provider or Market Customer that the generating unit, scheduled network service or scheduled load is identified as non-conforming, and request a reason for the non-compliance with the dispatch instruction, which reason is to be logged;
 - (2) if in *NEMMCO's* opinion modification of *plant* parameters is necessary or desirable, *NEMMCO* must request the *Scheduled Generator*, *Scheduled Network Service Provider* or *Market Customer* to submit modified *plant* parameters to satisfy *NEMMCO* that a realistic real time *dispatch* schedule can be carried out;
 - (3) should a *Scheduled Generator* fail to meet the requests set out in clauses 3.8.23(b)(1) and (2) or if *NEMMCO* is not satisfied that the *generating unit* will respond to future *dispatch instructions* as required, *NEMMCO* must direct the *generating unit's* output to follow, as far as is practicable, a specified output profile to be determined at its discretion by *NEMMCO*;
 - (4) should a *Scheduled Network Service Provider* fail to meet the requests set out in clauses 3.8.23(b)(1) and (2) or if *NEMMCO* is not satisfied that the *scheduled network service* will respond to future *dispatch instructions* as required, *NEMMCO* must direct the *scheduled network service* to follow, as far as is practicable, a specified transfer profile to be determined at its discretion by *NEMMCO*; and
 - (5) should a *Market Customer* not meet the requests set out in clauses 3.8.23(b)(1) and (2) within a reasonable time of the request, or if *NEMMCO* is not satisfied that the *scheduled load* will respond to future *dispatch instructions* as required, *NEMMCO* acting reasonably may invoke a *default dispatch bid* lodged by the relevant *Market Customer* or apply *constraints* as it deems appropriate.
- (c) Until a Scheduled Generator, Scheduled Network Service Provider or Market Customer satisfactorily responds to the requests under clauses 3.8.23(b)(1) and (2) and NEMMCO is satisfied that the generating unit, scheduled network service or scheduled load (as the case may be) will respond to future dispatch instructions as required, the generating unit, scheduled network service or scheduled load (as the case may be) continues to be non-conforming.
- (d) If a generating unit, scheduled network service or scheduled load (as the case may be) continues to be non-conforming after a reasonable period of

- time, *NEMMCO* must prepare a report setting out the details of the non-conformance and forward a copy of the report to the *Scheduled Generator*, *Scheduled Network Service Provider* or *Market Customer* (as the case may be) and the *AER*.
- (e) The direction referred to in clauses 3.8.23(b)(3) and (4) must remain in place until the *Scheduled Generator* or *Scheduled Network Service Provider* (whichever is relevant) satisfies *NEMMCO* of rectification of the cause of the non-conformance.
- (f) If an *ancillary service generating unit* or *ancillary service load* is *enabled* to provide a *market ancillary service* and fails to respond in the manner contemplated by the *market ancillary service specification* (as determined in *NEMMCO's* reasonable opinion), then:
 - (1) the *ancillary service generating unit* or *ancillary service load* is to be declared and identified as non-conforming;
 - (2) NEMMCO must advise the relevant Market Participant that the ancillary service generating unit or ancillary service load is identified as non-conforming, and request a reason for the non-conformance. The relevant Market Participant must promptly provide a reason if requested to do so, and the reason is to be logged; and
 - (3) NEMMCO may set a fixed level for the relevant ancillary service (in this clause 3.8.23 called the 'fixed constraint') for the ancillary service generating unit or ancillary service load and the relevant Market Participant must ensure that the ancillary service generating unit or ancillary service load complies with the fixed constraint set by NEMMCO.
- (g) NEMMCO must lift the fixed constraint in respect of an ancillary service generating unit or ancillary service load when NEMMCO is reasonably satisfied (as a result of a test or otherwise) that the ancillary service generating unit or ancillary service load is capable of responding in the manner contemplated by the market ancillary service specification.
- (h) In assessing a report of non-conformance with a *dispatch instruction* by a *scheduled load*, the *AER* shall have regard to whether a *default dispatch bid* had been lodged with *NEMMCO* and was, or could have reasonably been, applied in the circumstances applicable to that *scheduled load*.

3.8.24 Scheduling errors

- (a) A scheduling error is any one of the following circumstances:
 - (1) the dispute resolution panel determines under rule 8.2 that NEMMCO has failed to follow the central dispatch process set out in this rule 3.8; or
 - (2) *NEMMCO* declares that it failed to follow the *central dispatch* process set out in this rule 3.8; or

- (3) *NEMMCO* determines under clause 3.9.2B(d) that a *dispatch interval* contained a manifestly incorrect input.
- (b) Spot prices and market ancillary service prices will not be adjusted due to the occurrence of a scheduling error except where the scheduling error arises through the application of clause 3.9.2B.

3.9 Price Determination

3.9.1 Principles applicable to spot price determination

- (a) The principles applying to the determination of prices in the *spot market* are as follows:
 - (1) a dispatch price at a regional reference node is determined by the central dispatch process for each dispatch interval;
 - (2) a spot price at a regional reference node is the time-weighted average of the dispatch prices at that regional reference node in a trading interval;
 - (2A) the *central dispatch* process must determine an *ancillary service price* for each *market ancillary service* at each *regional reference node* for every *dispatch interval*;
 - (3) dispatch prices determine dispatch such that a generating unit or load whose dispatch bid or dispatch offer at a location is below the spot price at that location will normally be dispatched;
 - (3A) generating units, scheduled network services or scheduled loads which operate in accordance with a direction, are to be taken into account in the central dispatch process, but the dispatch offer, in the case of a generating unit or scheduled network service, which operates in accordance with a direction, or the dispatch bid, in the case of a scheduled load which operates in accordance with a direction, will not be used in the calculation of the dispatch price in the relevant dispatch interval;
 - (3B) ancillary service generating units and ancillary service loads the subject of a fixed constraint (within the meaning of clause 3.8.23(f)) are to be taken into account in the central dispatch process, but the price in a market ancillary service offer which operates in accordance with a fixed constraint will not be used in the calculation of the ancillary service price for that market ancillary service in the relevant dispatch interval;
 - (3C) generating units or loads which operate in accordance with a direction to provide an ancillary service are to be taken into account in the central dispatch process, but the price in a market ancillary service offer which operates in accordance with a direction, will not be used in the calculation of the ancillary service price for that market ancillary service in the relevant dispatch interval;

- (4) network losses, network constraints, the availability of scheduled network services and network dispatch offers are taken into account in the determination of dispatch and consequently affect dispatch prices, spot prices and (apart from network losses) ancillary services prices;
- (5) where the *energy* output of a *Registered Participant* is limited above or below the level at which it would otherwise have been *dispatched* by *NEMMCO* on the basis of its *dispatch offer* or *dispatch bid* due to an *ancillary services direction*, the *Registered Participant's dispatch offer* or *dispatch bid* is taken into account in the determination of *dispatch* but the *dispatch offer* or *dispatch bid* will not be used in the calculation of the *dispatch price* for *energy* in the relevant *dispatch interval*;
- (5A) market ancillary service offers, in other ancillary services markets, due to an ancillary services direction are taken into account in the determination of dispatch and consequently affect ancillary service prices in those other ancillary services markets;
- (6) when the *spot price* is determined, it applies to both sales and purchases of electricity at a particular location and time;
- (6A) when an *ancillary service price* is determined for an *ancillary service*, it applies to purchases of that *ancillary service*;
- (7) spot prices and dispatch prices provide Market Participants with signals as to the value of providing or cost of consuming electricity at a particular location at a particular time; and
- (7A) *ancillary service prices* provide *Ancillary Service Providers* with signals as to the value of providing the relevant *market ancillary service* within a particular *region* at a particular time.
- (b) A single regional reference price which is the spot price at the regional reference node provides a reference from which the spot prices are determined within each region.
- (c) The *local spot price* at each *transmission network connection point* is the *spot price* at the *regional reference node* for the *region* to which the *connection point* is assigned multiplied by the *intra-regional loss factor* applicable to that *connection point*.

3.9.2 Determination of spot prices

- (a) [Deleted]
- (b) [Deleted]
- (c) Each time the *dispatch algorithm* is run by *NEMMCO*, it must determine a *dispatch price* for each *regional reference node* for a *dispatch interval* in accordance with clause 3.8.21(b), provided that if *NEMMCO* fails to run the *dispatch algorithm* to determine *dispatch prices* for any *dispatch interval*

- then the *dispatch price* for that *dispatch interval* is the last *dispatch price* determined by the *dispatch algorithm* prior to the relevant *dispatch interval*.
- (d) The *dispatch price* at a *regional reference node* represents the marginal value of *supply* at that location and time, this being determined as the price of meeting an incremental change in *load* at that location and time in accordance with clause 3.8.1(b).
- (e) Notwithstanding clauses 3.9.2(c) or (d), for any dispatch interval if:
 - (1) the *dispatch price* for that *dispatch interval* has not already been set by the *central dispatch* process and *NEMMCO* reasonably determines that the *central dispatch* process may determine that:
 - (i) all *load* in a *region* could not otherwise be supplied and *NEMMCO* issues instructions that are current for that *dispatch interval* to *Network Service Providers* or *Market Participants* to shed *load*; or
 - (ii) no more *interruptible load* that had been shed as a result of a *contingency event* can be restored in a *dispatch interval* immediately following the restoration of the frequency of the *power system* to within the normal band of the *frequency operating standards*,
 - then, subject to 3.9.2(f), *NEMMCO* must set the *dispatch price* at that *region's regional reference node* to equal *VoLL*;
 - (2) NEMMCO has declared a dispatch interval to be an intervention price dispatch interval under clause 3.9.3(a), then subject to clauses 3.9.3(a2) and 3.9.3(a3) NEMMCO must set the dispatch price in accordance with clause 3.9.3; and
 - (3) [Deleted]
 - (4) an *administered price period* in accordance with rule 3.14 applies, then *NEMMCO* must limit the *dispatch price* in accordance with clause 3.14.2(d1).
- (f) If interruptible load is shed as a result of a contingency event and NEMMCO has not set the dispatch price to equal VoLL pursuant to clause 3.9.2(e)(1)(i), NEMMCO must not set the dispatch price to VoLL pursuant to clause 3.9.2(e)(1)(ii) prior to the commencement of the third dispatch interval following the restoration of the power system to a secure operating state and the restoration of the frequency of the power system to the normal band of the frequency operating standards.
- (g) [Deleted]
- (h) The *spot price* at a *regional reference node* for a *trading interval* equals the time weighted average of the *dispatch prices* at the *regional reference node* for each of the *dispatch intervals* in the *trading interval*, provided that if *NEMMCO* has made a declaration that the *market* is suspended under clause 3.14.3, then the *spot price* in any *trading interval* during the period during

which the *spot market* is suspended must be determined in accordance with clause 3.14.5.

- (i) [Deleted]
- (j) [Deleted]
- (k) If a test is being conducted on a *generating unit* or *scheduled load* in accordance with clause 3.11.7 and for the purpose of conducting that test, the *generating unit* or *scheduled load* is excluded from *central dispatch*, then that *generating unit* or *scheduled load* cannot be used to set the *dispatch price* for *energy* in the relevant *dispatch interval*.

3.9.2A Determination of ancillary services prices

- (a) Each time the *dispatch algorithm* is run by *NEMMCO*, it must determine an ancillary service price for each market ancillary service for each regional reference node which is to apply until the next time the *dispatch algorithm* is run, provided that if *NEMMCO* fails to run the *dispatch algorithm* to determine ancillary service prices for any dispatch interval then the ancillary service price for that dispatch interval is the last ancillary service price determined by the dispatch algorithm prior to the relevant dispatch interval.
- (b) For each *market ancillary service*, other than the *regulating raise service* and the *regulating lower service*, each time the *dispatch algorithm* is run by NEMMCO where a local *ancillary services* constraint has been applied, NEMMCO must:
 - (1) calculate the marginal price of meeting any *global market ancillary* service requirement for that service;
 - (2) calculate the marginal price of meeting each *local market ancillary* service requirement for that service and;
 - (3) identify for each *local market ancillary service requirement* the *regions* requiring the service.
- (b1) An ancillary service price for a region is the sum of:
 - (1) the marginal price of meeting any *global market ancillary service* requirement for that service; and
 - (2) the marginal price of meeting each *local market ancillary service* requirement for that service in that region.
- (c) If an *ancillary service price* determined using the *dispatch algorithm* under clause 3.9.2A(a):
 - (1) is less than zero, then the *ancillary service price* is reset to zero; and
 - (2) is greater than VoLL, then the ancillary service price is reset to VoLL.
- (c1) If a marginal price calculated pursuant to clause 3.9.2A(b) is greater than *VoLL*, then that marginal price is reset to *VoLL*.

(d) If a test is being conducted on a *generating unit* or *scheduled load* in accordance with clause 3.11.7 and for the purpose of conducting that test, the *generating unit* or *scheduled load* is excluded from *central dispatch*, then that *generating unit* or *scheduled load* cannot be used to set *market ancillary service prices*.

3.9.2B Pricing where NEMMCO determines a manifestly incorrect input

(a) For the purposes of this clause:

"Input" means any value that is used by the *dispatch algorithm* including measurements of *power system* status, five minute demand forecast values, *constraint* equations entered by *NEMMCO*, or software setup but not including *dispatch bids* and *dispatch offers* submitted by *Registered Participants*.

"Last correct dispatch interval" means the most recent dispatch interval preceding the affected dispatch interval that is not itself an affected dispatch interval.

- (b) *NEMMCO* may apply the automated procedures developed in accordance with clause 3.9.2B(h), to identify a *dispatch interval* as subject to review ("a *dispatch interval* subject to review").
- (c) NEMMCO may also determine that a dispatch interval is subject to review if NEMMCO considers that it is likely to be subject to a manifestly incorrect input, but only where the dispatch interval immediately preceding it was a dispatch interval subject to review.
- (d) *NEMMCO* must determine whether a *dispatch interval* subject to review contained a manifestly incorrect input to the *dispatch algorithm* ("an affected *dispatch interval*").
- (e) Where *NEMMCO* determines an affected *dispatch interval*, *NEMMCO* must:
 - (1) replace all *dispatch prices* and *market ancillary services* prices with the corresponding prices for the last correct *dispatch interval*; and
 - (2) recalculate, in accordance with clause 3.9.2(h), and adjust all *spot prices* relevant to each affected *dispatch interval*.
- (f) *NEMMCO* may only carry out the action described in clause 3.9.2B(e) if no more than 30 minutes have elapsed since the publication of the *dispatch prices* for the *dispatch interval* subject to review.
- (g) As soon as reasonably practicable after the action as described in clause 3.9.2B(e), *NEMMCO* must *publish* a report outlining:
 - (1) The reasons for the determination under clause 3.9.2B(d);
 - (2) Whether that determination was correct:
 - (3) What action will be taken to minimise the risk of a similar event in future.

- (h) *NEMMCO* must, in consultation with *Registered Participants*, develop procedures for the automatic identification of *dispatch intervals* subject to review under clause 3.9.2B (b) (the "automated procedures").
- (i) The purpose of the automated procedures is to detect instances where manifestly incorrect inputs may have resulted in material differences in pricing outcomes.
- (j) The automated procedures must be designed to a performance standard, so that at least the majority of *dispatch intervals* subject to review are found either to:
 - (1) have had manifestly incorrect inputs; or
 - (2) be the result of the *dispatch algorithm* being run with correct inputs immediately after being run with manifestly incorrect inputs.
- (k) At least once each calendar year, *NEMMCO* must review the effectiveness of the automated procedures having regard to the performance standard referred to in clause 3.9.2B(j).
- (l) *NEMMCO* must report on the findings of the review under clause 3.9.2B(k) and must include in that report details of all *dispatch intervals* subject to review that were not affected *dispatch intervals* and an analysis of why such intervals were identified as subject to review.
- (m) If the report demonstrates that the automated procedures have not achieved the performance standards under clause 3.9.2B(j), then *NEMMCO* must carry out a review of the automated procedures, in consultation with *Registered Participants*, and where appropriate, amend the automated procedures.

3.9.3 Pricing in the event of intervention by NEMMCO

- (a) In respect of a dispatch interval in which NEMMCO dispatches plant provided under a reserve contract, or a direction is in effect, NEMMCO must declare the next dispatch interval to be an intervention price dispatch interval.
- (a1) Subject to clauses 3.9.3(a2) and 3.9.3(a3), *NEMMCO* must in accordance with the methodology or assumptions *published* pursuant to clause 3.9.3(b) set the *dispatch price* and *ancillary service prices* for an *intervention price dispatch interval* at the value which *NEMMCO*, in its reasonable opinion, considers would have applied as the *dispatch price* and *ancillary service prices* for that *dispatch interval* in the relevant *region* had the *plant* provided under the *reserve contract* not been *dispatched* or had the *direction* not been issued.
- (a2) *NEMMCO* may continue to set *dispatch prices* pursuant to clause 3.9.2 and *ancillary service prices* pursuant to clause 3.9.2A until the later of:

- (1) the second *dispatch interval* after the first *dispatch interval* in which the *direction* has effect or *NEMMCO dispatches plant* provided under a *reserve contract*; or
- (2) if applicable, the second *dispatch interval* after the restoration of the *power system* to a *secure operating state* after the *direction* was issued.

provided that *NEMMCO* must use its reasonable endeavours to set *dispatch* prices and ancillary service prices pursuant to clause 3.9.3 as soon as reasonably practicable following a *direction* or *dispatch* of *plant* provided under a reserve contract.

- (a3) NEMMCO must continue to set dispatch prices pursuant to clause 3.9.2 and ancillary service prices pursuant to clause 3.9.2A if a direction given to a Registered Participant in respect of plant at the regional reference node would not in NEMMCO's reasonable opinion have avoided the need for the direction issued.
- (b) *NEMMCO* must develop in accordance with the *Rules consultation* procedures and publish details of the methodology it will use, and any assumptions it may be required to make, to determine dispatch prices and ancillary service prices for the purposes of clause 3.9.3(a1). The methodology must wherever reasonably practicable:
 - (1) be consistent with the principles for *spot price* determination set out in clause 3.9.1;
 - (2) enable *NEMMCO* to determine and *publish* such prices in accordance with clause 3.13.4; and
 - (3) be consistent with the principles for *ancillary service price* determination set out in clauses 3.9.2 and 3.9.2A.

3.9.4 VoLL

- (a) VoLL is a price cap which is to be applied to dispatch prices.
- (b) The value of *VoLL* is \$10,000/MWh.
- (c) By 30 April each year the *Reliability Panel* must conduct a review in accordance with the *Rules consultation procedures* and publish a report on the value of *VoLL* that it recommends should apply from 1 July in the year commencing 2 years after the year in which the review is conducted. In conducting a review in accordance with this clause 3.9.4(c) the *Reliability Panel* must have regard, in addition to any other *Rules* obligations, to the potential impact of any proposed increase in *VoLL* on:
 - (1) spot prices;
 - (2) investment in the national electricity market; and
 - (3) the reliability of the *power system*.

- (c1) The value of *VoLL* recommended by the *Reliability Panel* must be a level which the *Reliability Panel* considers will:
 - (1) allow the standard for reliability established by the *Reliability Panel* as part of the *power system security and reliability standards* to be satisfied without use of *NEMMCO's* powers to intervene under clauses 4.8.6(a) and 4.8.9(a);
 - (2) in conjunction with other provisions of the *Rules*, not create risks which threaten the overall integrity of the *market*; and
 - (3) take into account any other matters the *Reliability Panel* considers relevant.
- (c2) The *Reliability Panel's* report must set out the conclusions of its review and the recommendation in relation to the level of *VoLL* along with supporting information including:
 - (1) details of all relevant *market* conditions and circumstances on which the recommendation is based; and
 - (2) an assessment of whether the level of *VoLL* together with the operation of the *cumulative price threshold* has achieved the objectives set out in clauses 3.9.4(c1)(1) and (2).
- (d) As part of the review conducted pursuant to clause 3.9.4(c), the *Reliability Panel* may review the value of *VoLL* for the year commencing on 1 July in the year following the year in which the current review is conducted. The *Reliability Panel* may only recommend a change to the level of *VoLL* for the year commencing on 1 July in the year following the year in which the review is being conducted where:
 - (1) in the *Reliability Panel's* opinion, it is highly probable that the relevant *market* conditions and circumstances on which the recommendation for that year were based as stated in the report from the Panel under clause 3.9.4(c) will not eventuate; and
 - (2) the *Reliability Panel* has given due consideration to the impact of the change to the value of *VoLL* on *Market Participants* and in the event of a decrease in the level of *VoLL*, any alternative arrangements considered necessary to ensure that the reliability standard set out in the *power system security and reliability standards* is maintained.

3.9.5 Application of VoLL

- (a) Dispatch prices at regional reference nodes must not exceed VoLL.
- (b) If *central dispatch* and determination of *dispatch prices* in accordance with rule 3.8, and clauses 3.9.2 and 3.9.3 would otherwise result in a *dispatch price* greater than *VoLL* at any *regional reference node*, then subject to clause 3.9.5(c), the *dispatch price* at that *regional reference node* must be set to *VoLL*.

- (c) If the dispatch price at any regional reference node is set to VoLL under clause 3.9.2 or clause 3.9.5 then dispatch prices at all other regional reference nodes connected by a regulated interconnector or regulated interconnectors that have an energy flow towards that regional reference node must not exceed the product of VoLL multiplied by the average loss factor for that dispatch interval between that regional reference node and the regional reference node at which dispatch prices have been set to VoLL determined in accordance with clause 3.9.5(d).
- (d) *NEMMCO* must determine the average *loss factors* applicable to clause 3.9.5(c) by reference to the *inter-regional loss factor* equations relating to the relevant *regulated interconnector*.

3.9.6 Market Floor Price

- (a) The *market floor price* is a price floor which is to be applied to *dispatch prices*.
- (b) The value of the *market floor price* is \$-1,000/MWh.
- (c) By 30 April each year the *Reliability Panel* must, as part of its review of *VoLL* under clause 3.9.4(c), conduct a review in accordance with the *Rules consultation procedures* and publish a report on the value of the *market floor price* that it recommends should apply from 1 July in the year commencing after the year in which the review is conducted.
- (d) The value of the *market floor price* recommended by the *Reliability Panel* must be a level which the *Reliability Panel* considers will:
 - (1) allow the *market* to clear in most circumstances;
 - (2) not create substantial risks which threaten the overall stability and integrity of the *market*; and
 - (3) take into account any other matters the *Reliability Panel* considers relevant.
- (e) The *Reliability Panel's* report must set out the conclusions of its review and the recommendation in relation to the level of the *market floor price*, including details of all relevant *market* conditions and circumstances on which the recommendation is based.

3.9.6A Application of the Market Floor Price

- (a) Dispatch prices at regional reference nodes must not be less than the market floor price.
- (b) If *central dispatch* and determination of *dispatch prices* in accordance with rule 3.8, and clauses 3.9.2 and 3.9.3 would otherwise result in a *dispatch price* less than the *market floor price* at any *regional reference node*, then subject to clause 3.9.6A(c), the *dispatch price* at that *regional reference node* must be set to the *market floor price*.

- (c) If the dispatch price at any regional reference node is set to the market floor price under clause 3.9.6A then dispatch prices at all other regional reference nodes connected by a regulated interconnector or regulated interconnectors that have an energy flow towards that regional reference node must be equal to or greater than the product of market floor price multiplied by the average loss factor for that dispatch interval between that regional reference node and the regional reference node at which dispatch prices have been set to the market floor price in accordance with clause 3.9.6A.
- (d) *NEMMCO* must determine the average *loss factors* applicable to clause 3.9.6A(c) by reference to the *inter-regional loss factor* equations relating to the relevant *regulated interconnector*.

3.9.7 Pricing for constrained-on scheduled generating units

- (a) In the event that an *intra-regional network constraint* causes a *scheduled generating unit* to be *constrained-on* in any *dispatch interval*, that *scheduled generating unit* must comply with *dispatch instructions* from *NEMMCO* in accordance with its availability as specified in its *dispatch offer* but may not be taken into account in the determination of the *dispatch price* in that *dispatch interval*.
- (b) A Scheduled Generator that is constrained-on in accordance with clause 3.9.7(a) is not entitled to receive from NEMMCO any compensation due to its dispatch price being less than its dispatch offer price.

3.10 [Deleted]

3.11 Ancillary Services

3.11.1 Introduction

- (a) Ancillary services are services that are essential to the management of power system security, facilitate orderly trading in electricity and ensure that electricity supplies are of acceptable quality.
- (b) Market ancillary services are ancillary services which are acquired by NEMMCO as part of the spot market in accordance with this Chapter 3. The prices for market ancillary services are determined using the dispatch algorithm.
- (c) Non-market ancillary services are ancillary services which are not acquired by NEMMCO as part of the spot market, but under agreements which are entered into following a call for offers in accordance with this rule 3.11. The prices for non-market ancillary services are determined in accordance with the relevant ancillary services agreements.

3.11.2 Market ancillary services

(a) The *market ancillary services* are:

- (1) the fast raise service;
- (2) the fast lower service;
- (3) the *slow raise service*;
- (4) the slow lower service;
- (5) the regulating raise service;
- (6) the regulating lower service;
- (7) the delayed raise service; and
- (8) the delayed lower service.
- (b) *NEMMCO* must make and *publish* a *market ancillary service specification* containing:
 - (1) a detailed description of each kind of market ancillary service; and
 - (2) the performance parameters and requirements which must be satisfied in order for a service to qualify as the relevant *market ancillary service* and also when a *Market Participant* provides the relevant kind of *market ancillary service*.
- (c) *NEMMCO* may amend the *market ancillary service specification*, from time to time.
- (d) *NEMMCO* must comply with the *Rules consultation procedures* when making or amending the *market ancillary service specification*.
- (e) An amendment to the *market ancillary service specification* must not take effect until at least 30 days after the amendment has been *published*.

3.11.3 Acquisition of non-market ancillary services

- (a) *NEMMCO* must use reasonable endeavours to acquire *non-market ancillary services* in accordance with the remaining relevant provisions of rule 3.11.
- (b) The requirement for *NEMMCO* to acquire *non-market ancillary services* referred to in clause 3.11.3(a) must be met in the following ways:
 - (1) by *NEMMCO* setting minimum standards which are to be dealt with in *Registered Participants' connection agreements* for the technical performance of the service; or
 - (2) by *NEMMCO* acquiring *ancillary services* in accordance with this rule 3.11 or giving a *direction* in accordance with clause 4.8.9.
- (c) NEMMCO must make and publish a set of minimum technical ancillary service standards that must be met by all Registered Participants who have entered into a connection agreement.
- (d) *NEMMCO* may amend the *minimum technical ancillary service* standards from time to time.
- (e) *NEMMCO* must comply with the *Rules consultation procedures* when making or amending the *minimum technical ancillary service standards*.

- (f) In setting or amending *minimum technical ancillary service standards*, *NEMMCO* must:
 - (1) take into account the provisions of *connection agreements* existing at the time of setting or amending such standards;
 - (2) ensure that proposed *minimum technical ancillary service standards* do not impose more onerous material obligations on parties to existing *connection agreements*, as a whole, than are imposed by such existing *connection agreements*;
 - (3) take into account and minimise the additional costs overall that may arise from proposed *minimum technical ancillary service standards* for parties to existing *connection agreements* generally; and
 - (4) take into account the obligations imposed on parties to *connection* agreements by Chapter 5 of the *Rules* and any applicable derogation.
- (g) The *minimum technical ancillary service standards* are not intended to, nor are to be read or construed as having the effect of:
 - (1) altering any term of a connection agreement;
 - (2) altering the contractual rights or obligations of any of the parties under a *connection agreement* as between those parties; or
 - (3) relieving the parties under any such *connection agreement* of their contractual obligations under such agreement or obligations under Chapter 5 of the *Rules*.
- (h) An amendment to the *minimum technical ancillary service standards* must not take effect until at least 30 days after the *publication* of the report required under the *Rules consultation procedures*.
- (i) NEMMCO is not responsible for payment to a Registered Participant for services provided by that Registered Participant under a connection agreement or under clause 4.9.2(b).
- (j) A Network Service Provider must advise NEMMCO of all ancillary services or similar services to be provided by a Registered Participant under a connection agreement to which that Network Service Provider is a party.
- (k) NEMMCO may instruct a Registered Participant to provide a non-market ancillary service agreed to be provided under a connection agreement and any Registered Participant so instructed must use reasonable endeavours to comply with any such instruction.

3.11.4 Procedure for determining quantities of network control ancillary services

(a) *NEMMCO* must develop and *publish* a detailed description of each *network* control ancillary service.

- (b) *NEMMCO* must develop and *publish* a procedure for determining the quantities of each kind of *network control ancillary service* required for *NEMMCO*:
 - (1) to achieve the *power system security and reliability standards*; and
 - (2) where practicable to enhance *network* transfer capability whilst still maintaining a *secure operating state* when, in *NEMMCO's* reasonable opinion, the resultant expected increase in *network control ancillary service* costs will not exceed the resultant expected increase in benefits of trade from the *spot market*.
- (c) *NEMMCO* may amend the description developed under clause 3.11.4(a) and the procedure referred to in clause 3.11.4(b).
- (d) *NEMMCO* must comply with the *Rules consultation procedures* when making or amending descriptions or procedures under clause 3.11.4.

3.11.4A Guidelines and objectives for acquisition of system restart ancillary services

- (a) The objective for *system restart ancillary services* is to minimise the expected economic costs to the *market* in the long term and in the short term, of a *major supply disruption*, taking into account the cost of supplying *system restart ancillary services*, consistent with the *NEM objective* (the **SRAS objective**).
- (b) *NEMMCO* must use reasonable endeavours to acquire *system restart* ancillary services in accordance with the relevant provisions of clause 3.11.4A.
- (c) Each of the guidelines and *SRAS* description which *NEMMCO* is required to develop and *publish* in accordance with clause 3.11.4A must be:
 - (1) consistent with the SRAS objective;
 - (2) designed to ensure the system restart standard is met; and
 - (3) designed to ensure that the need for *system restart ancillary services* in each *electrical sub-network* is met, to the extent that it is practicable and reasonable to do so, by *NEMMCO* entering into *ancillary services agreements* for the provision of *primary restart services*.

(referred to collectively as the SRAS procurement objectives).

- (d) *NEMMCO* must develop and *publish* a detailed description of each type of *system restart ancillary service* in accordance with the guidelines determined by the *Reliability Panel* under clause 8.8.3(aa)(4), which description must identify:
 - (1) whether the system restart ancillary service is a primary restart service or a secondary restart service;
 - (2) the technical and availability requirements of each type of *system* restart ancillary service; and

- (3) any other matter considered relevant by *NEMMCO*, (the *SRAS* description).
- (e) In order to demonstrate that there is a reasonable degree of certainty that a *facility* is capable of delivering the relevant *system restart ancillary service* if required to do so, *NEMMCO* must develop and *publish* guidelines for undertaking:
 - (1) modelling and assessment of the technical capabilities of *system* restart ancillary services proposed to be submitted as part of a *SRAS* expression of interest or in response to a NMAS invitation to tender;
 - (2) physical testing of *system restart ancillary services* as required by the *NMAS* tender guidelines under clause 3.11.5(b)(2); and
 - (3) any other analysis which *NEMMCO* considers appropriate,

(the SRAS assessment guidelines).

- (f) *NEMMCO* must develop and *publish* the procedure for determining the number, type and location of *system restart ancillary services* required to be procured for each *electrical sub-network* consistent with the *system restart standard* determined by the *Reliability Panel* (the *SRAS* quantity guidelines).
- (g) *NEMMCO* may amend the *SRAS* assessment guidelines, the *SRAS* quantity guidelines and the *SRAS* description.
- (h) *NEMMCO* must comply with the *Rules consultation procedures* when making or amending the *SRAS* assessment guidelines, the *SRAS* quantity guidelines and the *SRAS* description.

3.11.4B Determination of electrical sub-network boundaries

- (a) For the purpose of acquiring *system restart ancillary services* and determining and implementing the *system restart plan*, the *power system* is to be divided into *electrical sub-networks*.
- (b) *NEMMCO* must determine the boundaries of the *electrical sub-networks* in accordance with the guidelines determined by the *Reliability Panel* under clause 8.8.3(aa)(5).
- (c) *NEMMCO* must comply with the *Rules consultation procedures* in determining the boundaries of the *electrical sub-networks*.

3.11.5 Tender process for non-market ancillary services

(a) Except as provided in clause 4.8.9, if *NEMMCO* proposes to acquire a *non-market ancillary service*, *NEMMCO* must call for offers in accordance with the *NMAS* tender guidelines from persons who are in a position to provide the *non-market ancillary service* so as to have the required effect at a *connection* to a *transmission network*.

- (b) *NEMMCO* must determine and *publish* the *NMAS* tender guidelines. Separate *NMAS* tender guidelines may be prepared in respect of *network* control ancillary services and system restart ancillary services. The *NMAS* tender guidelines must contain the following:
 - (1) a requirement for *NEMMCO* to call for *NMAS* expressions of interest before issuing an *NMAS* invitation to tender in relation to any required *non-market ancillary services*;
 - (2) a requirement that a person who is required to provide *SRAS* under an *ancillary services agreement* has the *facility* tested in accordance with:
 - (i) the SRAS assessment guidelines referred to in clause 3.11.4A(e); and
 - (ii) the timeframes for physical testing referred to in subparagraph (5);
 - (3) a requirement that a person who is to provide *network control* ancillary services under an ancillary services agreement has the facility tested in accordance with the NMAS tender guidelines;
 - (4) a requirement for a *Network Service Provider* or other *Registered Participant* to assist a prospective tenderer in identifying and, if possible, resolving issues that would prevent the delivery of effective *system restart ancillary services* proposed by a prospective tenderer;
 - (5) the timeframes over which *NEMMCO's* assessment of *NMAS* tenders and physical testing of selected *non-market ancillary services* will occur:
 - (6) the period for which each *non-market ancillary service* may be contracted;
 - (7) a requirement for a tenderer to provide data, models and parameters of relevant *plant*, sufficient to facilitate a thorough assessment of the *network* impacts and *power station* impacts of the use of the relevant *non-market ancillary service*;
 - (8) the minimum terms and conditions of the *ancillary services agreement* that a successful tenderer would be expected to enter into with *NEMMCO*;
 - (9) the principles *NEMMCO* must adopt in assessing *NMAS* tenders; and
 - (10) any other matter considered appropriate by *NEMMCO*.
- (c) *NEMMCO* may amend the *NMAS* tender guidelines and must comply with the *Rules consultation procedures* when making or amending the *NMAS* tender guidelines.
- (d) A *Registered Participant* is not under any obligation to submit an *NMAS* tender in response to an *NMAS* invitation to tender.
- (e) *NEMMCO* is not under any obligation to accept the lowest priced *NMAS* tender or any *NMAS* tender in response to an *NMAS* invitation to tender.

- (f) A Network Service Provider must:
 - (1) negotiate in good faith with a prospective tenderer in respect of issues the *NMAS* tender guidelines require a prospective tenderer to discuss and, if possible, resolve with a *Network Service Provider*; and
 - (2) participate in, or facilitate, testing of a *system restart ancillary service* required by the *NMAS* tender guidelines where it is reasonable and practicable to do so, and when participating in or facilitating such activities, the *Network Service Provider* will be entitled to recover from the relevant *Registered Participant* all reasonable costs incurred by the *Network Service Provider* and for such purposes the activities of the *Network Service Provider* will be treated as *negotiable services*.
- (g) Where a *Registered Participant* submits a *NMAS* tender in response to a *NMAS* invitation to tender and *NEMMCO* wishes to negotiate an aspect of that *NMAS* tender, *NEMMCO* and the *Registered Participant* must negotiate in good faith concerning that aspect.
- Where the tender is for *network control ancillary services*, in assessing any (h) offers submitted in response to a call for offers under this clause 3.11.5, NEMMCO must seek to acquire the quantity of the relevant kind of network control ancillary services determined in accordance with clause 3.11.4 by competitive tender and in accordance with this clause 3.11.5(h). A tender will be deemed to be a competitive tender for a particular network control ancillary service if the required quantity of that service determined in accordance with clause 3.11.4 can be supplied from the conforming offers received by NEMMCO with any one conforming offer discarded or all conforming offers from any one party discarded. If a tender process is not deemed to be a competitive tender for a particular *network control ancillary* service, then NEMMCO and those Registered Participants that submitted conforming and non-conforming tenders selected by NEMMCO, must negotiate in good faith to agree reasonable terms and conditions for the supply of the relevant kind of *network control ancillary service*, taking into account the need to:
 - (1) subject to clause 3.11.5(h)(2), so far as practicable minimise the overall cost of supply of that service; and
 - (2) appropriately remunerate the providers of the relevant *network control* ancillary service for that service.
- (i) If NEMMCO and the Registered Participants selected by NEMMCO cannot agree on the terms and conditions for the supply of a network control ancillary service after 21 business days from delivery to the Registered Participant of a written notice to negotiate, then either NEMMCO or the Registered Participant may refer the matter to an Adviser for the determination of a dispute as to those terms and conditions in accordance with rule 8.2.
- (j) Subject to clause 3.11.5(k), *NEMMCO* must not acquire *non-market* ancillary services from any person who is not a *Registered Participant*.

- (k) NEMMCO may enter into an agreement to acquire non-market ancillary services with a person who is not a Registered Participant if that agreement includes a condition for the benefit of NEMMCO that no ancillary services will be provided under the agreement until that person becomes a Registered Participant.
- (l) If *NEMMCO* calls for offers under clause 3.11.5(a) in respect of a type of *non-market ancillary service*, *NEMMCO* must give notice to *Registered Participants* when it believes that it has available, under *ancillary services agreements*, a sufficient quantity of that type of *non-market ancillary service* (as determined by applying the procedure developed under clause 3.11.4(b) or clause 3.11.4A(f), whichever is relevant).
- (m) Within 5 business days of NEMMCO giving a notice under clause 3.11.5(l), NEMMCO must publish the total quantity of each kind of network control ancillary service acquired by NEMMCO under ancillary services agreements under clause 3.11.5.
- (n) Within 5 business days of NEMMCO giving a notice under clause 3.11.5(l), NEMMCO must publish:
 - (1) the total estimated annual cost for the provision of *system restart* ancillary services, broken down to charges for availability and use, or other factors that *NEMMCO* considers appropriate for each *electrical sub-network*; and
 - (2) the number of those services procured for each *electrical sub-network*.
- (o) A Registered Participant must comply with an ancillary services agreement between the Registered Participant and NEMMCO under which the Registered Participant provides one or more non-market ancillary services.
- (p) A dispute concerning any aspect, (other than the aspect of price), of a *system* restart ancillary services agreement or a tender conducted by NEMMCO for the acquisition of system restart ancillary services, must be dealt with in accordance with rule 8.2.

3.11.6 Procedures for the dispatch of non-market ancillary services by NEMMCO

- (a) *NEMMCO* must develop procedures for:
 - (1) dispatching each kind of *non-market ancillary service NEMMCO* requires in order to maintain the *power system* in a *secure operating state*; and
 - (2) reporting to *Registered Participants*, on a periodic basis, on the effectiveness of the *dispatch* of *non-market ancillary services* using criteria related to the performance of the *power system* specified in the procedures developed pursuant to clause 3.11.6(a)(1).
- (b) *NEMMCO* must make the procedures developed under this clause 3.11.6 available to the *Registered Participants*.

- (c) *NEMMCO* may amend a procedure developed under this clause 3.11.6, from time to time.
- (d) *NEMMCO* must comply with the *Rules consultation procedures* when making or amending procedures pursuant to clause 3.11.6.

3.11.7 Performance and testing

- (a) In addition to the requirements under rule 4.15, a *Market Participant* which has classified a *generating unit* as an *ancillary service generating unit* or a *market load* as an *ancillary service load* must install and maintain in accordance with the standards referred to in clause 3.11.7(b) monitoring equipment to monitor and record the response of the *ancillary service generating unit* or *ancillary service load* to changes in the *frequency* of the *power system*.
- (b) *NEMMCO* must develop, and may amend from time to time, standards which must be met by *Market Participants* in installing and maintaining the equipment referred to in clause 3.11.7(a).
- (c) NEMMCO may request a Market Participant with an ancillary service generating unit or an ancillary service load to provide to NEMMCO a report detailing how the relevant facility responded to a particular change or particular changes in the frequency of the power system. A Market Participant must provide a report requested under this clause 3.11.7(c) promptly but, in any event, in no more than 20 business days after notice to do so.
- (d) NEMMCO may from time to time require a Registered Participant which provides a market ancillary service under the Rules or a non-market ancillary service under an ancillary services agreement to demonstrate the relevant plant's capability to provide the ancillary service to the satisfaction of NEMMCO according to standard test procedures. A Registered Participant must promptly comply with a request by NEMMCO under this clause.

3.12 Market Intervention by NEMMCO

3.12.1 Reliability Safety Net

- (a) *NEMMCO* may, prior to the *reliability safety net end date*, enter into *reserve contracts* in accordance with this rule 3.12 and the relevant guidelines and policies developed by the *Reliability Panel* as described in clause 8.8.1. *NEMMCO* must not enter into such contracts thereafter.
- (b) The Reliability Panel must, at the same time as it conducts a review of VoLL under clause 3.9.4(c), recommend whether the reliability safety net provided for by the power granted to NEMMCO under this clause 3.12.1 to enter into reserve contracts can be removed from the Rules prior to 1 July 2008.
- (c) In consultation with persons nominated by the relevant jurisdictions *NEMMCO* may determine to enter into *reserve contracts* for the provision

- of *reserve* to ensure that the *reliability* of *supply* in a *region* meets the reliability standard established by the *Reliability Panel*.
- (d) In entering into *reserve contracts* under clause 3.12.1(c) *NEMMCO* must agree with the relevant nominated persons cost sharing arrangements between the *regions* for the purposes of determining charges under clause 3.15.9.
- (e) If at any time *NEMMCO* deems it necessary to commence contract negotiations for the provision of *reserves*, or *market network services* to make *reserves* available where required, *NEMMCO* must *publish* a notice of its intention to do so.
- (f) When contracting for the provision of *reserves*, *NEMMCO* must not enter contracts in relation to capacity of *generating units*, *scheduled network services* or *scheduled loads* for which *dispatch offers* or *dispatch bids* have been submitted or are considered by *NEMMCO* to be likely to be submitted or be otherwise available for *dispatch* in the *trading intervals* to which the contract relates.
- (g) When contracting for the provision of *reserves*, or *market network services* to make *reserves* available where required, *NEMMCO* must give first priority to *facilities* which, if called upon, would result in the least distortion of the *spot price*.
- (h) If NEMMCO requests a Scheduled Generator or Market Participant to enter into a reserve contract in relation to a scheduled generating unit, scheduled network service or a scheduled load, then the Scheduled Generator or Market Participant must negotiate with NEMMCO in good faith as to the terms and conditions of that contract.
- 3.12.2 [Deleted]
- 3.12.3 [Deleted]
- 3.12.4 [Deleted]
- 3.12.5 [Deleted]
- 3.12.6 [Deleted]
- 3.12.7 [Deleted]

3.12.8 NEMMCO's risk management and accounts relating to the reliability safety net

- (a) *NEMMCO* may enter into insurance arrangements with an insurance provider with a view to minimising potential financial losses in respect of *NEMMCO's reserve* trading activities described in this rule 3.12.
- (b) *NEMMCO* must ensure that, as described in rule 1.11, it maintains in its books separate accounts relating to the reliability safety net provided for by

the powers granted to *NEMMCO* under clause 3.12.1 to enter into *reserve* contracts.

3.12.9 [Deleted]

3.12.10 Intervention settlement timetable

- (a) *NEMMCO* must use reasonable endeavours to complete and fulfil its obligations set out in clauses 3.12.11, 3.12.11A, 3.15.7, 3.15.7A, 3.15.7B, 3.15.8 and 3.15.10C as soon as practicable and no later than:
 - (1) 100 business days after the end of the direction or dispatch of plant under a reserve contract or the end of a series of related directions or a related series of dispatch of plant under a reserve contract if NEMMCO is not required to appoint an independent expert pursuant to clause 3.15.7A; and
 - (2) 150 business days after the end of the direction or dispatch of plant under a reserve contract or the end of a series of related directions or a related series of dispatch of plant under a reserve contract if NEMMCO is required to appoint an independent expert pursuant to clause 3.15.7A.
- (b) Subject to clause 3.12.10(a), *NEMMCO* must *publish* a timetable that sets a date for each of *NEMMCO*'s and the independent expert's obligations pursuant to clauses 3.12.11, 3.12.11A, 3.15.7, 3.15.7A, 3.15.7B, 3.15.8 and 3.15.10C, where required (the "intervention settlement timetable").
- (c) NEMMCO must at least once a month revise and publish the intervention settlement timetable to reflect any changes to the intervention settlement timetable.

3.12.11 Affected Participants and Market Customers entitlements to compensation in relation to directions and reserve contracts

- (a) In respect of each intervention price trading interval:
 - (1) an Affected Participant is entitled to receive from NEMMCO, or must pay to NEMMCO, an amount as determined in accordance with this clause 3.12.11 that will put the Affected Participant in the position that the Affected Participant would have been in regarding the scheduled generating unit or scheduled network service, as the case may be, had the direction not been issued or the plant under the reserve contract not been dispatched, as appropriate, taking into account solely the items listed in clause 3.12.11(d);
 - (2) a *Market Customer*, other than a *Market Customer* which was the subject of that *direction*, in respect of one or more of its *scheduled loads*, is entitled to receive an amount calculated by applying the following formula:

 $DC = ((RRP X LF) - BidP) \times QD$

where:

- DC (in dollars) is the amount the *Market Customer* is entitled to receive in respect of that *scheduled load* for the relevant *intervention price trading interval*;
- RRP (in dollars per MWh) is the *regional reference price* in the relevant *intervention price trading interval* determined in accordance with clause 3.9.3;
- LF where the scheduled load's connection point is a transmission network connection point, is the intra-regional loss factor at that connection point or where the scheduled load's connection point is a distribution network connection point, is the product of the distribution loss factor at that connection point multiplied by the intra-regional loss factor at the transmission network connection point to which it is assigned;
- BidP (in dollars per MWh) is the price of the highest priced *price* band specified in a dispatch offer for the scheduled load in the relevant intervention price trading interval;
- QD (in MWh) is the difference between the amount of electricity consumed by the *scheduled load* during the relevant *intervention* price trading interval determined from the metering data and the amount of electricity which NEMMCO reasonably determines would have been consumed by the scheduled load if the direction had not been issued or the plant under the reserve contract not been dispatched, as appropriate,

provided that if DC is negative for the relevant *intervention price* trading interval, then the adjustment that the Market Customer is entitled to claim in respect of that scheduled load for that intervention price trading interval is zero.

- (a1) In respect of a single *intervention price trading interval*, an *Affected Participant* or *Market Customer* is not entitled to receive from, or obliged to pay to, *NEMMCO* an amount pursuant to this clause 3.12.11 if such an amount is less than \$5,000.
- (b) In respect of each *intervention price trading interval*, *NEMMCO* must, in accordance with the *intervention settlement timetable*, notify, in writing:
 - (1) each Affected Participant (except eligible persons) of:
 - (i) the estimated level of *dispatch* in MW that its *plant* would have been *dispatched* at had the *direction* not been issued or the *plant* under *reserve contract* not been *dispatched*; and
 - (ii) an amount equal to:
 - (A) the estimated *trading amount* that it would have received had the *direction* not been issued or the *plant* under

- reserve contract had not been dispatched based on the level of dispatch in clause 3.12.11(b)(i), less:
- (B) the *trading amount* for that *Affected Participant* (excluding from that *trading amount* the amount referred to in clause 3.15.10C(a)) as set out in its *final statement* provided pursuant to clause 3.15.14 for the *billing period* in which the *intervention price trading interval* occurs;
- (2) each *eligible person* of:
 - (i) the estimated level of flow in MW of all relevant *directional interconnectors* that would have occurred had the *direction* not been issued or the *plant* under the *reserve contract* not been *dispatched*; and
 - (ii) an amount equal to:
 - (A) the estimated amount that person would have been entitled to receive pursuant to clause 3.18.1(b) had the *direction* not been issued or the *plant* under the *reserve contract* not been *dispatched* based upon the flows referred to in clause 3.12.11(b)(2)(i); less
 - (B) the actual entitlement of that person under clause 3.18.1(b); and
- (3) each *Market Customer*, the amount calculated by *NEMMCO* in accordance with clause 3.12.11(a)(2) for that *Market Customer*.
- (b1) NEMMCO must include in an Affected Participant's or Market Customer's final statement provided pursuant to clause 3.15.1 for a billing period in which one or more intervention price trading intervals occurred:
 - (1) the amount notified by *NEMMCO* pursuant to clause 3.12.11(b) if the absolute value of such amount is greater than \$5,000; and
 - (2) in all other cases no amount in relation to compensation pursuant to clause 3.12.11.
- (b2) If the figure calculated pursuant to clause 3.12.11(b) is:
 - (1) negative, the absolute value of that amount is the amount payable to *NEMMCO* by the relevant person; and
 - (2) positive, the absolute value of that amount is the amount receivable from *NEMMCO* by the relevant person.
- (c) Subject to clauses 3.12.11(c2) and 3.12.11(c3), within 7 business days of receipt of the notice referred to in clause 3.12.11(b) an Affected Participant or Market Customer may make a written submission to NEMMCO in accordance with clause 3.12.11(c1) claiming that the amount set out in the notice is greater than, less than, or equal to its entitlement pursuant to clause 3.12.11(a)(1) as an Affected Participant or clause 3.12.11(a)(2) as a Market Customer, as the case may be.

- (c1) A written submission made by an *Affected Participant* or *Market Customer* pursuant to clause 3.12.11(c) must:
 - (1) itemise each component of the claim;
 - (2) contain sufficient data and information to substantiate each component of the claim;
 - (3) if the *Affected Participant* claims that the amount calculated by *NEMMCO* pursuant to clauses 3.12.11(b)(1) or 3.12.11(b)(2) is less than the amount the *Affected Participant* is entitled to receive pursuant to clause 3.12.11(a)(1), specify the difference between such amounts (such difference being the "*affected participant's adjustment claim*");
 - (4) if the *Market Customer* claims that the amount calculated by *NEMMCO* pursuant to clause 3.12.11(b)(3) is less than the amount the *Market Customer* is entitled to receive pursuant to clause 3.12.11(a)(2), specify the difference between such amounts (such difference being the "*market customer*'s additional claim"); and
 - (5) be signed by an authorised officer of the *Affected Participant* or *Market Customer* certifying that the written submission is true and correct.
- (c2) If an *Affected Participant* or *Market Customer* does not deliver to *NEMMCO* a written submission in accordance with clause 3.12.11(c) it shall cease to have an entitlement to compensation under this clause 3.12.11.
- (c3) In respect of a single *intervention price trading interval* an *Affected Participant* or *Market Customer* may only make a claim pursuant to clause 3.12.11(c) in respect of that *intervention price trading interval* if it claims that its entitlement or liability pursuant to clause 3.12.11 is greater than \$5,000.
- (d) In determining the amount for the purposes of clause 3.12.11(a)(1), the following must, as appropriate, be taken into account:
 - (1) the direct costs incurred or avoided by the Affected Participant in respect of that scheduled generating unit or scheduled network service, as the case may be, as a result of the direction, or the dispatch of plant provided under the contract for the provisions of reserves, as appropriate, including without limitation:
 - (i) fuel costs in connection with the *scheduled generating unit* or *scheduled network service*;
 - (ii) incremental maintenance costs in connection with the *scheduled* generating unit or scheduled network service; and
 - (iii) incremental manning costs in connection with the *scheduled* generating unit or scheduled network service;

- (2) any amounts which the *Affected Participant* is entitled to receive under clauses 3.15.6 and 3.15.6A; and
- (3) the regional reference price published pursuant to clause 3.13.4(m).
- (e) *NEMMCO* must in accordance with the *intervention settlement timetable* calculate the "additional intervention claim" being the total of:
 - (1) the sum of the affected participant's adjustment claims and market customer's additional claims in respect of a direction or dispatch of plant provided under a reserve contract, or in respect of, in NEMMCO's reasonable opinion, a series of related directions or dispatch of plant provided under a reserve contract; plus
 - (2) the total claims by *Directed Participants* pursuant to clauses 3.15.7B(a), 3.15.7B(a1) and 3.15.7B(a2) in respect of that *direction* or *dispatch* of that *plant* provided under a *reserve contract*, or in respect of that series of related *directions* or *dispatch* of *plant* provided under a *reserve contract*.
- (f) *NEMMCO* must in accordance with the *intervention settlement timetable*:
 - (1) refer an *affected participant's adjustment claim* or *market customer's additional claim* to an independent expert to determine such claim in accordance with clause 3.12.11A if the claim is equal to or greater than \$20,000 and the *additional intervention claim* that includes that claim is equal to or greater than \$100,000; and
 - (2) determine in its sole discretion whether all other *affected participants' adjustment claims* and *market customers' additional claims* are reasonable and if so pay the amounts claimed in accordance with clause 3.15.10C.
- (g) If NEMMCO determines pursuant to clause 3.12.11(f) that an affected participant's adjustment claim or market customer's additional claim in respect of a direction or dispatch of plant provided under a reserve contract is unreasonable, it must in accordance with the intervention settlement timetable:
 - (1) advise the *Affected Participant* or *Market Customer*, as the case may be, in writing of its determination including its reasons for the determination; and
 - (2) refer the matter to an independent expert to determine the claim for compensation in accordance with clause 3.12.11A.
- (h) For the purposes of clauses 3.15.8 and 3.15.10C(b) any payment pursuant to clause 3.12.11(a) must include interest on the sum of that amount less the payment made in accordance with clause 3.15.10C(1), computed at the average bank bill rate for the period from the date on which payment was required to be made under clauses 3.15.16 and 3.15.17 in respect of the final statement for the billing period in which the direction was issued or plant provided under a reserve contract was dispatched pursuant to clause 4.8.6 to

the date on which payment is required to be made pursuant to clause 3.15.10C.

3.12.11A Role of the Independent Expert in calculating payments in relation to intervention by NEMMCO

- (a) Subject to clause 3.12.11A(a1), if a matter is to be referred to an independent expert pursuant to clauses 3.12.11(f), 3.12.11(g) or 3.15.7B, *NEMMCO* must in accordance with the *intervention settlement timetable publish* a notice of its proposed nominee as independent expert and appoint such nominee.
- (a1) If within 3 business days of publication of NEMMCO's nominee pursuant to clause 3.12.11A(a) more than 25% of the Referred Affected Participants, Referred Market Customers and Referred Directed Participants in relation to that direction object in writing to NEMMCO's nominee NEMMCO must, as soon as reasonably practicable thereafter, request the AEMC to nominate an independent expert.
- (a2) If a valid objection pursuant to clause 3.12.11A(a1) is made, the *AEMC* must, within 3 *business days* of a written request from *NEMMCO*, nominate an independent expert to be appointed by *NEMMCO* for the purposes of this clause 3.12.11A.
- (b) *NEMMCO* must provide to the independent expert a copy of all written submissions made by *Referred Affected Participants*, *Referred Market Customers* or *Referred Directed Participants* under clause 3.12.11(c) or 3.15.7B (a).
- (b1) To the extent reasonably practicable, all claims arising out of a single direction or dispatch of reserve plant or arising out of, in NEMMCO's reasonable opinion, a series of related directions or dispatch of plant provided under a reserve contract, should be determined by the same independent expert as part of the same process.
- (c) *NEMMCO* must include as part of the independent expert's terms of appointment the following requirements:
 - (1) In accordance with the *intervention settlement timetable* the independent expert must:
 - (i) determine and *publish* a draft report setting out:
 - (A) as appropriate, the total compensation payable by, or receivable by, *Referred Affected Participants* and *Referred Market Customers* under clause 3.12.11(a) pursuant to claims referred to the independent expert pursuant to clauses 3.12.11(f) and 3.12.11(g) in respect of the *intervention price trading interval*;
 - (B) the total amount of compensation payable to *Referred Directed Participants* pursuant to clause 3.15.7B; and

- (C) the methodology and assumptions, if any, used by the independent expert in making the determination in clauses 3.12.11A(c)(1)(ii) and 3.12.11A(c)(1)(iii);
- (ii) notify individual assessments by delivery to each *Referred Affected Participant* and *Referred Market Customer* and to *NEMMCO* of a draft assessment detailing the amount payable or receivable by that party, as the case may be, pursuant to clause 3.12.11(a); and
- (iii) deliver to each *Referred Directed Participant* and to *NEMMCO* a draft assessment detailing the calculation of the amount of compensation receivable by that party pursuant to 3.15.7B.
- (2) The independent expert must call for submissions from all relevant Referred Affected Participants, Referred Market Customers and Referred Directed Participants after publishing the draft report and delivering the draft assessment under clause 3.12.11A(c)(1).
- (3) Before the *publication* of the final report and delivery of the final assessment pursuant to clause 3.12.11A(c)(4), the independent expert must:
 - (i) if requested to do so by a Referred Affected Participant, Referred Market Customer or Referred Directed Participant, within 15 business days of the publication of the draft report and draft assessment, meet with representatives of the Referred Affected Participant, Referred Market Customer, or Directed Participant to discuss any queries it has in relation to the draft report or draft assessment as appropriate; and
 - (ii) take into consideration, any further written submissions made by a *Referred Affected Participant*, *Referred Market Customer* or *Referred Directed Participant* in relation to the draft report or draft assessment, as the case may be, if the independent expert receives those submissions within 15 *business days* of the *publication* of the draft report and draft assessment.
- (4) The independent expert must in accordance with the *intervention* settlement timetable:
 - (i) prepare and *publish* a final report;
 - (ii) prepare and deliver his or her final assessment of the amounts payable or receivable by the relevant party pursuant to clause 3.12.11(a) or 3.15.7B, as the case may be; and
 - (iii) deliver to *NEMMCO* a final tax invoice for the services rendered by the independent expert and a copy of all final assessments issued pursuant to clause 3.12.11A(c)(ii).
- (5) A report prepared under clauses 3.12.11A(c)(1)(i) and 3.12.11A(c)(4)(i) must not disclose *confidential information*.

- (6) If the independent expert requires further information than that contained in a written submission made by the *Referred Affected Participant*, *Referred Market Customer* or *Referred Directed Participant* under clause 3.12.11(c) or 3.15.7B(a), the independent expert may advise the relevant party in writing of the information required.
- (7) If the relevant party has not provided that information to the independent expert within 10 *business days* of the date of the request for further information, then the independent expert, acting reasonably, is entitled to make such assumptions concerning that information as he or she thinks appropriate.
- (8) The independent expert must enter into, and deliver, a confidentiality deed for the benefit of each *Referred Affected Participant*, *Referred Market Customer* and *Referred Directed Participant* in a form developed by *NEMMCO* pursuant to clause 3.12.11A(e).
- (d) A final report and a final assessment of an independent expert prepared in accordance with clause 3.12.11A(c)(4) is final and binding.
- (e) *NEMMCO* must in accordance with the *Rules consultation procedures* prepare and *publish* a confidentiality deed for the purposes of this clause 3.12.11A.

3.12A Mandatory restrictions

3.12A.1 Restriction offers

- (a) *NEMMCO* must develop, and may vary from time to time, in accordance with the *Rules consultation procedures* a *mandatory restrictions* trading system. The trading system must include:
 - (1) procedures for the acquisition by *NEMMCO* of capacity the subject of *restriction offers*;
 - (2) the standard terms and conditions upon which *NEMMCO* shall accept a *restriction offer*;
 - (3) the criteria to be applied by *NEMMCO* in the appointment of an appropriately qualified independent expert for the purposes of clause 3.12A.7(g)(ii); and
 - (4) procedures for the rebidding and *dispatch* of capacity the subject of an *accepted restriction offer*.
- (b) The *restriction offer procedures* must take into account the following principles:
 - (1) NEMMCO may accept a restriction offer for all or part of the capacity of a scheduled generating unit or scheduled network service, as recorded in the registered bid and offer data for that scheduled generating unit or scheduled network service.

- (2) NEMMCO must use its reasonable endeavours to acquire capacity from valid restriction offers or to terminate in whole or part an accepted restriction offer in a manner that minimises the estimated restriction shortfall amount.
- (3) NEMMCO may at any time terminate an accepted restriction offer in whole or in part by providing 4 hours notice to the relevant Scheduled Generator or Scheduled Network Service Provider that an accepted restriction offer is so terminated.
- (4) The submission of *restriction offers* must be made in the form and by the means set out in procedures developed and *published* by *NEMMCO* for the purpose of the submission of *restriction offers*.
- (5) If a *restriction offer* is made in accordance with the *restriction offer* procedures, *NEMMCO* must make available to the parties who submitted the *restriction offer* the following information without delay:
 - (i) acknowledgment of receipt of a valid restriction offer; and
 - (ii) notification detailing why a restriction offer is invalid, if appropriate.
- (6) If any details contained within a *restriction offer* are inconsistent with the *registered bid and offer data* provided by the relevant party then *NEMMCO* has the right to reject that *restriction offer* as invalid.
- (7) A valid *restriction offer* must set out for each *trading interval* of a *trading day*:
 - (i) the price offered in \$/MWh or as otherwise permitted by the *restriction offer procedures;* and
 - (ii) MW amount for that *trading interval* being offered.
- (8) *NEMMCO* must only accept *restriction offers* from *Scheduled Generators* and *Scheduled Network Service Providers* with a *connection point* located in the *region* in which *mandatory restrictions* apply or are proposed to apply.
- (c) The standard terms and conditions developed by *NEMMCO* pursuant to clause 3.12A.1(a)(2) must take into account the following principles:
 - (1) All capacity the subject of the *restriction offer* must be available for immediate *dispatch* in the *central dispatch* process at all times.
 - (2) An accepted restriction offer is binding and may only be revoked or varied if the Scheduled Generator or Scheduled Network Service Provider notifies NEMMCO in accordance with the restriction offer procedures of a revocation or variation. Immediately upon receipt of such notification NEMMCO must amend the accepted restriction offer to reduce the capacity of the accepted restriction offer by the notified capacity. Such capacity must not be dispatched by NEMMCO

- pursuant to a *dispatch offer* for such capacity during the remainder of the *trading day* in which the *accepted restriction offer* was revoked or varied in accordance with this clause 3.12.A.1(c) provided that such capacity may be re-offered as a *restriction offer*.
- (3) A restriction offer may be amended or revoked in accordance with the restriction offer procedures at any time prior to it becoming an accepted restriction offer.

3.12A.2 Mandatory restrictions schedule

- (a) *NEMMCO* must, within 4 hours of receipt of a formal written notice from a *Jurisdictional Co-ordinator* advising that the relevant *participating jurisdiction* proposes to invoke *mandatory restrictions*:
 - (1) in consultation with such *participating jurisdiction*, and in accordance with any procedures developed with that *participating jurisdiction*, estimate the effect in MW of the *mandatory restrictions* on the *region's* demand for each *trading interval* of the next *trading day* of the proposed *mandatory restriction period*; and
 - (2) prepare and deliver to the *Jurisdictional Co-ordinator* a schedule of capacity for each *trading interval* of the next *trading day* of the proposed *mandatory restriction period* which is approximately equal to the estimated reduction in *regional* demand due to the *mandatory restrictions* net of all *scheduled loads* in that *region*.
- (b) NEMMCO must regularly in conjunction with the relevant Jurisdictional Co-ordinator review the current mandatory restriction schedule and when appropriate prepare and deliver to the Jurisdictional Co-ordinator a revised schedule of capacity for each trading interval of that trading day which is approximately equal to the revised estimated reduction in regional demand due to the mandatory restrictions net of all scheduled loads in that region.
- (c) NEMMCO may only publish a mandatory restriction schedule and an amended mandatory restriction schedule upon receipt of a formal written notice approving the mandatory restriction schedule from the relevant Jurisdictional Co-ordinator.

3.12A.3 Acquisition of capacity

- (a) NEMMCO must immediately upon publication of a mandatory restriction schedule or an amended mandatory restriction schedule use its reasonable endeavours to acquire, in accordance with the restriction offer procedures, capacity to meet the mandatory restriction schedule or amended mandatory restriction schedule as the case may be.
- (b) *NEMMCO* must terminate in accordance with the *restriction offer* procedures such number of accepted restriction offers, in whole or in part, so that the total capacity of existing accepted restriction offers as far as practicable equals the amended mandatory restriction schedule.

3.12A.4 Rebid of capacity under restriction offers

In each dispatch interval when mandatory restrictions apply, each scheduled generating unit or scheduled network service the subject of an accepted restriction offer with respect to that dispatch interval must rebid the total capacity the subject of such restriction offer by varying the respective dispatch offers or network dispatch offers in accordance with the procedures developed pursuant to clause 3.12A.1(a)(4).

3.12A.5 Dispatch of restriction offers

- (a) In a *dispatch interval NEMMCO* may only *dispatch* the capacity of a *scheduled generating unit* or *scheduled network service* in accordance with the procedures for the rebidding and *dispatch* of capacity the subject of an *accepted restriction offer* developed by *NEMMCO* in consultation with *Registered Participants*. Such procedures must as far as reasonably practical incorporate the following principles:
 - (i) dispatch of accepted restriction offers only after all the capacity of scheduled loads, scheduled generating units and scheduled network services contained in valid dispatch offers and dispatch bids have been dispatched;
 - (ii) recognise any requirement for advance notice or action for *Generators* to operate at minimum *generation*, provide advance notice to *loads* or obtain capacity of *market network services* that are under *direction* or *reserve contracts*;
 - (iii) be consistent with the price of accepted restriction offers in accordance with clause 3.12A.6; and
 - (iv) minimise the restriction shortfall amount.
- (b) Notwithstanding the provisions of this clause 3.12A.5, at no time is *NEMMCO* required to *dispatch* the capacity of a *Scheduled Generator* or *Scheduled Network Service Provider* the subject of an *accepted restriction offer* if such *dispatch* would prevent *NEMMCO* from meeting its obligations for system security.

3.12A.6 Pricing during a restriction price trading interval

During a mandatory restriction period, dispatch prices must be determined by the central dispatch process based on dispatch offers, dispatch bids and network dispatch offers in accordance with clause 3.9.2, provided that NEMMCO must calculate the dispatch price as if the dispatch offer price for all capacity the subject of an accepted restriction offer was the maximum price permitted by clause 3.8.6(h) and 3.8.6A(i) notwithstanding any other provision of the Rules.

3.12A.7 Determination of funding restriction shortfalls

(a) NEMMCO is entitled to the trading amount received by Scheduled Generators and Scheduled Network Service Providers from the dispatch of

- capacity the subject of an accepted restriction offer in accordance with 3.15.10B.
- (b) *NEMMCO* must, as soon as reasonably practicable following the end of a *mandatory restriction period*, calculate:
 - (i) the aggregate amount payable to *NEMMCO* pursuant to clause 3.12A.7(a) from all *accepted restriction offers* in that *mandatory restriction period*;
 - (ii) the aggregate amount payable by *NEMMCO* pursuant to all *accepted* restriction offers in that mandatory restriction period; and
 - (iii) the sum of the amount determined under clause 3.12A.7(b)(i) less the amount determined under clause 3.12A.7(b)(ii) (the 'restriction shortfall amount').
- (b1) The maximum amount payable to a Scheduled Generator or Market Participant for any accepted restriction offer of that Scheduled Generator or Market Participant during a mandatory restriction period is the aggregate of the maximum possible spot price for each trading interval within the mandatory restriction period, being VoLL or an administered price cap as the case may be, multiplied by the capacity of the accepted restriction offer in MWh for each corresponding trading interval.
- (c) Notwithstanding any other provisions of the *Rules*, the absolute value of the *restriction shortfall amount* must not exceed the sum of the maximum possible *spot price* for a *trading interval*, being *VoLL* or an *administered price cap* as the case may be, multiplied by the aggregate of the capacity of all *accepted restriction offers* in MWh for that *trading interval* for all *trading intervals* in the *mandatory restriction period*.
- (d) Notwithstanding any other provision of the *Rules*, if the *restriction shortfall* amount is capped pursuant to clause 3.12A.7(c) and the *restriction shortfall* amount calculated pursuant to clause 3.12A.7 is a negative number, then the amount payable by *NEMMCO* pursuant to each accepted restriction offer is to be reduced pro-rata until clause 3.12A.7(c) is satisfied.
- (e) If the *restriction shortfall amount* is a negative number, *Market Customers* in the relevant *region* must pay to *NEMMCO* an amount determined in accordance with clause 3.12A.7(f) or 3.12A.7(g).
- (f) If the *restriction shortfall amount* is between minus \$100,000 and \$0, then each *Market Customer* in the relevant *region* must pay to *NEMMCO* an amount determined in accordance with the following formula:

$$MCP = RSA$$
 $x \frac{(AGE)}{(AAGE)}$

Where:

MCP is the amount payable by a *Market Customer* in accordance with this clause 3.12A.7(f).

RSA is the restriction shortfall amount.

AGE is the *adjusted gross energy* of a *Market Customer* in that *region* for the *mandatory restriction period* expressed in MWh.

AAGE is the aggregate of the *adjusted gross energy* of all *Market Customers* in that *region* for the *mandatory restriction period* expressed in MWh.

- (g) If the restriction shortfall amount is less than minus \$100,000:
 - (i) each *Market Customer* in the relevant *region* must pay to *NEMMCO* an amount determined in accordance with the following formula:

$$RCP = (RSA + IE) \times (RD/TRD)$$

Where

RCP is the amount payable to *NEMMCO* by a *Market Customer* in that *region* following the cessation of the *mandatory restriction period*.

RSA is the *restriction shortfall amount* incurred by *NEMMCO* upon the cessation of the *mandatory electricity restriction period*.

RD is the *Market Customer's restriction demand reduction*.

TRD is the sum of RD for all *Market Customers* in the relevant region.

IE is the amount of the independent expert's final tax invoice delivered to *NEMMCO* in accordance with clause 3.12A.7(i)(11) plus any amounts payable by *NEMMCO* on behalf of the independent expert as determined by the *dispute resolution panel* established in accordance with clause 3.12A.7(m); and

- (ii) NEMMCO must within 10 days of the end of a mandatory restriction period appoint an appropriately qualified independent expert as NEMMCO's agent to determine the restriction demand reduction claimed by each Market Customer in a region for the purposes of clause 3.12A.7(g).
- (h) If the *restriction shortfall amount* is a positive number then *NEMMCO* must pay to *Market Customers* in the relevant *region* an amount equal to:

$$RCRP = RSA$$
 $x \frac{(AGE)}{(AAGE)}$

Where:

RCRP is the payment to be made by *NEMMCO* to *Market Customers* pursuant to this clause 3.12A.7.

RSA is the *restriction shortfall amount*.

AGE is the *adjusted gross energy* of a *Market Customer* in that *region* for the *mandatory restriction period* expressed in MWh.

AAGE is the aggregate of the *adjusted gross energy* of all *Market Customers* in that *region* for the *mandatory restriction period* expressed in MWh.

- (i) When appointing the independent expert under clause 3.12A.7(g), *NEMMCO* must include as part of the independent expert's terms of appointment the following requirements:
 - (1) The independent expert must prepare a statement of the principles which the independent expert believes should be followed in determining the *restriction demand reduction* of *Market Customers*.
 - (2) Within 5 business days of his or her appointment, the independent expert must provide NEMMCO with details of his or her estimated fees and costs.
 - (3) Within 5 business days of his or her appointment, the independent expert must provide the statement prepared under clause 3.12A.7(i)(1) to all Market Customers in the relevant region and request that each Market Customer in the relevant region provide him or her with details of the restriction demand reduction claimed by that Market Customer and such additional information specified by the independent expert to fulfil its obligations.
 - (4) The independent expert must offer to meet with and consult each *Market Customer* who may be liable to make a payment to *NEMMCO* pursuant to clause 13.12A.7(g).
 - (5) The independent expert must within 30 *business days* of his or her appointment or such later date as approved by *NEMMCO* in its sole discretion:
 - (i) publish a draft report; and
 - (ii) provide each *Market Customer* in the relevant *region* with a draft statement.
 - (6) The draft report must contain:
 - (i) the *restriction shortfall amount* based upon the independent expert's estimated fees and costs; and
 - (ii) the methodology used by the independent expert in determining the *restriction demand reduction* of each *Market Customer* in a *region*.

The draft report must not contain details pertaining to individual *Market Customers*.

- (7) A draft statement provided to a *Market Customer* must contain:
 - (i) the *Market Customer's restriction demand reduction* as determined by the independent expert;
 - (ii) the estimated amount payable by that *Market Customer* under clause 3.12A.7(g), based upon the independent experts estimated fees and costs; and
 - (iii) information showing how the estimated amount referred to in clause 3.12A.7(i)(7)(ii) was calculated.
- (8) The independent expert must within 50 *business days* of his or her appointment or such later date as approved by *NEMMCO* in its sole discretion make any necessary amendments to his or her draft report and draft statements following consultation with *Market Customers*, and:
 - (i) publish his or her final report; and
 - (ii) provide each *Market Customer* in the relevant *region* with a final statement.
- (9) The independent expert's final report must contain the information set out in clause 3.12A.7(i)(6).
- (10) A final statement provided to a *Market Customer* by the independent expert must contain the information set out in clause 3.12A.7(i)(7).
- (11) The independent expert must provide *NEMMCO* with his or her final tax invoice for services rendered at the time of publication of the final report.
- (i1) Each *Market Customer* must within 10 *business days* of the independent expert requesting information in accordance with clause 3.12A.7(i)(3) deliver to the independent expert all such information.
- (i2) The independent expert may request a *Market Customer* to provide further information that he or she requires to prepare either the draft or final report or a draft or final statement within 5 *business days* of the request being made.
- (j) A *Market Customer* must not unreasonably withhold information sought by the independent expert and must use its reasonable endeavours to provide the independent expert with the information required within the relevant timeframe specified in this clause 3.12A.7.
- (k) If a *Market Customer* has not provided the independent expert with information required under this clause 3.12A.7 within the specified time period, then the independent expert is entitled to make such assumptions concerning that information as he or she thinks appropriate.
- (l) Subject to the review process specified in clause 3.12A.7(m), a determination made by an independent expert appointed under clause 3.12A.7(g) binds all *Market Customers*.

- (m) Following the publication of the independent expert's final report, a *Market Customer* may request the *Adviser* to establish a *dispute resolution panel* to redetermine that *Market Customer's restriction demand reduction* only if the *Market Customer* reasonably believes that the independent expert's determination:
 - (1) has incorrectly assessed the *restriction demand reduction* of that Market Customer by more than 10%; or
 - (2) was made negligently or in bad faith.
- (n) The determination of a *dispute resolution panel* established under clause 3.12A.7(m):
 - (1) binds all *Market Customers* and each *Market Customer* must comply with a determination of the *dispute resolution panel*; and
 - (2) may only order reimbursement of the reasonable fees and expenses incurred by a *Market Customer* in disputing the independent expert's determination and no other amounts.
- (o) Any amounts determined by the *dispute resolution panel* as payable by *NEMMCO* on behalf of the independent expert for the reasonable fees and expenses incurred by a *Market Customer* in disputing the independent expert's determination must be included on the next statement provided under clauses 3.15.14 and 3.15.15.

3.12A.8 Cancellation of a mandatory restriction period

- (a) At the cessation time designated in the *mandatory restriction schedule*, *NEMMCO* must:
 - (1) immediately terminate all current restriction offers; and
 - (2) *publish* a notice detailing the termination of all current *restriction offers* following the cancellation of the relevant *mandatory restriction period*.

3.12A.9 Review by AEMC

- (a) The *AEMC* must, in accordance with clause 3.12A.9(b), conduct a review of the operation of the provisions applicable to *mandatory restrictions* including:
 - (1) the integration of *restriction offers* and *mandatory restrictions* into the *market*; and
 - (2) any other matters which the *AEMC* reasonably believes are relevant to the operation of clauses 3.12A.1 to 3.12A.8 and clause 3.15.10B.
- (b) The review conducted by the *AEMC* in accordance with clause 3.12A.9(a) must:
 - (1) include an analysis of:

- (i) the accuracy of the forecast demand reduction due to restrictions and the impact any error had on the resulting *spot price*;
- (ii) whether the impact on the *spot price* resulting from an error in the forecast demand reduction due to restrictions adversely affects one group of *Scheduled Generators* or *Market Participants* over another group;
- (iii) the *restriction offer* prices for contracts accepted by *NEMMCO* in meeting the *mandatory restriction schedule* including a comparison with the expected revenue the capacity subject to the *restriction offer* would have earned in the *spot market* taking into account the circumstances in which *restriction offers* were made:
- (2) be conducted in accordance with the *Rules consultation procedures*; and
- (3) commence following the first application of the *mandatory* restrictions where the estimated effect in MW of *mandatory* restrictions on a region's demand met or exceeded 10% of that region's estimated demand for the same period.

3.13 Market Information

3.13.1 Provision of information

- (a) In addition to any specific obligation or power of *NEMMCO* under the *Rules* to provide information, *NEMMCO* must make available to *Scheduled Generators* and *Market Participants* on request any information concerning the operation of the *market* not defined by the *AEMC* or the *Rules* as confidential or commercially sensitive and may charge a fee reflecting the cost of providing any information under this clause 3.13.1(a).
- (b) *NEMMCO* must make information available to the public on request in respect of the *regional reference price* at any *regional reference node* and, where requested and available, reasons for any significant movements in prices.

3.13.2 Systems and procedures

- (a) Information must be provided to *NEMMCO* and by *NEMMCO* on the *electronic communication system* unless otherwise approved by *NEMMCO*. In circumstances where the *electronic communication system* is partially or wholly unavailable then information will, to the extent of that unavailability, be provided to *NEMMCO* and by *NEMMCO* by means of the backup procedures specified by *NEMMCO* from time to time.
- (b) Information must be provided by using the templates supplied in the *electronic communication system* unless otherwise approved by *NEMMCO*.

- (c) Where approved by *NEMMCO*, information may be transmitted to and from *NEMMCO* and the *Scheduled Generator* or *Market Participant* concerned in any agreed format.
- (d) If possible, information provided to *NEMMCO* must be *time stamped* by *NEMMCO* on receipt by *NEMMCO* of the information by the *electronic communication system* and, if stamped, is deemed to be provided at the time indicated by the *time stamp*.
- (e) Information that is *published* by *NEMMCO* is deemed to be *published* when the information is placed on the *market information bulletin board*.
- (f) The market information bulletin board must be accessible by Scheduled Generators and Market Participants via the electronic communication system subject to applicable security requirements.
- (g) Information *published* or notified to a *Scheduled Generator* or *Market Participant* must be capable of being reviewed by that *Scheduled Generator* or *Market Participant* and be capable of being downloaded from the *market information bulletin board* to the *Scheduled Generator* or *Market Participant* via the *electronic communication* system.
- (h) All Scheduled Generators and Market Participants must notify NEMMCO of, and NEMMCO must publish, any changes to submitted information within the times prescribed in the timetable.
- (i) NEMMCO must make a copy of all *changes* to the data available to each *Scheduled Generator* and *Market Participant* for verification and resubmission by the *Scheduled Generator* or *Market Participant* as necessary.
- (j) All revisions must be provided on the *electronic communication system* and in the same format as the original information.
- (k) A Scheduled Generator or Market Participant may withhold information from NEMMCO which must otherwise be provided under the Rules if:
 - (1) the information is of a confidential or commercially-sensitive nature and is not information of a kind that, in the reasonable opinion of the *AEMC*, is fundamental to the efficient operation of the *market*; or
 - (2) disclosure of the information would have the likely effect of causing detriment to the person required to provide it unless, in the reasonable opinion of the *AEMC*, the public benefit resulting from the provision of the information outweighs that detriment.

(l) [Deleted]

(m) Nothing in clause 3.13.2(k) allows a *Scheduled Generator* or *Market Participant* to avoid providing information to *NEMMCO* under the *Rules* where that information is generally available.

3.13.3 Standing data

(a) *NEMMCO* must establish, maintain, update and *publish*:

- (1) a list of all of the Scheduled Generators and Market Participants and a list of all applications to become a Scheduled Generator or Market Participant, including the Scheduled Generator and Market Participant information as set out in schedule 3.1;
- (2) a list of all of the *Scheduled Generators* and *Market Participants* who will cease to be *Scheduled Generators* or *Market Participants* and the time that each listed *Scheduled Generator* or *Market Participant* will cease to be a *Scheduled Generator* or *Market Participant*;
- (3) a list of all of the *Scheduled Generators* and *Market Participants* who are or are going to be suspended and the time at which each listed *Scheduled Generator* or *Market Participant* was suspended or will be suspended.
- (b) All Scheduled Generators and Market Participants must provide NEMMCO with the registered bid and offer data relevant to their scheduled loads, scheduled network services and generating units in accordance with schedule 3.1.
- (c) All *Scheduled Generators* and *Market Participants* will be required to provide *NEMMCO* with information as set out below:
 - (1) forecasts for *connection points* as prescribed in clause 5.6.1; and
 - (2) *metering* information for *settlements* purposes as prescribed in Chapter 7.
- (d) Network Service Providers are to maintain a register of data provided by Scheduled Generators and Market Participants for planning and design purposes in accordance with schedule 5.7 of Chapter 5 and are to provide a copy of this register of data to NEMMCO on request and in a form specified by NEMMCO.
- (e) Network Service Providers must, without delay, notify and provide NEMMCO with details of any additions or changes to the register of data described in clause 3.13.3(d).
- (f) Each year, by a date to be specified by *NEMMCO*, *Network Service Providers* must provide *NEMMCO* with the following information:
 - (1) expected *network capability* under normal, *outage* and emergency conditions;
 - (2) electrical data sufficient to allow *power system* modelling under steady state and dynamic conditions, this data to be made available in hard copy and an acceptable industry standard electronic format approved by *NEMMCO*; and
 - (3) operating procedures and practices for *network* operation and maintenance.
- (g) Network Service Providers must notify NEMMCO of any changes to the information provided under clause 3.13.3(f) as soon as practicable.

- (h) Scheduled Generators and Market Participants must notify NEMMCO of any changes to registered bid and offer data one month prior to the implementation of planned changes and without unreasonable delay in the event of unplanned changes.
- (i) Network Service Providers must notify NEMMCO of any changes or additions to technical data one month prior to the implementation of planned changes and without unreasonable delay in the event of unplanned changes.
- (j) NEMMCO must conduct an annual review of Scheduled Generator and Market Participant registered bid and offer data in consultation with Scheduled Generators and Market Participants and Scheduled Generators and Market Participants must advise NEMMCO of any required changes to the data.
- (k) Subject to the requirements relating to disclosure of information under clause 5.3.8(a), a *Registered Participant* may request from *NEMMCO*:
 - (1) registered bid and offer data;
 - (2) information that is reasonably required by the *Registered Participant* to carry out *power system* studies (including load flow and dynamic simulations) for planning and operational purposes including:
 - (i) historical information relating to the operating conditions of the *power system* that is not *confidential information*;
 - (ii) information and data provided to *NEMMCO* under paragraphs (f)(1), (f)(3) and (g); and
 - (iii) details of the shared *transmission* and *distribution network* impedance data and other technical data as listed in schedules 5.5.3 and 5.5.4; and
 - (3) operation and maintenance procedures and practices for *transmission* network or distribution network operation, developed for the purposes of schedule 5.1 sufficient to enable the Registered Participant to carry out power system modelling under normal, outage and emergency conditions.
- (l) Where *NEMMCO* holds information requested under paragraph (k), it must be provided to the *Registered Participant* as soon as practicable.
- (m) Where special approvals or exemptions have been granted by *NEMMCO*, including approval to aggregate *generating units*, *market network services*, *loads* for *central dispatch*, or exemptions from *central dispatch*, details of such special arrangements must be *published* by *NEMMCO*.
- (n) *NEMMCO* must determine and *publish intra-regional loss factors* in accordance with clause 3.6.2 by 1 April each year and whenever changes occur.
- (o) Network Service Providers must advise NEMMCO of their distribution loss factors, duly authorised by the appropriate Jurisdictional Regulator, and

NEMMCO must *publish* such *distribution loss factors* in accordance with clause 3.6.3(i).

- (p) NEMMCO must publish on a quarterly basis details of:
 - (1) interconnector transfer capability; and
 - (2) the discrepancy between *interconnector* transfer capability and the capacity of the relevant *interconnector* in the absence of *outages* on the relevant *interconnector* only,

for each day of the preceding quarter for all *interconnectors*.

Statement of opportunities

- (q) By 31 October in each year, *NEMMCO* must prepare and *publish* at a reasonable charge to cover the cost of production, a *statement of opportunities*, including at least the following information for the subsequent 10 year period:
 - (1) projections of aggregate MW demand and *energy* requirements for each *region*;
 - (2) generating capabilities of existing *generating units* and *generating units* for which formal commitments have been made for construction or installation;
 - (3) planned *plant* retirements;
 - (4) a summary of *network capabilities* and *constraints* based upon *Annual Planning Reports*; and
 - (5) operational and economic information about the *market* to assist planning by:
 - (i) Scheduled Generators and Market Participants; and
 - (ii) potential Scheduled Generators and Market Participants.
- (r) If after the publication of the most recent *statement of opportunities*, significant new information becomes available to *NEMMCO* relating to:
 - (1) the matters covered by paragraphs (q)(1),(2) and (3); or
 - (2) the matters covered by clause 5.6.5(c)(8) and (9),
 - *NEMMCO* must, as soon as practicable, *publish* that information in a descriptive form that is consistent with the *statement of opportunities*.
- (s) In preparing a *statement of opportunities NEMMCO* may seek the assistance of the *Inter-regional Planning Committee*.
- (t) As soon as practicable after a *Scheduled Generator*, *Market Participant* or *Network Service Provider* becomes aware of any information required for *publication* by *NEMMCO* under paragraph (q), that information must be provided to *NEMMCO* by that *Scheduled Generator*, *Market Participant* or *Network Service Provider*.

3.13.4 Spot market

- (a) Each week, in accordance with the *timetable*, *NEMMCO* must *publish* details of the outcome of the *medium term PASA*.
- (b) The details to be *published* by *NEMMCO* under clause 3.13.4(a) must include the information specified in clause 3.7.2(f).
- (c) Each *day*, in accordance with the *timetable*, *NEMMCO* must *publish* details of the outcome of the *short term PASA* for each *trading interval* covered.
- (d) The details of the *short term PASA published* each *day* by *NEMMCO* under clause 3.13.4(c) must include the information specified in clause 3.7.3(h).
- (e) Each day, in accordance with the timetable, NEMMCO must publish a half hourly pre-dispatch schedule for the period described in clause 3.8.20(a).
- (f) Details of the *pre-dispatch schedule* to be *published* must include the following for each *trading interval* in the period covered:
 - (1) forecasts of the most probable peak *power system load* plus required *reserve* for each *region* and for the total *power system*;
 - (2) forecasts of the most probable *energy* consumption for each *region* and for the total *power system*;
 - (3) forecast inter-regional loss factors;
 - (4) aggregate *generating plant* availability for each *region* and aggregate availability of each type of *market ancillary service* for each *region*;
 - (5) projected *supply* surpluses and deficits for each *region*, including shortages of *reserve* and projected *market ancillary service* surpluses and deficits for each *region*;
 - (5A) the aggregated MW allowance (if any) made by *NEMMCO* for generation from *non-scheduled generating systems* in each forecast:
 - (i) of the most probable peak *power system load* referred to in clause 3.13.4(f)(1);
 - (ii) referred to in clause 3.13.4(f)(2);
 - (iii) of aggregate *generating plant* availability referred to in clause 3.13.4(f)(4); and
 - (iv) of projected *supply* surpluses and deficits referred to in clause 3.13.4(f)(5) but not including shortages of *reserve* or projected *market ancillary service* surpluses and deficits for each *region*.
 - (5B) in respect of each forecast:
 - (i) of the most probable peak *power system load* referred to in clause 3.13.4(f)(1);
 - (ii) referred to in clause 3.13.4(f)(2);

- (iii) of aggregate *generating plant* availability referred to in clause 3.13.4(f)(4); and
- (iv) of projected *supply* surpluses and deficits referred to in clause 3.13.4(f)(5) but not including shortages of *reserve* or projected *market ancillary service* surpluses and deficits for each *region*,

a value that is the sum of that forecast and the relevant aggregated MW allowance (if any) referred to in clause 3.13.4(f)(5A); and

- (6) identification and quantification of:
 - (i) when and where the projected conditions are found to be inadequate;
 - (ii) any *trading intervals* for which *low reserve* or *lack of reserve* conditions are forecast to apply;
 - (iii) where a projected *supply* deficit in one *region* can be supplemented by a surplus in a neighbouring *region* (dependent on forecast *interconnector* capacities) and the expected *interconnector flow*;
 - (iv) forecast *interconnector* transfer capabilities and the projected impact of any *inter-network tests* on those transfer capabilities; and
 - (v) when and where *network constraints* may become binding on the *dispatch* of *generation* or *load*.
- (g) Each day, in accordance with the timetable, NEMMCO must publish forecasts of spot prices and ancillary service prices at each regional reference node for each trading interval or dispatch interval (as applicable) of the period described in clause 3.8.20(a), with such forecasts being based on the pre-dispatch schedule information.
- (h) Together with its forecast *spot prices*, *NEMMCO* must *publish* details of the expected sensitivity of the forecast *spot prices* to changes in the forecast *load* or *generating unit* availability.
- (i) In accordance with the *timetable* or more often if there is a *change* in circumstances which in the opinion of *NEMMCO* results in a significant *change* in forecast *spot price*, or in any event no more than 3 hours after the previous such publication, *NEMMCO* must prepare and *publish* updated *pre-dispatch schedules* and *spot price forecasts*, including the details specified in clause 3.13.4(f).
- (j) If *NEMMCO* considers there to be a significant change in a forecast *spot price*, *NEMMCO* must identify and *publish* the cause of such a change in terms of the aggregate *supply* and demand situation and any *network constraints* in or between the affected *region(s)*.

- (k) *NEMMCO* must specify and *publish* its criteria for a significant change in forecast *spot price* for the purposes of activating an update in the *published* forecasts.
- (1) Within 5 minutes of each time *NEMMCO* runs the *dispatch algorithm*, *NEMMCO* must *publish* the *dispatch price* for each *regional reference node* calculated in accordance with clause 3.9.2 and the *ancillary service* for each *market ancillary service* for each *regional reference node* calculated in accordance with clause 3.9.2A.
- (m) Within 5 minutes of the conclusion of each *trading interval*, *NEMMCO* must *publish* the *regional reference prices* for each *region* for that *trading interval*.
- (n) Each day, in accordance with the timetable, NEMMCO must publish the actual regional reference prices, ancillary service prices, regional and total interconnected system loads and energies, inter-regional flows, inter-regional loss factors and details of any network constraints for each trading interval in the previous trading day.
- (o) Within 2 business days of an event whereby a scheduled generating unit has been constrained off or constrained on in the central dispatch by a network constraint within its own region, NEMMCO must advise the Scheduled Generator and Network Service Provider, with whom the relevant Scheduled Generator has a connection agreement in respect of that scheduled generating unit, of the following information:
 - (1) the dispatch intervals in which the constraint applied; and
 - (2) NEMMCO's reasonable estimate of the MW quantities at which the scheduled generating unit would otherwise have been dispatched in each relevant trading interval in accordance with its dispatch offer and in the absence of the network constraint.
- (p) Each day, in accordance with the timetable, NEMMCO must publish details of final dispatch offers, dispatch bids and market ancillary service offers received and actual availabilities of generating units, scheduled network services, scheduled loads and market ancillary services for the previous trading day, including:
 - (1) the number and times at which *rebids* were made, and the reason provided by the *Scheduled Generator* or *Market Participant* for each *rebid* under clause 3.8.22(c)(2).
 - (2) identification of the *Scheduled Generator* or *Market Participant* submitting the *dispatch bid, dispatch offer* or *market ancillary offer*;
 - (3) the dispatch bid or dispatch offer prices;
 - (4) quantities for each *trading interval*;
 - (5) the *ramp rate* of each *generating unit*, *scheduled load* and *scheduled network service* as measured by *NEMMCO's* telemetry system; and

- (6) identification of *trading intervals* for which the *plant* was specified as being *inflexible* in accordance with clause 3.8.19 and the reasons provided by the *Scheduled Generator* or *Market Participant* in accordance with clause 3.8.19(b)(1)
- (q) Each day, in accordance with the timetable, NEMMCO must publish details of actual generation, dispatched generation, dispatched network service or dispatched load for each scheduled generating unit, scheduled network service and scheduled load, respectively, in each trading interval for the previous trading day.
- (r) Each day, in accordance with the timetable, NEMMCO must publish details of actual generation for each non-scheduled generating unit or non-scheduled generating system, in each trading interval for the previous trading day.
- (s) Where *NEMMCO publishes* details as referred to in clause 3.13.4(r), the requirement to *publish* applies only to data available to *NEMMCO*.
- (t) *NEMMCO* may, in *publishing* the details referred to in clause 3.13.4(s), *publish* aggregated information of actual *generation* for *non-scheduled generating units* or *non-scheduled generating systems* that have a *nameplate rating* that is less than 30 MW.
- (u) Each time *NEMMCO* runs the *dispatch algorithm* it must, within 5 minutes, *publish* for the relevant *dispatch interval*:
 - (1) details of any MW allowance made by *NEMMCO* for *generation* from *non-scheduled generating systems* in its forecast regional demand;
 - (2) for each regional reference node the sum of the actual generation for each non-scheduled generating unit or non-scheduled generating system; and
 - (3) for each *regional reference node*, a value that is the sum of the *regional* demand value used by *NEMMCO* in its *dispatch algorithm* to calculate the *dispatch price* referred to in clause 3.13.4(1) and the sum of the actual *generation* referred to in clause 3.13.4(u)(2).
- (v) Where *NEMMCO publishes* the information referred to in clause 3.13.4(u), the requirement for *NEMMCO* to *publish* applies only to data available to *NEMMCO*.
- (w) Each day, in accordance with the timetable, NEMMCO must publish details of any operational irregularities arising on the previous trading day including, for example, any circumstances in which there was prima facie evidence of a failure to follow dispatch instructions.
- (x) Each *trading interval*, *NEMMCO* must, for each *regional reference node*, *publish* the demand for that *trading interval*, both inclusive and exclusive of the aggregate actual *generation* from *non-scheduled generating systems*.

3.13.4A Market ancillary services

- (a) *NEMMCO* must each week, in accordance with the *timetable*, *publish* a forecast of the requirements for each type of *market ancillary service* for each *region* for the following week.
- (b) *NEMMCO* must *publish* information describing the key factors which determine the requirement for each type of *market ancillary service* and how they impact on forecast requirements.
- (c) *NEMMCO* must *publish* information detailing any significant changes to the forecast requirement for any *market ancillary service* previously *published* under clause 3.13.4A(a), as soon as reasonably practicable after becoming aware of that information.

3.13.5 Ancillary services contracting by NEMMCO

- (a) *NEMMCO* must *publish* annually the costs of all of its operations associated with the acquisition of *market ancillary services* and *non-market ancillary services*.
- (b) NEMMCO must publish annually the quantities and categories of non-market ancillary services covered under existing ancillary services agreements and the additional quantities of non-market ancillary services for which NEMMCO expects to enter into ancillary services agreements within the ensuing 12 months.
- (c) Information published under clauses 3.13.5(a) or (b) must include:
 - (1) the costs and quantities associated with each category of *ancillary service* purchased or to be purchased; and
 - (2) where possible, the *regions* in respect of which costs were or are expected to be incurred and *ancillary services* were or are expected to be provided.

3.13.5A Settlement residue auctions

- (a) If *NEMMCO* conducts an *auction* under rule 3.18, *NEMMCO* must, as soon as practicable thereafter, make available to all *Registered Participants* a report outlining:
 - (1) the *auction* clearing prices;
 - (2) all bids (but not the name of any bidder); and
 - (3) the proceeds of each such *auction*.
- (b) *NEMMCO* must, as soon as practicable after the *final statements* for a *billing period* have been given to *Market Participants* under clause 3.15.15, make available to all *Registered Participants* a report setting out:
 - (1) the total settlements residue;

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- (2) the amount of *settlements residue* attributable to each *directional interconnector* (including the amount paid pursuant to the *jurisdictional derogations* in Chapter 9); and
- (3) the amount of *settlement residue* attributable to *intra-regional loss* factors for each region, for that billing period.
- (c) *NEMMCO* may provide copies of its reports under clauses 3.13.5A(a) and (b) to persons other than *Registered Participants*, and may charge a fee for doing so to cover an appropriate share of the costs of preparing the report.

3.13.6 Reserve trading by NEMMCO

- (a) If any *plant* under a *reserve contract* with *NEMMCO* is *dispatched*, then *NEMMCO* must, as soon as practicable thereafter, *publish* a report outlining:
 - (1) the circumstances giving rise to the need for *dispatch* of *reserves*;
 - (2) the basis on which it determined the latest time for that *dispatch* of *reserves* and on what basis it determined that a *market* response would not have avoided the need for the *dispatch* of *reserves*;
 - (3) details of the changes in *dispatch* outcomes due to the *dispatch* of *reserves*;
 - (4) the processes implemented by *NEMMCO* to *dispatch* the *reserves*;
 - (5) if applicable, reasons why *NEMMCO* did not follow any or all of the processes set out in rule 4.8 either in whole or in part prior to the *dispatch* of *reserves*; and
 - (6) if applicable, the basis upon which *NEMMCO* considered it impractical to set *spot prices* and *ancillary service prices* in accordance with clause 3.9.3(a1).
- (a1) As soon as reasonably practicable after *NEMMCO* has, in accordance with clause 3.15.9, included the amounts arising under a *reserve contract* in a *final statement* provided under clause 3.15.15, *NEMMCO* must *publish* details of:
 - (1) the payments under the *reserve contract* for the relevant *billing periods*; and
 - (2) a breakdown of the recovery of those costs by each category of *Registered Participant*, as determined by *NEMMCO*, in each *region*.
- (b) Within 30 *days* of the end of each *financial year*, *NEMMCO* must *publish* a report detailing:
 - (1) each occasion on which it intervened to secure *reserve* availability;
 - (2) each occasion during the financial year when *plant* under a *reserve* contract was dispatched; and

(3) its costs and finances in connection with its *reserve* trading activities according to appropriate accounting standards including profit and loss, balance sheet, sources and applications of funds.

3.13.6A Report by NEMMCO

- (a) *NEMMCO* must, as soon as reasonably practicable after issuing a *direction*, *publish* a report outlining:
 - (1) the circumstances giving rise to the need for the *direction*;
 - (2) the basis on which it determined the latest time for that *direction* and on what basis that it determined that a *market* response would not have avoided the need for the *direction*;
 - (3) details of the changes in *dispatch* outcomes due to the *direction*;
 - (4) the processes implemented by *NEMMCO* to issue the *direction*;
 - (5) if applicable, the basis upon which *NEMMCO* did not follow any or all of the processes set out in rule 4.8 either in whole or in part prior to the issuance of the *direction*;
 - (6) if applicable, the basis upon which *NEMMCO* considered it impractical to set *spot prices* and *ancillary service prices* in accordance with clause 3.9.3(a1);
 - (7) details of the adequacy and effectiveness of responses to inquiries made by *NEMMCO* under clause 4.8.5A(c); and
 - (8) information regarding any notification by a *Registered Participant* that it will not be able to comply with a *direction* under clause 4.8.9(d).
- (b) As soon as reasonably practicable after *NEMMCO* has, in accordance with clause 3.15.10C, included the amounts arising from a *direction* in a settlement statement provided under clause 3.15.15, *NEMMCO* must *publish* details of:
 - (1) the *compensation recovery amount* arising from the *direction* as calculated under clause 3.15.8(a) for the period of the *direction*;
 - (2) details of the calculation of the regional benefit determined under clause 3.15.8(b1); and
 - (3) a breakdown of the *compensation recovery amount* by each category of *Registered Participant*, as determined by *NEMMCO*, in each region.

3.13.7 Monitoring of significant variation between forecast and actual prices by AER

(a) The AER must, after consulting with the AEMC, specify and make available to Registered Participants and the public, criteria which the AER will use to determine whether there is a significant variation between the spot price

- forecast published by NEMMCO in accordance with clause 3.13.4 and the actual spot price in any trading interval. The AER must, in accordance with these criteria, monitor in each trading interval whether any such significant variation has occurred.
- (b) The *AER* must prepare and *publish* a report in respect of each three month period commencing on 1 January, 1 April, 1 July and 1 October in each year. The report must:
 - (1) be *published* no later than 4 weeks after the end of each three month period;
 - (2) identify and review each occasion when, in accordance with the criteria specified under clause 3.13.7(a), the *AER* considers that a significant price variation has occurred;
 - (3) state why the AER considers that the significant price variation occurred:
 - (4) be available to members of the public on request; and
 - (5) be provided to the *AEMC*.
- (c) The *ACCC* or the *AEMC* may request the *AER* to report to it on a particular *market* outcome. If the *ACCC* or the *AEMC* makes a request of this type, the *AER* may provide a report on that *market* outcome. The report must review the *market* outcome raised by the *ACCC* or the *AEMC* (as the case may be) and state why the *AER* considers that the *market* outcome occurred.
- (d) The *AER* must, within 20 *business days* of the end of a week in which the *spot price* exceeded \$5,000/MWh in a *trading interval* or *trading intervals*, prepare and *publish* a report which must for each *trading interval* in which the *spot price* exceeded \$5,000/MWh in that week:
 - (1) describe the significant factors that contributed to the *spot price* exceeding \$5,000/MWh, including the withdrawal of *generation* capacity and *network* availability;
 - (2) assess whether *rebidding* pursuant to clause 3.8.22 contributed to the *spot price* exceeding \$5,000/MWh; and
 - (3) identify the marginal scheduled generating units for the dispatch intervals in the relevant trading interval and all scheduled generating units for which any dispatch offer for the trading interval was equal to or greater than \$5,000/MWh and compare these dispatch offers to relevant dispatch offers in previous trading intervals.

(e) Where

- (1) prices at a *regional reference node* for a *market ancillary service* over a period significantly exceed the relevant *spot price* for *energy;* and
- (2) prices for that *market ancillary service* exceed \$5,000 for a number of *trading intervals* within that period,

the AER must prepare and publish a report which:

- (3) describes the significant factors that contributed to the *market* ancillary service prices exceeding \$5,000/MWh;
- (4) identifies any linkages between *spot prices* in the *energy market* and *market ancillary service* prices contributing to the occurrence; and
- (5) assesses whether *rebidding* pursuant to clause 3.8.22 contributed to prices exceeding \$5,000/Mwh.

3.13.8 Public information

- (a) *NEMMCO* must *publish* on a daily basis the following information for the previous *trading day*:
 - (1) regional reference price by trading interval;
 - (2) power system load for each region referred to the regional reference node by trading interval;
 - (3) regional electricity consumption in MWh by trading interval;
 - (4) inter-regional power flows by trading interval; and
 - (5) inter-regional and intra-regional network constraints by trading interval.
- (b) All *market information* that *NEMMCO* is required to *publish* in accordance with the *Rules* shall also be made available by *NEMMCO* to persons other than *Registered Participants* using the *electronic communications system* on the fee basis described in clause 8.7.6. *NEMMCO* may make the *market information* available to persons other than *Registered Participants* using a mechanism other than the *market information bulletin board* on the fee basis described in clause 8.7.6, so long as that information is also available on the *market information bulletin board*.
- (c) *NEMMCO* must make available for purchase by any party the *statement of opportunities* from the date of *publication* of such statement.
- (d) *NEMMCO* must retain all information provided to it under the *Rules* for at least 6 years in whatever form it deems appropriate for reasonably easy access.

3.13.9 [Deleted]

3.13.10 Market auditor

- (a) *NEMMCO* must appoint one or more *market auditors* to carry out *reviews* of such matters as *NEMMCO* considers appropriate which must include (but need not be limited to) a *review* of:
 - (1) the calculations and allocations performed by the *metering system* and *settlements* system;
 - (2) the billing and information systems;
 - (3) the scheduling and *dispatch* processes;

- (4) the processes for software management;
- (5) the *NEMMCO* procedures and their compliance with the *Rules*.
- (b) *NEMMCO* must ensure that the *market auditor* carries out the *reviews* to be carried out under clause 3.13.10(a) no less than annually.
- (c) A market auditor shall be an independent person.
- (d) A *market auditor* must report in writing to *NEMMCO*. *NEMMCO* must, after receiving the report, either:
 - (1) approve the report, and any recommendations made in it, by noting such approval on the report or in a paper attached to the report; or
 - (2) prepare a separate report setting out the matters dealt with in the report which *NEMMCO* approves and those matters which *NEMMCO* does not approve and setting out *NEMMCO's* reasons for that view.
- (e) *NEMMCO* must *publish* any report received from the *market auditor* together with the material mentioned in clause 3.13.10(d).

3.13.11 [Deleted]

3.13.12 NMI Standing Data

- (a) The *Jurisdictional Regulator* for each *participating jurisdiction* may provide *NEMMCO* with a *Jurisdictional NMI Standing Data schedule* setting out the categories of *NMI Standing Data* which:
 - (1) Registered Participants are required by the participating jurisdiction's legislation or licensing requirements to provide to NEMMCO in relation to connection points in that participating jurisdiction; and
 - (2) *NEMMCO* must make available to *Market Customers*, or a class of *Market Customers*, on request pursuant to its disclosure obligations under clauses 3.13.12(d) and (e).

Any such schedule must contain the matters set out in clause 3.13.12(c).

- (b) A Jurisdictional Regulator may from time to time amend the Jurisdictional NMI Standing Data schedule in respect of the relevant participating jurisdiction, which amendments must be consistent with the matters set out in clause 3.13.12(c), and must promptly provide the amended schedule to NEMMCO.
- (c) A valid *Jurisdictional NMI Standing Data schedule* must contain the following items:
 - (1) a specification of the categories of *NMI Standing Data* which *NEMMCO* must provide to *Market Customers*, or a specified class of *Market Customers*, on request, pursuant to its disclosure obligations under clauses 3.13.12(d) and (e), in respect of *connection points* in the relevant *participating jurisdiction*;

- (2) details of the *Jurisdictional NMI Standing Data suppliers*, including which *Registered Participants* are required to provide that data in respect of particular *connection points* within that *participating jurisdiction*;
- (3) the timetable which the relevant participating jurisdiction will implement to ensure Jurisdictional NMI Standing Data suppliers supply NMI Standing Data in respect of connection points in that participating jurisdiction to NEMMCO;
- (4) the criteria which *NEMMCO* must use to identify whether *NEMMCO* must disclose *NMI Standing Data* for *connection points* in that *participating jurisdiction* to particular *Market Customers*, pursuant to its disclosure obligations under clauses 3.13.12(d) and (e);
- (5) the purposes connected with the facilitation of the wholesale electricity *market* for which the *Market Customer* may use *NMI Standing Data*;
- (6) any additional information or criteria as may be determined by the *Jurisdictional Regulator* as necessary or appropriate in relation to the obligations of *Jurisdictional NMI Standing Data suppliers* and the release by *NEMMCO* of *NMI Standing Data* for *connection points* in that *participating jurisdiction*.

(d) NEMMCO must:

- (1) publish the Jurisdictional NMI Standing Data schedules and any amendments to those schedules provided to it by the Jurisdictional Regulators under clauses 3.13.12(a) and (b); and
- (2) subject to clause 3.13.12(e), make available to *Market Customers* on request *NMI Standing Data* within the relevant categories in respect of connection points in a participating jurisdiction described in the *Jurisdictional NMI Standing Data schedule* for that participating jurisdiction.
- (e) *NEMMCO* must only provide *NMI Standing Data* under this clause 3.13.12 to a *Market Customer*:
 - (1) that is a *Market Customer* or a member of a class of *Market Customers* fitting the criteria stated in the relevant *Jurisdictional NMI Standing Data schedule* as being entitled to receive that data;
 - (2) in accordance with the relevant valid *Jurisdictional NMI Standing Data schedule*; and
 - (3) for the purposes described in clause 3.13.12(g).
- (f) Each Registered Participant which is a Jurisdictional NMI Standing Data supplier must provide the NMI Standing Data to NEMMCO which it is required to provide in accordance with the relevant Jurisdictional NMI Standing Data schedule, if any such Jurisdictional NMI Standing Data schedule has been provided to NEMMCO under clause 3.13.12(a):

- (1) at no charge and in the format reasonably required by *NEMMCO*; and
- (2) after having first done whatever may be required or otherwise necessary under any applicable privacy legislation (including if appropriate making relevant disclosures or obtaining relevant consents from end-use customers) taking into account that *NEMMCO* will use and disclose the *NMI Standing Data* in accordance with the *Rules*.
- (g) *Market Customers* must only use *NMI Standing Data* provided to it by *NEMMCO* under this clause 3.13.12 for the purposes permitted by the relevant *Jurisdictional NMI Standing Data schedule*.
- (h) Where a *Jurisdictional Regulator* has provided *NEMMCO* with a *Jurisdictional NMI Standing Data schedule* for the relevant *participating jurisdiction* and a *Registered Participant* which is a *Jurisdictional NMI Standing Data supplier* fails to provide *NEMMCO* with *NMI Standing Data* in accordance with clause 3.13.12(f) and *NEMMCO* becomes aware of that failure, then:
 - (1) *NEMMCO* must advise the *Registered Participant* that, in its opinion, the *Registered Participant* is failing to comply with clause 3.13.12(f);
 - (2) if the Registered Participant fails to provide NEMMCO with the NMI Standing Data within 5 business days of the notice provided under clause 3.13.12(h)(1), NEMMCO must notify the relevant Jurisdictional Regulator of the failure and the failure by the Registered Participant to provide the NMI Standing Data is to be dealt with by the Jurisdictional Regulator under the relevant participating jurisdiction's legislation or licensing requirements unless the Jurisdictional Regulator notifies NEMMCO otherwise in accordance with clause 3.13.12(h)(3); and
 - (3) if, after receiving a notice from *NEMMCO* under clause 3.13.12(h)(2), the *Jurisdictional Regulator* notifies *NEMMCO* that the relevant participating jurisdiction's legislation or licensing requirements do not contain a regime which empowers the *Jurisdictional Regulator* to compel the *Registered Participant* to provide the *NMI Standing Data* to *NEMMCO*, *NEMMCO* must notify the *AER* of the failure by the *Registered Participant* to provide the *NMI Standing Data* under clause 3.13.12(f).
- (i) Where a *Jurisdictional Regulator* has provided *NEMMCO* with a *Jurisdictional NMI Standing Data schedule* for the relevant *participating jurisdiction* and a *Market Customer*, that has been provided with *NMI Standing Data* by *NEMMCO* under clause 3.13.12(d) in accordance with that schedule, fails to use that *NMI Standing Data* in accordance with clause 3.13.12(g), and *NEMMCO* becomes aware of that failure, then:
 - (1) *NEMMCO* must advise the *Market Customer* that, in its opinion, the *Market Customer* is failing to comply with clause 3.13.12(g);

- (2) if the *Market Customer* does not remedy the failure within 5 *business* days of the notice provided under clause 3.13.12(i)(1), *NEMMCO* must notify the relevant *Jurisdictional Regulator* of the failure and the failure by the *Market Customer* to use the *NMI Standing Data* in accordance with this clause 3.13.12 is to be dealt with by the *Jurisdictional Regulator* under the relevant *participating jurisdiction's* legislation or licensing requirements unless the *Jurisdictional Regulator* notifies *NEMMCO* otherwise in accordance with clause 3.13.12(i)(3); and
- (3) if, after receiving a notice from *NEMMCO* under clause 3.13.12(i)(2), the *Jurisdictional Regulator* notifies *NEMMCO* that the relevant participating jurisdiction's legislation or licensing requirements do not contain a regime which empowers the *Jurisdictional Regulator* to regulate the use of the *NMI Standing Data* by a *Market Customer*, *NEMMCO* must notify the *AER* of the failure by the *Market Customer* to use the *NMI Standing Data* in accordance with clause 3.13.12(g).
- (j) NEMMCO must if requested by a Jurisdictional Regulator:
 - (1) develop a regime for monitoring and reporting to the *Jurisdictional Regulator* on requests received by *NEMMCO* to provide *NMI Standing Data* to *Market Customers* for *connections points* in the relevant *participating jurisdiction*, in consultation with the *Jurisdictional Regulator*; and
 - (2) provide information to the *Jurisdictional Regulator* in accordance with the monitoring and reporting regime developed under this clause 3.13.12(j).
- (k) Nothing in this clause 3.13.12:
 - (1) requires *NEMMCO* to make available *NMI Standing Data* if that *NMI Standing Data* has not been provided to *NEMMCO*;
 - (2) requires *NEMMCO* to make available *NMI Standing Data* where the collection, use or disclosure of that information by *NEMMCO* would breach applicable privacy laws;
 - (3) precludes *NEMMCO* from providing *NMI Standing Data* to a *Registered Participant* where the provision of that information is required to give effect to other provisions of the *Rules*;
 - (4) precludes *NEMMCO* from disclosing the information in the circumstances described in clause 8.6.2; and
 - (5) requires *NEMMCO* to provide information which its software systems cannot provide without modification.

3.13.13 Inter-network tests

(a) *NEMMCO* must *publish* the *test program* for an *inter-network test* as soon as practicable after determining it under clause 5.7.7(r).

- (b) If *NEMMCO* amends the *test program* for an *inter-network test* it must *publish* details of the amendment.
- (c) If *NEMMCO* proposes to conduct an *inter-network test* it must *publish* the approximate time of the test, giving as much notice as is reasonably practicable.
- (d) If the time of an *inter-network test* is changed, *NEMMCO* must *publish* details of the change.

3.14 Administered Price Cap and Market Suspension

3.14.1 Cumulative Price Threshold and Administered Price Cap

- (a) In conjunction with each *participating jurisdiction*, and after consulting *Market Participants* in accordance with the *Rules consultation procedures*, the *AEMC* must develop, authorise and *publish* and may vary from time to time a schedule to specify an *administered price cap* for each *region* to apply to *spot prices* and *market ancillary service prices* and to be used as described in this rule 3.14.
- (b) The *administered floor price* for each *region* to apply to *spot prices* and to be used as described in clause 3.14.2 will be the negative of the value of the *administered price cap*.
- (c) The *cumulative price threshold* is \$150,000/MWh.

3.14.2 Application of Administered Price Cap

- (a) [Deleted]
- (b) *NEMMCO* must immediately notify all *Market Participants* of the commencement and closing of an *administered price period* under rule 3.14.
- (c) A trading interval is to be an administered price period if in a region:
 - (1) the sum of the *spot price* in the previous 336 *trading intervals*, calculated as if this clause did not apply, exceeds the *cumulative price threshold*:
 - (1A) the sum of the *ancillary service price* for a *market ancillary service* in the previous 2016 *dispatch intervals*, calculated as if this clause did not apply, exceeds 6 times the *cumulative price threshold*;
 - (2) the *trading interval* occurs in a *trading day* in which a prior *trading interval* is an *administered price period* under this clause 3.14.2; or
 - (3) the previous trading interval was an administered price period and in NEMMCO's opinion one or more trading intervals in the next business day will be an administered price period and NEMMCO deems, with the consent of the AER, the trading interval to be an administered price period.

- (d) During an *administered price period* the procedures for *PASA*, *dispatch*, *spot price* and *ancillary service price* determination are to continue in accordance with the provisions of the *Rules*.
- (d1) If, within an *administered price period* triggered because of clauses 3.14.2(c)(1), (2) or (3) in relation to *energy*, the *dispatch price* for the *region* identified in clause 3.14.2(c) calculated as if this clause 3.14.2(d1) did not apply:
 - (1) exceeds the *administered price cap*, then *NEMMCO* must set the *dispatch price* to the *administered price cap*; or
 - (2) is less than the *administered floor price*, *NEMMCO* must set the *dispatch price* to the *administered floor price*.
- (d2) If within an *administered price period* an *ancillary service price* for a *market ancillary service* for the *region* identified in clause 3.14.2(c) calculated as if this clause 3.14.2(d2) did not apply exceeds the *administered price cap*, then *NEMMCO* must set that *ancillary service price* to the *administered price cap*.
- (e) If during an administered price period the dispatch price:

(1) **[Deleted]**

(2) at any regional reference node is set to the administered price cap under clause 3.14.2, the dispatch prices at all other regional reference nodes connected by a regulated interconnector or regulated interconnectors that have an energy flow towards that regional reference node must not exceed the product of the administered price cap multiplied by the average loss factor for that dispatch interval between that regional reference node and the regional reference node at which dispatch prices have been set to the administered price cap determined in accordance with clause 3.14.2(e)(5).

(3) [Deleted]

- (4) at any regional reference node is set to the administered floor price under clause 3.14.2, then dispatch prices at all other regional reference nodes connected by a regulated interconnector or regulated interconnectors that have an energy flow towards that regional reference node must be equal to or greater than the product of the administered floor price multiplied by the average loss factor for that dispatch interval between that regional reference node and the regional reference node at which dispatch prices have been set to the administered floor price determined in accordance with clause 3.14.2(e)(5).
- (5) *NEMMCO* must determine the average *loss factors* applicable to clause 3.14.2(e)(2) and 3.14.2(e)(4) by reference to the *inter-regional loss factor* equations relating to the relevant *regulated interconnector*.

3.14.3 Conditions for suspension of the spot market

- (a) Subject to clause 3.14.3(b), *NEMMCO* may declare the *spot market* to be suspended in a *region* when in respect of that *region*:
 - (1) the *power system* has collapsed to a *black system*;
 - (2) *NEMMCO* has been directed by a *participating jurisdiction* to suspend the *market* or operate all or part of the *power system* in a manner contrary to the provisions of the *Rules* following the formal declaration by that *participating jurisdiction* of a state of emergency under its emergency services or equivalent legislation; or
 - (3) NEMMCO determines that it is necessary to suspend the *spot market* in a *region* because it has become impossible to operate the *spot market* in accordance with the provisions of the *Rules*.
- (a1) If *NEMMCO* declares the *spot market* to be suspended in a *region*, then all *spot prices* and *ancillary service prices* are set in accordance with clause 3.14.5 for that *region*.
- (b) *NEMMCO* must not suspend the *spot market* solely because:
 - (1) *spot prices* have reached *VoLL*;
 - (1A) spot prices have reached the market floor price;
 - (2) NEMMCO has issued a direction; or
 - (3) *NEMMCO* has otherwise intervened in the market under rule 3.12.
- (c) *NEMMCO* must conduct reviews of each occasion when it suspended the *spot market* in order to assess the adequacy of the provision and response of *facilities* or services, and the appropriateness of actions taken to restore or maintain *power system security*.
- (d) The report of the review carried out in accordance with clause 3.14.3(c) must be made available to *Registered Participants* and the public.
- (e) A *Registered Participant* must co-operate in any such review conducted by *NEMMCO* (including making available relevant records and information).
- (f) A Registered Participant must provide to NEMMCO such information relating to the performance of its equipment during and after a suspension of the spot market as NEMMCO reasonably requires for the purposes of analysing or reporting on that suspension.
- (g) NEMMCO must provide to a Registered Participant such information or reports relating to the performance of that Registered Participant's equipment during a suspension of the spot market as that Registered Participant reasonably requests and in relation to which NEMMCO is required to conduct a review under this clause 3.14.3.

3.14.4 Declaration of market suspension

- (a) The *spot market* can only be suspended by a declaration by *NEMMCO* under clause 3.14.3(a) and if the *spot market* is suspended, *NEMMCO* must notify all *Registered Participants* without delay.
- (b) *NEMMCO* must not declare the *spot market* to be suspended retrospectively.
- (c) The *spot market* is to be deemed to be suspended at the start of the *trading interval* in which *NEMMCO* makes a declaration that the *spot market* is suspended.
- (d) Following a declaration by *NEMMCO* under clause 3.14.3(a), the *spot* market is to remain suspended until *NEMMCO* declares and informs all *Registered Participants*:
 - (1) that *spot market* operation is to resume in accordance with this Chapter 3; and
 - (2) of the *time* at which the *spot market* is to resume.
- (e) If *NEMMCO* declares that the *spot market* is suspended:
 - (1) *NEMMCO* may then issue *directions* to *Registered Participants* in accordance with clause 4.8.9; and
 - (2) *spot prices* and *ancillary service prices* are to be set by *NEMMCO* in accordance with clause 3.14.5.
- (f) NEMMCO must within 10 business days following the day on which, in accordance with the notice given by NEMMCO under clause 3.14.4(d), the spot market resumed, commence an investigation of that spot market suspension.
- (g) The investigation must examine and report on the reason for the suspension and the effect that the suspension had on the operation of the *spot market*. *NEMMCO* must make a copy of the report available to *Registered Participants* and the public as soon as it is practicable to do so.

3.14.5 Pricing during market suspension

- (a) If *NEMMCO* declares that the *spot market* is suspended then, as far as *NEMMCO* considers it practically and reasonably possible, it must follow the procedures in the *Rules* for *PASA*, *dispatch* and *spot price* and *ancillary service price*, subject to the application of clause 3.14.5.
- (b) The *spot price* and the *ancillary service price* during a *trading interval* for which *NEMMCO* has declared the *spot market* to be suspended is to be determined by *NEMMCO* in accordance with clause 3.14.5.
- (c) Subject to clauses 3.14.5(d), (g) and (j), if the *spot market* is suspended in a *region* then *dispatch* and the determination of *spot prices* and *ancillary service prices* in the *region* where the *spot market* is suspended are to continue in accordance with rules 3.8 and 3.9.
- (d) If at any time on or during suspension of the *spot market* in a *region*:

- (1) in *NEMMCO's* reasonable opinion it is not possible to continue *dispatch* and the determination of *spot prices* in the *suspended region* in accordance with rules 3.8 and 3.9;
- (2) the suspended region is connected by an unconstrained interconnector to another region;
- (3) the *dispatch* and determination of *spot prices* and *ancillary service prices* in the other *region* is continuing in accordance with rules 3.8 and 3.9; and
- (4) *local market ancillary service requirements* do not apply in the *suspended region*,

NEMMCO must:

- (5) determine the *spot price* in the *suspended region* in accordance with clause 3.14.5(e); and
- (6) continue to determine *ancillary service prices* in the *suspended region* in accordance with rules 3.8 and 3.9.
- (e) In the circumstances described in clause 3.14.5(d) the *spot price* is to be determined by application of an appropriate *inter-regional loss factor* to the *spot price* in the adjacent *region* referred to in clause 3.14.5(d)(2), such *inter-regional loss factor* being determined by *NEMMCO* in accordance with the methodology in clause 3.6.2A and the actual flows on the relevant *unconstrained interconnectors*.
- (f) If the *spot price* in the *suspended region* is being determined in accordance with clause 3.15.4(e), the *spot price* must continue to be determined in accordance with that clause until the earlier of:
 - (1) the time that the *spot market* is no longer suspended in the *region*; and
 - (2) the time that the spot price in the region is required to be determined in accordance with either clause 3.14.5(g) or clause 3.14.5(j).
- (g) If at any time during suspension of the *spot market* in a *region*:
 - (1) either:
 - (A) dispatch and the determination of spot prices and ancillary service prices is being effected in accordance with rules 3.8 and 3.9; or
 - (B) the *spot prices* and *ancillary service prices* in the *suspended region* are being determined in accordance with clause 3.14.5(e); and
 - (2) in *NEMMCO's* reasonable opinion it is no longer practical to continue *dispatch* and the determination of *spot prices* and *ancillary service prices* in the *suspended region* in accordance with the clauses under which *dispatch*, *spot prices* and *ancillary service prices* are currently being determined; and

- (3) in *NEMMCO's* reasonable opinion a current *pre-dispatch schedule* exists in respect of the *suspended region*,
- then *NEMMCO* must determine the *spot prices* and *ancillary service prices* in the *suspended region* in accordance with clause 3.14.5(h).
- (h) In the circumstances described in clause 3.14.5(g), the *spot prices* and *ancillary service prices* in the *suspended region* are set at *NEMMCO's* forecast *regional reference price* and *ancillary service prices* determined in accordance with the most recently *published pre-dispatch schedule* if it is still current.
- (i) If the *spot prices* and *ancillary service prices* in the *suspended region* are being determined in accordance with clause 3.15.4(h), they must continue to be determined in accordance with that clause until the earlier of:
 - (1) the time that the *spot market* is no longer suspended in the relevant *region*; and
 - (2) the time that the *spot prices* or the *ancillary service prices* (as the case may be) in the *suspended region* are determined in accordance with clause 3.14.5(j).
- (j) If at any time on or during suspension of the *spot market* in a *region*:
 - (1) either:
 - (A) dispatch and the determination of spot prices and ancillary service prices is being effected in accordance with rules 3.8 and 3.9; or
 - (B) the *spot prices* and *ancillary service prices* in the *suspended region* are being determined in accordance with either clause 3.14.5(e) or clause 3.14.5(h); and
 - (2) in *NEMMCO's* reasonable opinion it is no longer practical to set the *spot prices* and *ancillary service prices* in the *suspended region* in accordance with either clauses rules 3.8, 3.9, clause 3.14.5(e) or clause 3.14.5(h) (as the case may be),

then *NEMMCO* must set the *spot prices* and *ancillary service prices* in the *suspended region* at the prices set out in the relevant market suspension pricing schedule developed and published in accordance with clause 3.14.5(1).

- (k) If the *spot prices* and *ancillary service prices* in the *suspended region* are being determined in accordance with clause 3.15.4(j), they must continue to be determined in accordance with that clause until the *spot market* is no longer suspended in that *region*.
- (1) *NEMMCO* must:
 - (1) develop in accordance with the *Rules consultation procedures* a methodology to be used by *NEMMCO* (estimated price methodology) to prepare and update schedules containing reasonable

- estimates of typical *market* prices during the periods to which the schedules relate (**estimated price schedules**);
- (2) develop and update estimated price schedules in accordance with the estimated price methodology and that set out *NEMMCO's* reasonable estimate of typical *market* prices during periods in which the *spot market* is suspended; and
- (3) *publish* the estimated price methodology promptly after it has been developed and *publish* the estimated price schedule at least 14 days prior to the first day to which the schedule relates.
- (m) If a spot price is set in accordance with clause 3.14.5(g) or clause 3.14.5(j) at a regional reference node (suspension node), spot prices at all other regional reference nodes connected by an interconnector that has an actual flow towards the suspension node must not exceed the spot price in the suspended region multiplied by the average loss factor between that regional reference node and the suspension node for that trading interval.
- (n) *NEMMCO* must use reasonable endeavours to ensure that any adjustments required to *regional reference prices* so that they do not exceed the limits set by clause 3.14.5(m) are finalised as soon as practicable but in any event by no later than one *business day* following the day on which the *spot market* in the *region* ceased to be suspended.
- (o) *NEMMCO* must calculate the average *loss factor* applicable to clause 3.14.5(m) by reference to the *inter-regional loss factor* equations relating to the relevant *regulated interconnector*.

3.14.6 Compensation due to the application of an administered price, VoLL or market floor price

- (a) Scheduled Generators may claim compensation from NEMMCO in respect of generating units if, due to the application of an administered price cap during either an administered price period or market suspension, the resultant spot price payable to dispatched generating units in any trading interval is less than the price specified in their dispatch offer for that trading interval.
- (a1) A Scheduled Network Service Provider may claim compensation from NEMMCO in respect of a scheduled network service if, due to the application of an administered price cap, VoLL, the market floor price or an administered floor price, the resultant revenue receivable in respect of dispatched network services in any trading interval is less than the minimum requirement specified by its network dispatch offer for that trading interval.
- (a2) A Market Participant which submitted a dispatch bid may claim compensation from NEMMCO in respect of a scheduled load if, due to the application of an administered floor price during either an administered price period or market suspension, the resultant spot price in any trading

- *interval* is greater than the price specified in the *dispatch bid* for that *trading interval*.
- (a3) In respect of an ancillary service generating unit or an ancillary service load, a Market Participant may claim compensation from NEMMCO if, due to the application of an administered price cap, the resultant ancillary service price for that ancillary service generating unit or ancillary service load in any dispatch interval is less than the price specified in the relevant market ancillary service offer.
- (b) Notification of an intent to make a claim under clause 3.14.6(a), 3.14.6(a1), 3.14.6(a2) or 3.14.6(a3) must be submitted to both *NEMMCO* and the *AEMC* within 2 *business days* of the *trading interval* in which *dispatch prices* were adjusted in accordance with clause 3.9.5 or notification by *NEMMCO* that an *administered price period* or period of *market suspension* has ended.
- (c) The *AEMC* must determine whether it is appropriate in all the circumstances for compensation to be payable by *NEMMCO* and, if so, the *AEMC* must determine an appropriate amount of compensation.
- (d) Before making a determination, the *AEMC* must request the *Adviser* to establish a three member panel from the group of persons referred to in clause 8.2.2(e) to make recommendations on the matters to be determined by the *AEMC*.
- (e) The panel must conduct itself on the same basis as a *DRP* under clauses 8.2.6A to 8.2.6D and make its recommendations within the period specified for the making of a determination under clause 8.2.6D(b). The panel must base its recommendations on its assessment of a fair and reasonable amount of compensation taking into account:
 - (1) all the surrounding circumstances;
 - (2) the actions of any relevant *Registered Participants* and *NEMMCO*;
 - (3) in the case of a claim by a *Scheduled Generator*, the difference between the *spot price* applicable due to the application of the *administered price cap* and the price specified by the *Scheduled Generator* in its *dispatch offer*;
 - (4) in the case of a claim by a *Scheduled Network Service Provider*, the difference between the revenue receivable by the *Scheduled Network Service Provider* for the *dispatched network services* as the result of the application of the *administered price cap, VoLL* or an *administered floor price* and the minimum revenue requirement specified in its *network dispatch offer*;
 - (5) in the case of a *Market Participant* which submitted a *dispatch bid*, the difference between the *spot price* applicable due to the application of the *administered floor price* and the price specified by the *Market Participant* in its *dispatch bid*;

- (6) in the case of a claim in respect of an *ancillary service generating unit*, the difference between the *ancillary service price* applicable due to the application of the *administered price cap* and the price specified by the *ancillary service generating unit* in its *market ancillary service offer*; and
- (7) in the case of a claim in respect of an *ancillary service generating* unit, the difference between the *ancillary service price* applicable due to the application of the *administered floor price* and the price specified by the *ancillary service load* in its *market ancillary service* offer.

3.15 Settlements

3.15.1 Settlements management by NEMMCO

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

3.15.2 Electronic funds transfer

- (a) *NEMMCO* must ensure that an electronic funds transfer (EFT) facility is provided and made available for all *Market Participants* for the purposes of *settlements* and the collection and payment of all *market* fees.
- (b) Unless otherwise authorised by *NEMMCO*, all *Market Participants* must use the EFT facility provided by *NEMMCO* under clause 3.15.2(a) for the payment and receipt of amounts due in respect of *transactions* and the payment of *market* fees.
- (c) In establishing the EFT facility in accordance with clause 3.15.2(a) *NEMMCO* must use its reasonable endeavours to ensure that the use of that facility does not impose unnecessary restrictions on the normal banking arrangements of *Market Participants*.

3.15.3 Connection point and virtual transmission node responsibility

- (a) For each *market connection point* there is one person that is *financially responsible* for that *connection point*. The person that is *financially responsible* for such a *connection point* is:
 - (1) the *Market Participant* which has classified the *connection point* as a *market load*;

- (2) the *Market Participant* which has classified the *generating unit connected* at that *connection point* as a *market generating unit*; or
- (3) the *Market Participant* which has classified the *network service* connected at that connection point as a market network service.
- (b) For each *virtual transmission node* there is one person that is *financially responsible* for that *virtual transmission node*. The person that is *financially responsible* for such a *virtual transmission node* is the *Market Participant* which is the *Local Retailer* for all of the *market connection points* assigned to that *virtual transmission node*.

3.15.4 Adjusted energy amounts - connection points

Where a connection point is not a transmission network connection point, the adjusted gross energy amount for that connection point for a trading interval is calculated by the following formula:

 $AGE = ME \times DLF$

where:

AGE is the *adjusted gross energy* amount to be determined;

ME is the amount of electrical *energy*, expressed in MWh, flowing at the *connection point* in the *trading interval*, as recorded in the *metering data* in respect of that *connection point* and that *trading interval* (expressed as a positive value where the flow is towards the *transmission network connection point* to which the *connection point* is assigned and negative value where the flow is in the other direction); and

DLF is the *distribution loss factor* applicable at that *connection point*.

3.15.5 Adjusted energy - transmission network connection points

Where a connection point is a transmission network connection point, the adjusted gross energy amount for that connection point for a trading interval is calculated by the following formula:

AGE = ME - AAGE

where:

AGE is the *adjusted gross energy* amount to be determined;

ME is the amount of electrical *energy*, expressed in MWh, flowing at the *connection point* in the *trading interval*, as recorded in the *metering data* in respect of that *connection point* and that *trading interval* (expressed as a positive value where the flow is towards the *transmission network*, and negative value where the flow is in the other direction); and

AAGE is the aggregate of the adjusted gross energy amounts for that trading interval for each connection point assigned to that transmission network connection point, for which a Market Participant (other than a suspended Market Participant) is financially responsible (and in that aggregation

positive and negative *adjusted gross energy* amounts are netted out to give a positive or negative aggregate amount).

3.15.5A Adjusted energy – virtual transmission nodes

For each virtual transmission node, the adjusted gross energy amount for that virtual transmission node for a trading interval is calculated by the following formula:

AGE = -AAGE

where:

AGE is the adjusted gross energy amount to be determined; and

AAGE is the aggregate of the *adjusted gross energy* amounts for that *trading interval* for each *connection point* assigned to that *virtual transmission node* for which a *Market Participant* (other than a suspended *Market Participant*) is *financially responsible* (and in that aggregation positive and negative *adjusted gross energy* amounts are netted out to give a positive or negative aggregate amount).

3.15.6 Spot market transactions

(a) In each trading interval, in relation to each connection point and to each virtual transmission node for which a Market Participant is financially responsible, a spot market transaction occurs, which results in a trading amount for that Market Participant determined in accordance with the formula:

TA= AGE x TLF x RRP

where

- TA is the *trading amount* to be determined (which will be a positive or negative dollar amount for each *trading interval*);
- AGE is the *adjusted gross energy* for that *connection point* or *virtual transmission node* for that *trading interval*, expressed in MWh;
- TLF for a transmission network connection point or virtual transmission node, is the intra-regional loss factor at that connection point or virtual transmission node respectively, and for any other connection point, is the intra-regional loss factor at the transmission network connection point or virtual transmission node to which it is assigned in accordance with clause 3.6.3(a); and
- RRP is the *regional reference price* for the *regional reference node* to which the *connection point* or *virtual transmission node* is assigned, expressed in dollars per MWh.
- (b) *NEMMCO* is entitled to the *trading amount* resulting from the *dispatch* of *plant* under a *reserve contract* pursuant to clause 4.8.6 or a *direction* pursuant to clause 4.8.9(a) and for the purposes of determining *settlement*

- amounts, any such trading amount is not a trading amount for the relevant Market Participant.
- (c) A *Directed Participant* is entitled to the *trading amount* resulting from any service, other than the service the subject of the *direction* or the *dispatch of plant* under a *reserve contract*, rendered as a consequence of that *direction*.

3.15.6A Ancillary service transactions

(a) In each *trading interval*, in relation to each *enabled ancillary service* generating unit or *enabled ancillary service load*, an ancillary services transaction occurs, which results in a *trading amount* for the relevant *Market Participant* determined in accordance with the following formula:

$$TA$$
 = the aggregate of $\underbrace{EA \times ASP}_{(12)}$ for each dispatch interval in a trading interval

where:

TA (in \$) = the *trading amount* to be determined (which is a positive number);

EA (in MW) = the amount of the relevant *market ancillary* service which the *ancillary service*

generating unit or ancillary service load has been enabled to provide in the dispatch

interval; and

ASP (in \$ per MW per hour)

hour)

the ancillary service price for the market ancillary service for the dispatch interval for the region in which the ancillary service generating unit or ancillary service load has been enabled.

- (b) In each trading interval, in relation to each Market Participant which provides non-market ancillary services under an ancillary services agreement, an ancillary services transaction occurs, which results in a trading amount for the relevant Market Participant determined in accordance with that agreement.
- (c) In each *trading interval*, in relation to each *Market Customer*, an ancillary services transaction occurs, which results in a *trading amount* for the *Market Customer* determined in accordance with the following formula:

$$TA = TNCASP \times \frac{TCE}{ATCE} \times -1$$

where:

TA (in \$) = the *trading amount* to be determined (which is

a negative number);

TNCASP (in \$) = all amounts payable by *NEMMCO* in respect of the *trading interval* under *ancillary services* agreements in respect of the provision of *NCAS*;

TCE (in MWh) = the *customer energy* for the *Market Customer* for the *trading interval*; and

ATCE (in MWh) = the aggregate *customer energy* figures for all *Market Customers* for the *trading interval*.

(d) In each *trading interval*, in relation to each *Market Generator*, an ancillary services transaction occurs, which results in a *trading amount* for the *Market Generator* determined in accordance with the following formula:

$$TA = \frac{TSRP}{2} \times \frac{TGE}{ATGE} \times -1$$

where:

TA (in \$) = the *trading amount* to be determined (which is a negative number);

TSRP (in \$) = the total of all amounts payable by *NEMMCO* in respect of the *trading interval* under *ancillary services agreements* in respect of the provision of *system restart ancillary services*;

TGE (in MWh) = the *generator energy* for the *Market Generator* for the *trading interval*; and

ATGE (in MWh) = the aggregate of the *generator energy* figures for all *Market Generators* for the *trading*

interval.

(e) In each *trading interval*, in relation to each *Market Customer*, an ancillary services transaction occurs, which results in a *trading amount* determined in accordance with the following formula:

$$TA = \frac{TSRP}{2} \times \frac{TCE}{ATCE} \times -1$$

where:

TA (in \$) = the *trading amount* to be determined (which is a negative number);

a negative number),

TSRP (in \$) = has the meaning given in clause 3.15.6A(d);

TCE (in MWh) = the *customer energy* for the *Market Customer* for the *trading interval*; and

ATCE (in MWh)

= the aggregate of the *customer energy* figures for all *Market Customers* for the *trading interval*.

- (f) The total amount calculated by *NEMMCO* under clause 3.15.6A(a) for each of the *fast raise service*, *slow raise service* or *delayed raise service* in respect of each *dispatch interval* which falls within the *trading interval* must be allocated to each *region* in accordance with the following procedure and the information provided under clause 3.9.2A(b). *NEMMCO* must:
 - (1) allocate for each *region* and for each *dispatch interval* within the relevant *trading interval* the proportion of the total amount calculated by *NEMMCO* under clause 3.15.6A(a) for each of the *fast raise service*, *slow raise service* or *delayed raise service* between *global market ancillary services requirements* and *local requirements* prorata to the respective marginal prices for each such service;
 - (2) calculate for each relevant dispatch interval the sum of the costs of acquiring the global market ancillary service requirements for all regions and the sum of the costs of acquiring each local ancillary service requirement for all regions, as determined pursuant to clause 3.15.6A(f)(1); and
 - (3) allocate for each relevant dispatch interval the sum of the costs of the global market ancillary service requirement and each local ancillary service requirement calculated in clause 3.15.6A(f)(2) to each region as relevant to that requirement pro-rata to the aggregate of the generator energy for the Market Generators in each region during the trading interval.

For the purpose of this clause 3.15.6A(f) *RTCRSP* is the sum of:

- (i) the *global market ancillary service requirement* cost for that *region*, for all *dispatch intervals* in the relevant *trading interval*, as determined pursuant to clause 3.15.6A(f)(3); and
- (ii) all *local market ancillary service requirement* costs for that *region*, for all *dispatch intervals* in the relevant *trading interval*, as determined pursuant to clause 3.15.6A(f)(3).

In each *trading interval*, in relation to each *Market Generator* in a given *region*, an ancillary services transaction occurs, which results in a *trading amount* for that *Market Generator* determined in accordance with the following formula:

$$TA = RTCRSP \times \frac{TGE}{RATGE} \times -1$$

where:

TA (in \$) = the *trading amount* to be determined (which is a negative number);

RTCRSP (in \$) the total of all amounts calculated by *NEMMCO* as appropriate to recover from the given region as calculated in this clause 3.15.6A(f) for the fast raise service, slow raise service or delayed raise service in respect of dispatch intervals which fall in the trading interval; TGE (in MWh) the *generator energy* figures for the *Market* Generator in that region for the trading interval; and RATGE (in MWh) the aggregate of the *generator energy* figures for all Market Generators in that region for the trading interval.

- (g) The total amount calculated by *NEMMCO* under clause 3.15.6A(a) for each of the *fast lower service*, *slow lower service* or *delayed lower service* in respect of each *dispatch interval* which falls within the *trading interval* must be allocated to each *region* in accordance with the following procedure and the information provided under clause 3.9.2A(b). *NEMMCO* must:
 - (1) allocate for each *region* and for each *dispatch interval* within the relevant *trading interval* the proportion of the total amount calculated by *NEMMCO* under clause 3.15.6A(a) for each of the *fast lower service*, *slow lower service* or *delayed lower service* between *global market ancillary service requirements* and *local requirements* pro rata to the respective marginal prices of each such service;
 - (2) calculate for each relevant *dispatch interval* the sum of the costs of acquiring the *global market ancillary service requirements* for all *regions* and the sum of the costs of acquiring each *local ancillary service requirement* for all *regions*, as determined pursuant to clause 3.15.6A(g)(1); and
 - (3) allocate for each relevant dispatch interval the sum of the costs of the global market ancillary service requirement and each local ancillary service requirement calculated in clause 3.15.6A(g)(2) to each region as relevant to that requirement pro-rata to the aggregate of the customer energy figures for all Market Customers in each region during the trading interval.

For the purpose of this clause 3.15.6A(g) RTCLSP is the sum of:

- (i) the *global market ancillary service requirement* cost for that *region*, for all *dispatch intervals* in the relevant *trading interval*, as determined pursuant to clause 3.15.6A(g)(3); and
- (ii) all *local market ancillary service requirement* costs for that *region*, for all *dispatch intervals* in the relevant *trading interval*, as determined pursuant to clause 3.15.6A(g)(3).

In each *trading interval*, in relation to each *Market Customer* in a given *region*, an ancillary services transaction occurs, which results in a *trading amount* for that *Market Customer* determined in accordance with the following formula:

$$TA = RTCLSP \times \frac{TCE}{RATCE} \times -1$$

where:

TA (in \$) = the *trading amount* to be determined (which is

a negative number);

RTCLSP (in \$) = the total of all amounts calculated by

NEMMCO as appropriate to recover from the given region as calculated in this clause 3.15.6A(g) for the fast lower service, slow lower service or delayed lower service in respect of dispatch intervals which fall in the

trading interval;

TCE (in MWh) = the customer energy for the Market Customer

in that region for the trading interval; and

RATCE (in MWh) = the aggregate of the *customer energy* figures

for all Market Customers in that region for the

trading interval.

(h) In each trading interval, in relation to each Market Generator or Market Customer which has metering to allow their individual contribution to the aggregate deviation in frequency of the power system to be assessed, an ancillary services transaction occurs, which results in a trading amount for that Market Generator or Market Customer determined in accordance with the following formula:

$$TA = PTA \times -1$$

and

$$PTA =$$
the aggregate of $(TSFCAS \times \frac{MPF}{AMPF})$) for each

dispatch interval in the trading interval

where:

TA (in \$) = the *trading amount* to be determined (which is

a negative number);

TSFCAS (in \$) = the total of all amounts calculated by

NEMMCO under clause 3.15.6A(a) for the

regulating raise service or the regulating lower service in respect of a dispatch interval;

MPF (a number) = the factor last set by *NEMMCO* for the

Market Generator or Market Customer, as the case may be, under clause 3.15.6A(j); and

AMPF (a number) = the aggregate of the MPF figures for all Market Participants for the dispatch interval.

(i) In each *trading interval*, in relation to each *Market Customer* for whom the *trading amount* is not calculated in accordance with the formula in clause 3.15.6A(h), an ancillary services transaction occurs, which results in a *trading amount* for that *Market Customer* determined in accordance with the following formula:

$$TA = PTA x TCE / ATCE x -1$$

and

$$PTA = \text{the aggregate of} \quad (TSFCAS \times \frac{MPF}{AMPF}) \text{ for each}$$

dispatch interval in the trading interval

where:

TA (in \$) = the *trading amount* to be determined (which is a

negative number);

TSFCAS (in \$) = has the meaning given in clause 3.15.6A(h);

MPF (a number) = the aggregate of the factor set by *NEMMCO*

under clause 3.15.6A(j) for *Market Customers*, for whom the *trading amount* is not calculated in

accordance with the formula in clause

3.15.6A(h);

AMPF (a number) = the aggregate of the MPF figures for all *Market*

Participants for the dispatch interval;

TCE (in MWh) = the *customer energy* for the *Market Customer* for

the trading interval; and

ATCE (in MWh) = the aggregate of the *customer energy* figures for

all *Market Customers*, for whom the *trading amount* is not calculated in accordance with the formula in clause 3.15.6A(h), for the *trading*

interval.

- (j) *NEMMCO* must determine a factor for each *Market Participant* for the purposes of clauses 3.15.6A(h) and (i) in accordance with the procedure contemplated by clause 3.15.6A(k).
- (k) *NEMMCO* must prepare a procedure for determining contribution factors for use in clause 3.15.6A(j) taking into account the following principles:
 - (1) the contribution factor for a *Market Participant* should reflect the extent to which the *Market Participant* contributed to the need for *regulation services*;
 - (2) the contribution factor for all *Market Customers* that do not have *metering* to allow their individual contribution to the aggregate need for *regulation services* to be assessed must be equal;
 - (3) the individual *Market Participant's* contribution to the aggregate need for *regulation services* will be determined over a period of time to be determined by *NEMMCO*; and
 - (4) a Registered Participant which has classified a scheduled generating unit, scheduled load, ancillary service generating unit or ancillary service load (called a 'Scheduled Participant') will not be assessed as contributing to the deviation in the frequency of the power system if within a dispatch interval:
 - (a) the Scheduled Participant achieves its *dispatch* target at a uniform rate;
 - (b) the Scheduled Participant is *enabled* to provide a *market* ancillary service and responds to a control signal from *NEMMCO* to *NEMMCO*'s satisfaction; or
 - (c) the Scheduled Participant is not enabled to provide a *market* ancillary service, but responds to a need for regulation services in a way which tends to reduce the aggregate deviation.
- (l) *NEMMCO* may amend the procedure referred to in clause 3.15.6A(j) from time to time.
- (m) *NEMMCO* must comply with the *Rules consultation procedures* when making or amending the procedure referred to in clause 3.15.6A(k).
- (n) *NEMMCO* must *publish*, in accordance with the *timetable*, the historical data used in determining a factor for each *Market Participant* for the purposes of clauses 3.15.6A(h) and (i) in accordance with the procedure contemplated by clause 3.15.6A(k).
- (na) Notwithstanding any other provisions of the *Rules*, *NEMMCO* must *publish* the factors determined in accordance with clause 3.15.6A(j) at least 10 *business days* prior to the application of those factors in accordance with clauses 3.15.6A(h) and 3.15.6A(i).
- (o) In this clause 3.15.6A:

- (1) 'generator energy' in respect of a Market Generator for a trading interval means the sum of the adjusted gross energy figures calculated for that trading interval in respect of that Market Generator's applicable connection points, provided that, if the sum of those figures is negative, then the Market Generator's generator energy for that trading interval is zero;
- (2) a connection point is an applicable connection point of a Market Generator if:
 - (A) the *Market Generator* is *financially responsible* for the *connection point*; and
 - (B) the connection point connects a market generating unit to the national grid;
- (3) 'customer energy' in respect of a Market Customer for a trading interval means the sum of the adjusted gross energy figures calculated for that trading interval in respect of that Market Customer's relevant connection points; and
- (4) a connection point is a relevant connection point of a Market Customer if:
 - (A) the *Market Customer* is *financially responsible* for the *connection point*; and
 - (B) the *load* at that *connection point* has been classified (or is deemed to be classified) as a *market load*.

3.15.7 Payment to Directed Participants

- (a) Subject to clause 3.15.7(b), *NEMMCO* must pay compensation to *Directed Participants* calculated in accordance with clauses 3.15.7, 3.15.7A and 3.15.7B, as the case may be, for any service which the *Directed Participant* was required to provide in order to comply with the *direction*.
- (b) For the purpose of clause 3.15.8 and 3.15.10C the amount of compensation due to a *Directed Participant* pursuant to clause 3.15.7(a) must include interest on the sum of that amount less any payment made in accordance with clause 3.15.10C(a), computed at the average *bank bill rate* for the period beginning on the day on which payment was required to be made under clauses 3.15.16 and 3.15.17 in respect of the *final statement* for the *billing period* in which the *direction* was issued and ending on the day on which payment is required to be made pursuant to clause 3.15.10C.
- (c) Subject to clause 3.15.17(d) and clause 3.15.7B, the compensation payable to each *Directed Participant* for the provision of *energy* or *market ancillary services* pursuant to a *direction* is to be determined in accordance with the formula set out below:

 $DCP = AMP \times DQ$

where:

DCP = the amount of compensation the *Directed Participant* is entitled to receive;

AMP = the price below which are 90% of the *spot prices* or *market*ancillary service prices (as the case may be) for the relevant
service provided by Scheduled Generators, Scheduled Network
Service Providers or Market Customers in the region to which
the direction relates, for the 12 months immediately preceding
the trading day in which the direction was issued; and

DQ = is either:

- (A) the difference between the total *adjusted gross energy* delivered or consumed by the *Directed Participant* and the total *adjusted gross energy* that would have been delivered or consumed by the *Directed Participant* had the *direction* not been issued; or
- (B) the amount of the relevant *market ancillary service* which the *Directed Participant* has been *enabled* to provide in response to the *direction*.
- (d) If at the time *NEMMCO* issues a *direction*, the *Directed Participant* had submitted a valid *dispatch bid*, *dispatch offer* or *rebid* for *dispatch* of the service that is to be *dispatched* in accordance with the *direction*, the *Directed Participant* is entitled to receive compensation for the provision of that service at a price equal to the *price* in that *dispatch bid*, *dispatch offer* or *rebid* as appropriate.
- (e) NEMMCO must, in accordance with the *intervention settlement timetable*, advise each *Directed Participant* in writing of the amount the *Directed Participant* is entitled to receive pursuant to clause 3.15.7(c) or clause 3.15.7(d).

3.15.7A Payment to Directed Participants for services other than energy and market ancillary services

- (a) Subject to clause 3.15.7(d) and clause 3.15.7B, *NEMMCO* must compensate each *Directed Participant* for the provision of services pursuant to a *direction* other than *energy* and *market ancillary services*, at the fair payment price of the services determined in accordance with this clause 3.15.7A.
- (b) Subject to clause 3.15.7A(e) and clause 3.15.7A(e1), *NEMMCO* must, in accordance with the *intervention settlement timetable* and any guidelines developed by *NEMMCO* in accordance with the *Rules consultation procedures*, determine if in *NEMMCO*'s reasonable opinion, an independent expert could reasonably be expected to determine a fair payment price for the services provided pursuant to the *direction* within a reasonable time period.

- (b1) If *NEMMCO* determines pursuant to clause 3.15.7A(b) that an independent expert could reasonably be expected to determine a fair payment price for the services provided pursuant to the *direction* within a reasonable time period it must as soon as reasonably practicable after making such determination *publish* its determination and, subject to clause 3.15.7A(e1), appoint an independent expert, in accordance with the *intervention settlement timetable*, to determine the fair payment price for the services provided pursuant to the *direction*.
- (c) *NEMMCO* must include as part of the terms of appointment of an independent expert the following requirements:
 - (1) that the independent expert must, in determining the fair payment price of the relevant service for the purposes of clause 3.15.7A, take into account:
 - (i) other relevant pricing methodologies in Australia and overseas, including but not limited to:
 - (A) other electricity markets;
 - (B) other markets in which the relevant service may be utilised; and
 - (C) relevant contractual arrangements which specify a price for the relevant service;
 - (ii) the following principles:
 - (A) the disinclination of Scheduled Generators, Market Generators, Scheduled Network Service Providers or Market Customers to provide the service the subject of the direction must be disregarded;
 - (B) the urgency of the need for the service the subject of the *direction* must be disregarded;
 - (C) the *Directed Participant* is to be treated as willing to supply at the market price that would otherwise prevail for the directed services the subject of the *direction* in similar demand and supply conditions; and
 - (D) the fair payment price is the market price for the directed services the subject of the *direction* that would otherwise prevail in similar demand and supply conditions;
 - (2) that the independent expert must determine and *publish* a draft report, in accordance with the *intervention settlement timetable*, setting out:
 - (i) a description of the services provided in response to the *direction*:
 - (ii) the independent expert's draft determination of each fair payment price for the services provided;

- (iii) the methodology and assumptions used by the independent expert in making the draft determination of the fair payment price; and
- (iv) a request for submissions from interested parties on the matters set out in the draft report;
- (3) that the independent expert must, in accordance with the *intervention* settlement timetable, determine the fair payment price for the services provided, taking into account the submissions received, and must prepare and *publish* a final report setting out:
 - (i) the description of the services provided in response to the *direction*;
 - (ii) the independent expert's determination of the fair payment price for the services provided;
 - (iii) the methodology and assumptions used by the independent expert in making the determination of each fair payment price; and
 - (iv) summaries of the submissions made by interested parties;
- (4) that the independent expert must deliver to *NEMMCO* a final tax invoice for the services rendered at the time he or she *publishes* the final report; and
- (5) that a report *published* by the independent expert pursuant to clause 3.15.7A(c) must not disclose *confidential information* or the identity of a *Directed Participant*.
- (d) In accordance with the *intervention settlement timetable*, *NEMMCO* must calculate the compensation payable to the *Directed Participant* using the fair payment price *published* by the independent expert under clause 3.15.7A(c)(3).
- (e) The fair payment price determined in accordance with clause 3.15.7A(c)(3) is to be the fair payment price for that service to be applied in all future occurrences where there is a *direction* for that service at any time within a period of 12 calendar months from the date on which the determination of that price was published.
- (e1) *NEMMCO* must not appoint an independent expert under clause 3.15.7A(b1) in respect of a *direction* for a service in respect of which:
 - (1) there is a determination of an independent expert in place in accordance with clause 3.15.7A(e) in relation to that service; or
 - (2) *NEMMCO* has appointed an independent expert to determine the fair payment price for that service under clause 3.15.7A and the independent expert has not yet made a determination of the fair payment price.

- In these circumstances, *NEMMCO* must apply to the subsequent *direction* the fair payment price for that service determined, or to be determined, by the independent expert.
- (f) Within 1 *business day* of calculating the compensation payable pursuant to clause 3.15.7A(a) by application of clause 3.15.7A(e) or pursuant to clause 3.15.7A(d), *NEMMCO* must advise the relevant *Directed Participant* in writing of the amount of compensation.
- (g) The determination of a fair payment price pursuant to clause 3.15.7A(c)(1) and the calculation of compensation payable to *Directed Participants* pursuant to clause 3.15.7A(d) is final and binding.

3.15.7B Claim for additional compensation by Directed Participants

- (a) Subject to clauses 3.15.7B(a1) and 3.15.7B(a4), a *Directed Participant* entitled to compensation pursuant to clause 3.15.7 or clause 3.15.7A may, in accordance with the *intervention settlement timetable*, make a written submission to *NEMMCO* claiming an amount equal to the sum of:
 - (1) the aggregate of the loss of revenue and additional net direct costs incurred by the *Directed Participant* in respect of a *scheduled generating unit* or *scheduled network services*, as the case may be, as a result of the provision of the service under *direction*; less
 - (2) the amount notified to that *Directed Participant* pursuant to clause 3.15.7(c) or clause 3.15.7A(f); less
 - (3) the aggregate amount the *Directed Participant* is entitled to receive in accordance with clause 3.15.6(c) for the provision of a service rendered as a result of the *direction*.
- (a1) Subject to clause 3.15.7B(a4), if *NEMMCO* determines pursuant to clause 3.15.7A(a) that an independent expert could not reasonably be expected to determine within a reasonable period of time the relevant fair payment price, a *Directed Participant* may, in accordance with the *intervention settlement timetable*, make a written submission to *NEMMCO* claiming compensation from *NEMMCO* for the provision of services under the *direction* equal to:
 - (1) loss of revenue and additional net direct costs which the *Directed Participant* incurred as a result of the provision of services under the *direction*; and
 - (2) a reasonable rate of return on the capital employed in the provision of the service determined by reference as far as reasonably practicable to rates of return for the provision of similar services by similar providers of such services.
- (a2) Subject to clause 3.15.7B(a4), if a *Directed Participant* entitled to compensation pursuant to clause 3.15.7(d) considers that the amount notified pursuant to clauses 3.15.7(e) is less than the amount it is entitled to receive pursuant to that clause, the *Directed Participant* may, in accordance

- with the *intervention settlement timetable*, make a written submission to *NEMMCO* requesting compensation from *NEMMCO* for that difference.
- (a3) For the purposes of the calculation of additional net direct costs pursuant to clause 3.15.7B(a)(1) and clause 3.15.7B(a1)(1), the additional net direct costs incurred by the *Directed Participant* in respect of that *scheduled generating unit* or *scheduled network services*, as the case may be, includes without limitation:
 - (1) fuel costs in connection with the *scheduled generating unit* or *scheduled network services*;
 - (2) incremental maintenance costs in connection with the *scheduled* generating unit or scheduled network services;
 - (3) incremental manning costs in connection with the *scheduled* generating unit or scheduled network services;
 - (4) acceleration costs of maintenance work in connection with the *scheduled generating unit*, where such acceleration costs are incurred to enable the *scheduled generating unit* or *scheduled network services* to comply with the *direction*;
 - (5) delay costs for maintenance work in connection with the *scheduled* generating unit or scheduled network service, where such delay costs are incurred to enable the scheduled generating unit or scheduled network service to comply with the direction;
 - (6) other costs incurred in connection with the *scheduled generating unit* or *scheduled network services*, where such costs are incurred to enable the *scheduled generating unit* or *scheduled network service* to comply with the *direction*; and
 - (7) any compensation which the *Directed Participant* receives or could have obtained by taking reasonable steps in connection with the *scheduled generating unit* or *scheduled network services* being available.
- (a4) In respect of a single intervention price trading interval, a Directed Participant may only make a claim pursuant to clauses 3.15.7B(a), 3.15.7B(a1) or 3.15.7B(a2) if the amount of the claim in respect of that intervention price trading interval is greater than \$5,000.
- (b) The submissions pursuant to clauses 3.15.7B(a), 3.15.7B(a1) and 3.15.7B(a2) must:
 - (1) itemise each component of a claim;
 - (2) contain sufficient data and information to substantiate each component of a claim for loss of revenue and additional direct costs incurred and the reasonable rate of return, as the case may be; and
 - (3) be signed by an authorised officer of the applicant certifying that the written submission is true and correct.

- (c) *NEMMCO* must, in accordance with the *intervention settlement timetable*:
 - (1) refer an affected participant's adjustment claim or market customer's additional claim to an independent expert to determine such claim in accordance with clause 3.12.11A if the claim is equal to or greater than \$20,000 and the additional intervention claim that includes that claim is equal to or greater than \$100,000; and
 - (2) determine in its sole discretion if all other claims by a *Directed Participant* in respect of that *direction* pursuant to clauses 3.15.7B(a), 3.15.7B(a1) and 3.15.7B(a2) are reasonable and if so pay the amount claimed in accordance with clause 3.15.10C.
- (d) If *NEMMCO* considers that a claim by a *Directed Participant* under clause 3.15.7B(a) or 3.15.7B(a1) or 3.15.7B(a2) is unreasonable, it must, in accordance with the *intervention settlement timetable*:
 - (1) advise the *Directed Participant* of its determination in writing, setting out its reasons; and
 - (2) refer the matter to an independent expert to determine the claim for compensation in accordance with clause 3.12.11A.

3.15.8 Funding of Compensation for directions

- (a) *NEMMCO* must, in accordance with the *intervention settlement timetable*, calculate the "compensation recovery amount" being:
 - (1) the sum of:
 - (i) the total of the compensation payable to *NEMMCO* by *Affected Participants* and *Market Customers* under clause 3.12.11 in respect of a *direction* for the provision of *energy*; plus
 - (ii) the total of the amounts retained by *NEMMCO* pursuant to clause 3.15.6(b) in respect of a *direction* for the provision of *energy*;
 - (2) less the sum of:
 - (i) the total of the compensation payable by *NEMMCO* to *Affected Participants* and *Market Customers* pursuant to clause 3.12.11 in respect of a *direction* for the provision of *energy*; plus
 - (ii) the total of the compensation payable by *NEMMCO* to *Directed Participants* pursuant to clause 3.15.7(a) in respect of a *direction* for the provision of *energy*; plus
 - (iii) the total amount payable by *NEMMCO* to the independent expert pursuant to clause 3.12.11A(c).
- (b) NEMMCO must, in accordance with the *intervention settlement timetable*, calculate a figure for each Market Customer in each region applying the following formula:

$$MCP = \frac{E}{\Sigma E} \times \frac{RB}{\Sigma RB} \times CRA$$

where

MCP is the amount payable or receivable by a *Market Customer* pursuant to this clause 3.15.8(b);

- E is the sum of the Market Customer's adjusted gross energy amounts at each connection point for which the Market Customer is financially responsible in a region, determined in accordance with clauses 3.15.4 and 3.15.5 in respect of the relevant intervention price trading intervals excluding any loads in respect of which the Market Customer submitted a dispatch bid for the relevant intervention price trading interval in that region; and
- RB is the regional benefit determined by *NEMMCO* pursuant to clause 3.15.8(b1) at the time of issuing the *direction*.

CRAis the *compensation recovery amount*.

- (b1) *NEMMCO* must, as soon as practicable following the issuance of a *direction*, determine the relative benefit each *region* received from the issuance of a *direction* in accordance with the *regional benefit directions* procedures.
- (b2) NEMMCO must develop in accordance with the Rules consultation procedures a procedure to determine the relative benefit each region receives from the issuance of a direction (the "regional benefit directions procedures"). Such procedures must take into account, where applicable to the reason the direction was given, the load at risk of not being supplied if the direction were not issued or the extent of improvement in available energy reserve in the region, capability to control voltage in the region, and capability to control power system frequency within the region and any other relevant matters.
- (c) If the figure calculated for a *Market Customer* under clause 3.15.8(b) is negative, the absolute value of that amount is the amount payable by the *Market Customer* to *NEMMCO* pursuant to clause 3.15.8(b).
- (d) Subject to clause 3.15.22, if the figure calculated for a *Market Customer* under clause 3.15.8(b) is positive, such amount is the amount receivable by the *Market Customer* from *NEMMCO* pursuant to clause 3.15.8(b), subject to the provisions of clause 3.15.22.
- (e) *NEMMCO* must, in accordance with the *intervention settlement timetable*, calculate for each *ancillary service* the subject of a *direction*, the "ancillary service compensation recovery amount" being:
 - (1) the sum of:
 - (i) the total of the compensation payable to *NEMMCO* by *Affected Participants* and *Market Customers* under clause 3.12.11 in

- respect of a *direction* for the provision of that *ancillary service*; plus
- (ii) the total of the amounts retained by *NEMMCO* pursuant to clause 3.15.6(b) in respect of a *direction* for the provision of that *ancillary service*;

(2) less the sum of:

- (i) the total of the compensation payable by *NEMMCO* to *Affected Participants* and *Market Customers* pursuant to clause 3.12.11 in respect of a *direction* for the provision of that *ancillary service*; plus
- (ii) the total of the compensation payable by *NEMMCO* to *Directed Participants* pursuant to clause 3.15.7(a) in respect of a *direction* for the provision of that *ancillary service*; plus
- (iii) the total amount payable by *NEMMCO* to the independent expert pursuant to clause 3.12.11A(c), if the *direction* the subject of the independent expert's determination was with respect to that *ancillary service*.
- (f) The *trading amount* must be calculated as follows:
 - (1) subject to clause 3.15.8(f)(2) and (3) *NEMMCO* must use the appropriate formula set out in clause 3.15.6A(c), (d), (e), (f), (g), (h) or (i) depending on which *ancillary service* was the subject of the *direction*;
 - (2) TNCASP, TSRP, TCRSP, TCLSP or TSFCAS (as applicable) in the relevant formula is equal to the *ancillary service compensation recovery amount* for the relevant *ancillary service* in respect of the *direction*; and
 - (3) if TCE, TGE, ATCE or ATGE is used in the relevant formula, then the words 'the *trading interval*' in the definitions of those terms in the formula are to be read as 'all of the *trading intervals* during which the *direction* applied'.
- (g) Any compensation payable by *NEMMCO* pursuant to clauses 3.12.11 and 3.15.7 not recovered pursuant to clauses 3.15.8(b) and 3.15.8(e) must be recovered from *Registered Participants* in the same proportion as the largest single fixed component of *Participants fees*.

3.15.9 Reserve settlements

- (a) *NEMMCO's* costs incurred in contracting for the provision of *reserves* are to be met by fees imposed on *Market Customers* in accordance with this clause 3.15.9.
- (b) Included in the statements to be provided under clauses 3.15.14 and 3.15.15, *NEMMCO* must give each *Market Participant* a statement setting out:

- (1) the aggregate of the amounts payable by *NEMMCO* under *reserve* contracts and any amounts determined as payable by *NEMMCO* by the independent expert under clause 3.12.11 as a result of *plant* under a *reserve* contract being dispatched in respect of the relevant billing period; and
- (2) the aggregate of the amounts receivable by *NEMMCO* under the *Rules* in respect of *plant* under *reserve contracts* during the relevant *billing period*.
- (c) Separate statements must be provided under clause 3.15.9(b):
 - (1) for *reserve contracts* entered into by *NEMMCO* specifically in respect of the *Market Participant's region* in accordance with clause 3.15.9(d); and
 - (2) for *reserve contracts* other than those entered into for and allocated to a specific *region* or *regions*.
- (d) Where either:
 - (1) without the intervention in the *market* of *NEMMCO* a *region* would otherwise, in *NEMMCO's* reasonable opinion, fail to meet the minimum *power system security and reliability standards*; or
 - (2) a *region* requires a level of *power system reliability* or *reserves* which, in *NEMMCO's* reasonable opinion, exceeds the level required to meet the minimum *power system security and reliability standards*,

then *NEMMCO* must recover its net liabilities, or distribute its net profits, under the terms of *reserve contracts* entered into to meet these requirements, from or to the *Market Customers* in that *region* in accordance with 3.15.9(e).

(e) In respect of *reserve contracts* entered into by *NEMMCO*, *NEMMCO* must calculate in relation to each *Market Customer* for each *region* in respect of each *billing period* a sum determined by applying the following formula:

$$MCP = \frac{E \times RRC}{\Sigma E}$$

Where:

MCP is the amount payable by a *Market Customer* for a *region* in respect of a *billing period;*

E is the sum of all that *Market Customer's adjusted gross energy* amounts in a *region* (the "relevant region") in each *trading interval* which commences between 0800 hours and 1930 hours on a *business day* in the *billing period* excluding any loads in that *region* in respect of which the *Market Customer* submitted a *dispatch bid* for any such *trading interval*;

- RRC is the total amount payable by *NEMMCO* under *reserve contracts* which relate to the relevant *region* in the *billing period* as agreed under clause 3.12.1(d); and
- ΣE is the sum of all amounts determined as "E" in accordance with this clause 3.15.9(e) in respect of that *region*.
- (f) A *Market Customer* is liable to pay *NEMMCO* an amount equal to the sum calculated under clause 3.15.9(e) in respect of that *Market Customer*.
- (g) [Deleted]
- (h) [Deleted]
- (i) [Deleted]
- (j) [Deleted]
- (k) Operational and administrative costs incurred by *NEMMCO* in arranging for the provision of *reserves*, other than its liabilities under the terms of the *reserve contracts* into which it has entered, are to be recovered by *NEMMCO* from all *Market Participants* as part of the fees imposed in accordance with rule 2.11.
- (1) [Deleted]
- (m) For the purposes of clause 3.15.19, a re-determination by a panel established under clause 3.12.11 is to be taken to be an agreement between *NEMMCO* and each of the *Market Participants* and *Scheduled Generators*.

3.15.10 Administered price, VoLL or market floor price compensation payments

- (a) In the event that the AEMC awards compensation to a Scheduled Generator, Market Participant which submitted a dispatch bid or Scheduled Network Service Provider in accordance with clause 3.14.6, then NEMMCO must determine an amount which shall be payable by all Market Customers who purchased electricity from the spot market in a region in which the regional reference price was affected by the imposition of an administered price or VoLL, or market floor price in the trading interval or trading intervals in respect of which such compensation has been awarded.
- (b) NEMMCO shall determine the amounts payable for each relevant *trading* interval by each of the affected Market Customers under clause 3.15.10(a) as follows:

$$\frac{APC \times E_i}{\Sigma E_i}$$

where

APC is the total amount of any compensation payments awarded by the *AEMC* to *Scheduled Generators*, *Market Participants* which submitted

- dispatch bids or Scheduled Network Service Providers in respect of that trading interval in accordance with clause 3.14.6.
- E_i is the sum of all of the *Market Customer's adjusted gross energy* amounts, determined in accordance with clauses 3.15.4 and 3.15.5, in respect of each *trading interval* in the *billing period* and each *connection point* for which the *Market Customer* is *financially responsible* in any *region* or *regions* affected by the imposition of an *administered price* or *VoLL* or *market floor price*.
- ΣE_i is the sum of all amounts determined as "E_i" in accordance with this clause 3.15.10 for all *Market Customers* in all *regions* affected by the imposition of an *administered price* or *VoLL* or *market floor price* in that *trading interval*.
- (c) Within 15 business days of being notified by the AEMC that compensation is to be paid to a Scheduled Generator, Market Participant which submitted a dispatch bid or Scheduled Network Service Providers in accordance with clause 3.14.6, NEMMCO shall include in statements provided under clauses 3.15.14 and 3.15.15 separate details of any amounts payable by or to Market Participants as determined in accordance with this clause 3.15.10.

3.15.10A Goods and services tax

(a) In this clause 3.15.10A:

"GST" has the meaning given in the GST Act; and

"GST Act" means the A New Tax System (Goods and Services Tax) Act 1999 (C'th);

"supply" and "taxable supply" each have the meaning given in the GST Act,

and the definition of "supply" in Chapter 10 does not apply.

- (b) Despite anything else in the *Rules*, *Participant fees*, *spot prices*, adjustments for *directions*, *reserve settlements*, *administered price cap* compensation payments, system security *direction settlements*, *re-allocation transactions*, compensation, interest, *settlements residues*, *ancillary services settlements*, *settlements residue* distributions (including *auction* proceeds), *auction expense fees* and other prices, fees, charges and amounts payable to or by *NEMMCO*, the *AER* or the *AEMC* in respect of supplies under the *Rules* exclude GST. Accordingly:
 - (1) where a *Registered Participant* makes a taxable supply to *NEMMCO*, the *AER* or the *AEMC* under or in connection with the *Rules* on or after 1 July 2000, *NEMMCO*, the *AER* or the *AEMC* (as applicable) must also pay the *Registered Participant* making the supply an additional amount equal to the consideration payable for the supply multiplied by the applicable GST rate;

- (2) where *NEMMCO*, the *AER* or the *AEMC* makes a taxable supply to a *Registered Participant* under the *Rules* on or after 1 July 2000, the *Registered Participant* must also pay *NEMMCO*, the *AER* or the *AEMC* (as applicable) an additional amount equal to the consideration payable for the supply multiplied by the applicable GST rate; and
- (3) *NEMMCO* must include in *preliminary statements*, *final statements*, *routine revised statements*, *special revised statements*, statements and invoices issued under the *Rules* the additional amounts contemplated by clauses 3.15.10A(b)(1) and (2).
- (c) However, if the additional amount paid or payable to a *Registered participant*, *NEMMCO*, the *AER* or the *AEMC* under clause 3.15.10A(b) in respect of a taxable supply differs from the actual amount of GST payable by or to the *Registered Participant*, *NEMMCO*, the *AER* or the *AEMC* (as applicable) under the GST Act in respect of the relevant supply, then adjustments must be made in accordance with clause 3.15.19 so as to ensure the additional amount paid under this clause in respect of the supply is equal to the actual amount of GST payable under the GST Act in respect of the supply.

3.15.10B Restriction contract amounts

- (a) If clause 3.12A.7(g) applies then *NEMMCO* must include in the next statement provided under clauses 3.15.14 and 3.15.15 immediately after the end of the relevant *mandatory restriction period* separate details of amounts payable:
 - (1) by *Market Customers* in the relevant *region* in which the *mandatory restrictions* apply an amount equal to:

$$EMCP = RSA$$
 $x \frac{(AGE)}{(AAGE)}$

Where:

EMCP is the payment to be made by *Market Customers* to *NEMMCO*.

RSA is the *restriction shortfall amount*.

AGE is the *adjusted gross energy* of a *Market Customer* in that *region* for the *mandatory restriction period* expressed in MWh.

AAGE is the aggregate of the *adjusted gross energy* of all *Market Customers* in that *region* for the *mandatory restriction period* expressed in MWh;

- (2) by Scheduled Generators and Scheduled Network Service Providers to NEMMCO in accordance with clause 3.12A.7(a); and
- (3) the amounts payable by *NEMMCO* to the *Scheduled Generators* or *Scheduled Network Service Providers* pursuant to *accepted restriction offers*.

- (b) Immediately upon the later of the publication of the independent expert's final report in accordance with clause 3.12A.7(i)(8) and the determination of a *dispute resolution panel* pursuant to clause 3.12A.7(m), if any, *NEMMCO* must include in the next statements provided under clauses 3.15.14 and 3.15.15 separate details of any amounts payable:
 - (i) by a *Market Customer* equal to the amount as determined in accordance with clause 3.12A.7(g)(i) less the amount determined in accordance with clause 3.15.10B(a)(1), if such number is positive together with interest on such amount calculated by applying the *bank bill rate* on the date of this statement for the period from the date of the statement referred to in clause 3.15.10B(a) to the date of this statement under clause 3.15.10B(b); and
 - (ii) to a *Market Customer* equal to the amount determined in accordance with clause 3.15.10B(a)(1) less the amount determined in accordance with clause 3.12A.7(g)(i), if such number is positive together with interest on such amount calculated by applying the *bank bill rate* on the date of this statement for the period from the date of the statement referred to in clause 3.15.10B(a) to the date of this statement under clause 3.15.10B(b).
- (c) If clauses 3.12A.7(f) or 3.12A.7(h) apply then *NEMMCO* must include in the next statement provided under clauses 3.15.14 and 3.15.15 immediately after the end of the relevant *mandatory restriction period* separate details of any amounts payable:
 - (i) by or to *Market Customers* as determined in accordance with clauses 3.12A.7(e) or 3.12A.7(h) respectively;
 - (ii) by Scheduled Generators and Scheduled Network Service Providers to NEMMCO in accordance with clause 3.12A.7(a); and
 - (iii) the amounts payable by *NEMMCO* to the *Scheduled Generators* or *Scheduled Network Service Providers* pursuant to all *accepted restriction offers*.

3.15.10C Intervention Settlements

- (a) *NEMMCO* must include in the final statement provided under clause 3.15.14 and 3.15.15 for a *billing period* in which a *direction* was issued:
 - (1) for each Affected Participant and Market Customer in relation to that direction the amount calculated pursuant to clause 3.12.11(b);
 - (2) for each *Directed Participant* in relation to that *direction* the amount calculated pursuant to clause 3.15.7(c) or clause 3.15.7A(a) by application of clause 3.15.7A(e), as the case may be;
 - (3) for each *Market Customer* in relation to that *direction* the amount calculated pursuant to clause 3.15.8(b) by application of clause 3.15.8 mutatis mutandis provided that the amount for the purposes of:

- (i) clause 3.15.8(a)(1)(i) shall be the total amount payable to *NEMMCO* by *Affected Participants* and *Market Customers* calculated pursuant to clause 3.12.11(b);
- (ii) clause 3.15.8(a)(1)(ii) shall be the amount calculated in accordance with that clause;
- (iii) clause 3.15.8(a)(2)(i) shall be the total amount payable by *NEMMCO* to *Affected Participants* and *Market Customers* calculated pursuant to clause 3.12.11(b);
- (iv) clause 3.15.8(a)(2)(ii) shall be the sum of the total amount payable by *NEMMCO* to *Directed Participants* calculated pursuant to clause 3.15.7(c) and 3.15.7A(a) by application of 3.15.7A(e); and
- (v) clause 3.15.8(a)(2)(iii) shall be zero; and
- (4) for each *Market Customer* and *Market Generator* in relation to that *direction* an amount calculated pursuant to clause 3.15.8(e) by application of clause 3.15.8 mutatis mutandis provided that for the purposes of clause 3.15.8(f)(2) TNCASP, TSRP, TCRSP, TCLSP and TSFCAS shall be the total compensation payable by *NEMMCO* for the relevant *ancillary service* calculated in accordance with clause 3.15.7(c) or clause 3.15.7A(a) by application of clause 3.15.7A(e), as the case may be.
- (b) *NEMMCO* must include in the first statement it provides under clauses 3.15.14 and 3.15.15 following a final determination of all total amounts payable or receivable by it pursuant to clause 3.12.11, clause 3.15.7(a) and clause 3.15.8, separate details of the amount:
 - (1) receivable by each *Directed Participant* pursuant to clause 3.15.7(a) less the amount, if any, paid to that *Directed Participant* pursuant to clause 3.15.10C(a)(2);
 - (2) receivable by each Affected Participant or Market Customer pursuant to clause 3.12.11:
 - (i) less the amount paid to that Affected Participant or Market Customer, in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(1), if any; or
 - (ii) plus the amount paid by that Affected Participant or Market Customer in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(1), if any;
 - (3) payable by each *Affected Participant* or *Market Customer* pursuant to 3.12.11:
 - (i) less the amount paid by that Affected Participant or Market Customer, in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(1), if any; or

- (ii) plus the amount paid to that Affected Participant or Market Customer in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(1), if any;
- (4) receivable by each *Market Customer* pursuant to clause 3.15.8(b):
 - (i) less the amount paid to that *Market Customer* in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(3), if any; or
 - (ii) plus the amount paid by that *Market Customer* in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(3), if any;
- (5) payable by each *Market Customer* pursuant to clause 3.15.8(b):
 - (i) less the amount paid by that *Market Customer* in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(3), if any; or
 - (ii) plus the amount paid to that *Market Customer* in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(3), if any;
- (6) if an *Affected Participant* or *Market Customer* is not entitled to any compensation pursuant to clause 3.12.11, the amount:
 - (i) receivable by that person equal to the amount paid by that person pursuant to clause 3.15.10C(a); or
 - (ii) payable by that person equal to the amount paid to that person pursuant to clause 3.15.10C(a);
- (7) payable by each *Market Customer* and *Market Generator* equal to:
 - (i) the amount payable by the *Market Customer* or *Market Generator*, as the case may be, pursuant to clause 3.15.8(e) by application of clause 3.15.8 mutatis mutandis provided that for the purposes of clause 3.15.8(f)(2) TNCASP, TSRP, TCRSP, TCLSP and TSFCAS shall be the total compensation payable by *NEMMCO* for the relevant *ancillary service* calculated in accordance with clause 3.15.7A(a); less
 - (ii) the amount paid by the *Market Customer* or *Market Generator*, as the case may be, in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(4); and
- (8) payable by *Registered Participants* pursuant to clause 3.15.8(g).
- (c) If on application by the *AER* a court determines, in relation to a *direction*, that a *Directed Participant* has breached clause 4.8.9(c2) then:
 - (1) the *Directed Participant* shall not be entitled to, and must repay, any compensation plus interest pursuant to clauses 3.15.7, 3.15.7A and 3.15.7B, in relation to that *direction*; and

- (2) the AER must forward to NEMMCO a written notice of the court's determination.
- (3) *NEMMCO* must include in the first relevant statement it provides under clauses 3.15.14 and 3.15.15 following receipt of the notice from the *AER* issued pursuant to clause 3.15.10C(c)(2) separate details of:
 - (i) an amount payable to *NEMMCO* by the *Directed Participant* equal to the total compensation received by that *Directed Participant* in accordance with clauses 3.15.7, 3.15.7A and 3.15.7B plus interest on that total compensation computed at the average *bank bill* rate for the period from the date of payment of such amount to the *Directed Participant* until the date of that first statement;
 - (ii) an amount payable by *NEMMCO* to each relevant *Market Customer* calculated by applying clause 3.15.8(b) mutatis mutandis except that:
 - (A) MCP shall equal the amount receivable by the *Market Customer*; and
 - (B) CRA shall equal that part of the amount, including interest, calculated pursuant to clause 3.15.10C(c)(3)(i) attributable to the provision of *energy* by the *Directed Participant*; and
 - (iii) an amount payable by *NEMMCO* to each relevant *Market Customer* and *Market Generator* calculated by applying clause 3.15.8(f)(2) mutatis mutandis except that:
 - (A) all *trading amounts* determined by this clause 3.15.10C(c)(3)(iii) shall be positive; and
 - (B) TNCASP, TSRP, TCRSP, TCLSP, and TSFCAS shall all be an amount equal to that part of the amount, including interest, calculated pursuant to clause 3.15.10C(c)(3)(i) attributable to the provision of the relevant *ancillary service*.

3.15.11 Reallocation transactions

- (a) A reallocation transaction is a transaction undertaken with the consent of two Market Participants and NEMMCO, under which NEMMCO credits one Market Participant with a positive trading amount in respect of a trading interval, in consideration of a matching negative trading amount debited to the other Market Participant in respect of the same trading interval.
- (b) Reallocation transactions may be of any type permitted in the reallocation procedures.

- (c) A reallocation transaction is initiated by a reallocation request lodged with *NEMMCO* by or on behalf of two *Market Participants*.
- (d) A reallocation request must:
 - (1) contain the information required by the reallocation procedures; and
 - (2) be lodged with *NEMMCO* in accordance with the *reallocation* procedures and the timetable for reallocation requests as published by *NEMMCO* from time to time (the **reallocation timetable**).
- (e) Upon receipt of a *reallocation request NEMMCO* must register the *reallocation request* within the time specified in the *reallocation procedures* and the reallocation timetable and may impose conditions on that registration as contemplated by the *reallocation procedures*.
- (f) After a reallocation request has been registered in respect of two Market Participants, NEMMCO may deregister the reallocation request if:
 - (1) the *prudential requirements* are not satisfied by either of those *Market Participants*;
 - (2) either of the *Market Participants* fails to comply with any conditions imposed by *NEMMCO* in respect of the *reallocation request* at the time it was registered;
 - (3) both *Market Participants* notify *NEMMCO* in accordance with the *reallocation procedures* that they require the *reallocation request* to be terminated; or
 - (4) a *default event* occurs in respect of either of the *Market Participants* and *NEMMCO* exercises its powers under paragraph (1).
- (g) Deregistration of a *reallocation request* prevents *reallocation transactions* occurring in respect of all the *trading intervals* that occur after the time of deregistration.
- (h) *NEMMCO* must not deregister a *reallocation request* under paragraph (f) otherwise than in accordance with the *reallocation procedures*.
- (i) The *Market Participants* may agree to reverse the effect of a registered reallocation request by lodging a new reallocation request in accordance with the reallocation procedures and the reallocation timetable.
- (j) *NEMMCO* must include details of *reallocation transactions* in the *settlement statements* issued to all parties to those *reallocation transactions*.
- (k) Where there is a registration of a *reallocation request* in respect of a *trading interval* and that *trading interval* has occurred, a *reallocation transaction* occurs in accordance with that *reallocation request*.
- (l) If a *default event* occurs in relation to a party to a *reallocation request* when one or more of the *trading intervals* specified in the *reallocation request* has not occurred, *NEMMCO* may deregister the *reallocation request* by notice given at any time whilst the *default event* is subsisting.

- (m) The deregistration under paragraph (l) is effective immediately upon *NEMMCO* notifying both parties to a *reallocation request* of the deregistration and the deregistration:
 - (1) is effective for all *trading intervals* commencing after the time specified in the notice, and notwithstanding that the *default event* may be subsequently cured; and
 - (2) prevents the completion of the requested *reallocation transactions* in the *trading intervals* that commence at or after the time specified in the deregistration notice.
- (n) In addition to any other right *NEMMCO* may exercise following a *default event*, upon deregistration of a *reallocation request NEMMCO* may redetermine the *maximum credit limit* and *trading limit* for either or both of the parties to the *reallocation request*, having regard to the deregistration that has occurred.

3.15.11A Reallocation procedures

- (a) NEMMCO must develop and publish procedures in accordance with the Rules consultation procedures, to enable Market Participants to create and record reallocation requests and reallocation transactions in accordance with clause 3.15.11 in respect of electricity trading transactions other than those conducted through the market and/or establish mutual indemnification arrangements with other operators of markets for electricity-based trading (the "reallocation procedures").
- (b) *NEMMCO* may, from time to time and in accordance with the *Rules* consultation procedures, amend or replace the reallocation procedures.
- (c) Paragraph (b) does not apply to amendments to the *reallocation procedures* that are of a minor or administrative nature and *NEMMCO* may make such amendments at any time.
- (d) *NEMMCO* must develop and *publish* the first *reallocation procedures* by 1 January 2008 and there must be such procedures available at all times after that date.
- (e) *NEMMCO* is not required to meet its obligations under paragraph (a) in any way which increases *NEMMCO*'s risks in the collection of moneys owed to it in accordance with any provisions of the *Rules*.

3.15.12 Settlement amount

(a) Subject to clause 3.15.12(b), for each billing period NEMMCO must calculate a net "settlement amount" for each Market Participant by aggregating the trading amounts resulting for each Market Participant from each transaction in respect of each trading interval occurring in that billing period together with Participant fees determined in accordance with rule 2.11 and any other amounts payable or receivable by the Market Participants in that billing period under this Chapter 3. The settlement

- amount will be a positive or negative dollar amount for each Market Participant.
- (b) NEMMCO may calculate an estimate of the net settlement amount for each Market Participant (the "estimated settlement amount") if, within the time provided for the giving of preliminary statements in accordance with clause 3.15.14, NEMMCO is prevented from calculating the net settlement amount in accordance with clause 3.15.12(a) by factors which are beyond the control of NEMMCO and which deprive NEMMCO of the relevant data required to calculate the net settlement amount (the "relevant data"), including:
 - (1) a failure of:
 - (i) metering data processing;
 - (ii) communications; or
 - (iii) the settlements processing system; and
 - (2) any other events or circumstances which prevent the calculation of the actual net *settlement amount* by *NEMMCO*.
- (c) NEMMCO must develop the principles and the process to be applied in calculating the *estimated settlement amount*, and make any necessary modifications to those principles and that process, in accordance with the *Rules consultation process*.

3.15.13 Payment of settlement amount

Where the *settlement amount* for a *Market Participant* is negative the absolute value of the *settlement amount* is an amount payable by the *Market Participant* to *NEMMCO* pursuant to clause 3.15.15. Where the *settlement amount* for a *Market Participant* is positive the *settlement amount* is an amount receivable by the *Market Participant* from *NEMMCO* pursuant to clause 3.15.15, subject to the provisions of clause 3.15.22.

3.15.14 Preliminary statements

- (a) Subject to clause 3.15.14(b), within 5 *business days* after the end of each *billing period*, *NEMMCO* must give each *Market Participant* a draft of the statement to be given to the *Market Participant* under clause 3.15.15 together with supporting data relating to the *transactions* in that *billing period* and the prices at which electricity was bought and sold by the *Market Participant*.
- (b) If *NEMMCO* calculates an *estimated settlement amount* in accordance with clause 3.15.12(b), *NEMMCO* must:
 - (1) when giving a *preliminary statement* in accordance with this clause 3.15.14, provide a detailed report to affected *Market Participants* setting out the basis and calculations used for its estimation; and

(2) if requested to do so by affected *Market Participants*, consult with those *Market Participants* to ascertain whether or not any adjustments are required to the *estimated settlement amount* prior to the giving of a *final statement*.

3.15.15 Final statements

- (a) No later than 18 business days after the end of each billing period, NEMMCO must give to each Market Participant a final statement stating the amounts payable by the Market Participant to NEMMCO or receivable by the Market Participant from NEMMCO (subject to clause 3.15.22) in respect of the relevant billing period.
- (b) Unless *NEMMCO* has used an *estimated settlement amount* in accordance with clause 3.15.12, the statements issued under this clause 3.15.15 must include supporting data for all amounts payable or receivable.

3.15.15A Use of estimated settlement amounts by NEMMCO

- (a) Subject to clause 3.15.15A(b), if *NEMMCO* calculates an *estimated* settlement amount in accordance with clause 3.15.12(b), then clauses 3.15.13, 3.15.14 and 3.15.15 will have effect mutatis mutandis by applying the *estimated* settlement amount in place of a settlement amount for a *Market Participant* for the purposes of those clauses.
- (b) If *NEMMCO* receives *relevant data*:
 - (1) after it has given the *preliminary statement* in accordance with clause 3.15.14 but before giving a *final statement*, then it must adjust the *estimated settlement amount* accordingly for the purposes of preparing the *final statement*; or
 - (2) within 60 days after it has given a *final statement* to which the *relevant data* relates, then *NEMMCO* must adjust the relevant *estimated settlement amount* accordingly and issue a *revised statement* in accordance with clause 3.15.19(a).

3.15.16 Payment by market participants

On the 20th business day after the end of a billing period, or 2 business days after receiving a statement under clause 3.15.15, whichever is the later, and in accordance with the timetable each Market Participant must pay to NEMMCO in cleared funds the net amount stated to be payable by that Market Participant in that statement whether or not the Market Participant continues to dispute the net amount payable.

3.15.17 Payment to market participants

Subject to clause 3.15.22 on the *day* on which *NEMMCO* is to be paid under clause 3.15.16, *NEMMCO* must pay to each *Market Participant* in cleared funds the net amount stated to be payable to that *Market Participant* in the relevant statement given to it under clause 3.15.15.

3.15.18 Disputes

(a) In the event of a dispute between a *Market Participant* and *NEMMCO* concerning either the net amount (including any *estimated settlement amount*) stated in a *preliminary statement* provided under clause 3.15.14 to be payable by or to it or the supporting data, they must each use reasonable endeavours to resolve the dispute within 15 *business days* of the end of the relevant *billing period*.

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- (b) Disputes in respect of *final statements* or the supporting data provided with them in accordance with clause 3.15.15 must be raised within 6 months of the relevant *billing period*.
- (c) Disputes raised under this clause 3.15.18:
 - (1) can only be raised by a *Market Participant* or *NEMMCO* issuing a written notice of dispute in the form prescribed by *NEMMCO*'s *DMS* and otherwise in accordance with rule 8.2;
 - (2) must be resolved by agreement or pursuant to rule 8.2; and
 - (3) are, for the purpose of this clause, deemed to have been raised on the day *NEMMCO* receives the written notice of dispute.
- (d) A *Market Participant* that may be materially affected by the outcome of a dispute under clause 3.15.18 may be joined to that dispute by the *Adviser* on request by that *Market Participant* or by *NEMMCO*.

3.15.19 Revised Statements and Adjustments

- (a) Where a dispute about a *final statement* has been either resolved by agreement between *NEMMCO* and the relevant *Market Participant* ("the Disputant") or determined under rule 8.2 and an adjustment to the *settlement amount* stated in the disputed *final statement* is required, or an adjustment is required under clause 3.15.10A, *NEMMCO* must:
 - (1) recalculate the *settlement amount* for that *Market Participant* and each other *Market Participant* who received a *final statement* for the relevant *billing period*:
 - (i) in accordance with the applicable procedures set out in the *Rules* and.
 - (ii) taking into account the adjustment;
 - (2) if the adjustment is required as a result of a dispute and the recalculated *settlement amount* for the Disputant is between 95% and 105% of the relevant *settlement amount*:
 - (i) calculate for each *Market Participant* the amount by which the relevant *settlement amount* must be adjusted to be equal to the recalculated *settlement amount* after taking into account any *routine* or *special revised statement*; and

- (ii) for each *Market Participant* include that amount in the next *routine revised statement* given to those *Market Participants* for the relevant *billing period* practicable and if there is no *routine revised statement*, in accordance with clauses 3.15.19(a)(3)(ii) and (iii).
- (3) if the adjustment is required under clause 3.15.10A, or the adjustment is required as a result of a dispute and the recalculated *settlement amount* for the Disputant is less than 95% or more than 105% of the relevant *settlement amount*:
 - (i) calculate for each *Market Participant* the amount by which the relevant *settlement amount* must be adjusted to be equal to the recalculated *settlement amount* after taking into account any *routine* or *special revised statement*;
 - (ii) give each Market Participant a special revised statement for the relevant billing period in addition to any routine revised statement given under clause 3.15.19(b); and
 - (iii) give each *Market Participant* a notice advising of the reason why a *settlement statement* was given by *NEMMCO* under clause 3.15.19(a)(3).
- (b) For each billing period NEMMCO must give each Market Participant a routine revised statement approximately 20 weeks after the relevant billing period and approximately 30 weeks after the relevant billing period. Each routine revised statement must recalculate the Market Participant's settlement amount for that billing period:
 - (1) taking into account all amended *metering data*, amended *trading amounts*, amended *Participant fees* and any other amounts payable or receivable by *Market Participants* under this Chapter 3; and
 - (2) using the most recent version of *NEMMCO's* settlement calculation software applicable to that *billing period*.
- (c) Each special and routine revised statement issued under this clause must:
 - (1) state the revised *settlement amount* for the relevant *billing period*;
 - (2) be issued in accordance with the revised statement policy;
 - (3) be issued with revised supporting data for the *transactions* for the relevant *billing period* (except in the case of a *special revised statement* dealing with an adjustment required under clause 3.15.10A) and must include supporting data for all amounts payable or receivable.
- (d) If NEMMCO has issued a routine revised statement or special revised statement (the "revised statement") to a Market Participant in respect of a billing period (the "original billing period"), NEMMCO must include in the next final statement to the Market Participant issued not less than 8 business days after the revised statement (the "next statement"):

- (1) the amount necessary to put the *Market Participant* in the position it would have been in at the time payment was made under clause 3.15.16 or 3.15.17 (as applicable) in respect of the *final statement* for the original *billing period*, if the original *revised statement* had been given as the *final statement* for the *billing period*, but taking into account any adjustments previously made under this clause 3.15.19 as a result of any other *routine revised statement* or *special revised statement* in relation to the original *billing period*; and
- (2) interest on the amount referred to in clause 3.15.19(d)(1) computed at the average *bank bill rate* for the period from the date on which payment was required to be made under clauses 3.15.16 and 3.15.17 in respect of the *final statement* for the original *billing period* to the date on which payment is required to be made under those clauses in respect of the next statement.
- (e) NEMMCO must develop and publish a policy for *routine* and *special* revised statements. NEMMCO may amend the policy at any time. NEMMCO must develop and amend the policy in accordance with the Rules consultation procedures. The policy must include:
 - (1) a calendar setting out when *routine revised statements* will be issued by *NEMMCO*;
 - (2) the process by which the calendar can be amended or varied by *NEMMCO* and the process by which *Market Participants* are notified of any amendment and variation; and
 - (3) a transitional process by which *NEMMCO* will issue any outstanding *routine revised statement*.

3.15.20 Payment of adjustments

- (a) Adjustments made and interest calculated and included in a *final statement* under clause 3.15.19 must be paid as part of the *settlement amount* shown on that *final statement* in accordance with either clause 3.15.16 or 3.15.17.
- (b) Clause 3.15.22 does not apply to a *final statement* to the extent that the *final statement* incorporates an adjustment amount and interest pursuant to clause 3.15.19.
- (c) Disputes in respect of adjustment amounts and interest incorporated into a *final statement* pursuant to clause 3.15.19 must be:
 - (1) raised within 20 *business days* of the date of the *final statement* that they are incorporated into; and
 - (2) resolved by agreement or pursuant to the dispute resolution procedures set out in rule 8.2.

3.15.21 Default procedure

(a) Each of the following is a *default event* in relation to a *Market Participant*:

- (1) the *Market Participant* does not pay any money due for payment by it under the *Rules* by the appointed time on the due date;
- (2) NEMMCO does not receive payment in full of any amount claimed by NEMMCO under any credit support in respect of a Market Participant, within 90 minutes after the due time for payment of that claim:
- (3) the *Market Participant* fails to provide *credit support* required to be supplied under the *Rules* by the appointed time on the due date;
- (4) it is unlawful for the *Market Participant* to comply with any of its obligations under the *Rules* or any other obligation owed to *NEMMCO* or it is claimed to be so by the *Market Participant*;
- (5) it is unlawful for any *credit support provider* in relation to the *Market Participant* to comply with any of its obligations under the *Rules* or any other obligation owed to *NEMMCO* or it is claimed to be so by that *credit support provider*;
- (6) an authorisation from a government body necessary to enable the *Market Participant* or a *credit support provider* which has provided *credit support* for that *Market Participant* to carry on their respective principal business or activities ceases to be in full force and effect;
- (7) the *Market Participant* or a *credit support provider* which has provided *credit support* for that *Market Participant* ceases or threatens to cease to carry on its business or a substantial part of its business;
- (8) the *Market Participant* or a *credit support provider* which has provided *credit support* for that *Market Participant* enters into or takes any action to enter into an arrangement (including a scheme of arrangement), composition or compromise with, or assignment for the benefit of, all or any class of their respective creditors or members or a moratorium involving any of them;
- (9) the *Market Participant* or a *credit support provider* which has provided *credit support* for that *Market Participant* states that it is unable to pay from its own money its debts when they fall due for payment;
- (10) a receiver or receiver and manager is appointed in respect of any property of the *Market Participant* or a *credit support provider* which has provided *credit support* for that *Market Participant*;
- (11) an administrator, provisional liquidator, liquidator, trustee in bankruptcy or person having a similar or analogous function under the laws of any relevant jurisdiction is appointed in respect of the *Market Participant* or a *credit support provider* which has provided *credit support* for that *Market Participant*, or any action is taken to appoint any such person;

- (12) an application or order is made for the winding up or dissolution or a resolution is passed or any steps are taken to pass a resolution for the winding up or dissolution of the *Market Participant* or a *credit support provider* which has provided *credit support* for that *Market Participant*;
- (13) A notice under section 601AB(3) of the Corporations Act is given to the *Market Participant* or a *credit support provider* which has provided *credit support* for that *Market Participant* unless the registration of that *Market Participant* or *credit support provider* is reinstated under section 601AH of the Corporations Act;
- (14) the *Market Participant* or a *credit support provider* which has provided *credit support* for that *Market Participant* dies or is dissolved unless such notice of dissolution is discharged;
- (15) the *Market Participant* or a *credit support provider* which has provided *credit support* for that *Market Participant* is taken to be insolvent or unable to pay its debts under any applicable legislation.
- (b) Where a *default event* has occurred in relation to a *Market Participant*, *NEMMCO* may:
 - (1) issue a "default notice" specifying the alleged default and requiring the Market Participant to remedy the default by 1.00 pm (Sydney time) the next day following the date of issue of the default notice; and/or
 - (2) if it has not already done so, make claim upon any *credit support* held in respect of the obligations of the *Market Participant* for such amount as *NEMMCO* determines represents the amount of any money actually or contingently owing by the *Market Participant* to *NEMMCO* pursuant to the *Rules*.
- (c) If the *default event* is not remedied by 1.00 pm (*Sydney time*) the next *day* following the date of issue of the *default notice* or any later deadline agreed to in writing by *NEMMCO*, or if *NEMMCO* receives notice from the *defaulting Market Participant* that it is not likely to remedy the default, then *NEMMCO* may issue a "*suspension notice*" under which *NEMMCO* notifies the *defaulting Market Participant* of the date and time from which it is suspended from trading, and the extent of that suspension.
- (d) At the time of issue of a *suspension notice*, or as immediately thereafter as is practicable, *NEMMCO* must forward a copy of the *suspension notice* to the *AER* and to each *Market Participant* which is *financially responsible* for a *transmission network connection point* to which is allocated a *connection point* for which the defaulting *Market Participant* is *financially responsible*.
- (e) NEMMCO must lift a suspension notice if the default event is remedied and there are no other circumstances in existence which would entitle NEMMCO to issue a suspension notice.

- (f) NEMMCO must issue a public announcement that the Market Participant has been suspended from the market including details of the extent of the suspension, simultaneously with, or at any time after, a suspension notice is issued. NEMMCO must issue a public notice promptly after a suspension notice is lifted.
- (g) From the time of suspension that *NEMMCO* stipulates in a *suspension notice* to a *Market Participant* the *Market Participant* is ineligible to trade or enter into any *transaction* in the *market* to the extent specified in the notice, until such time that *NEMMCO* notifies the *Market Participant* and all other *Market Participants* of the date and time that the suspension has been lifted.
- (h) The defaulting Market Participant must comply with a suspension notice.
- (i) Following the issue of a *suspension notice*, *NEMMCO* may do all or any of the following to give effect to the *suspension notice*:
 - (1) reject any dispatch bid or dispatch offer submitted by the defaulting Market Participant;
 - (2) withhold the payment of any amounts otherwise due to the *defaulting Market Participant* under the *Rules*; or
 - (3) deregister or reject any *reallocation request* to which the *defaulting Market Participant* is a party.

The issue of a *suspension notice* which has not been lifted is a "relevant disconnection event" (ie. an event for which a *Registered Participant's market loads* may be *disconnected*) within the meaning of section 63(2) of the *National Electricity Law*.

(j) Unless provided with instructions from the relevant participating jurisdiction or participating jurisdictions that a nominated third party is to assume financial responsibility for a suspended Market Participant's obligations under the Rules and that person does so, then, following the issue of a suspension notice, NEMMCO must request the AER to seek, and the AER must then seek, an order from a court to physically disconnect market loads for which the defaulting Market Participant is financially responsible.

3.15.22 Maximum total payment in respect of a billing period

- (a) For the purposes of this clause 3.15.22, the *maximum total payment* in respect of a *billing period* is equal to:
 - (1) the aggregate of the *energy trading amounts* as determined in accordance with clause 3.15.6 and *reallocation* amounts as determined in accordance with clause 3.15.11 received by *NEMMCO* from *Market Participants* in accordance with clause 3.15.16 in respect of that *billing period* in accordance with the *timetable* on the latest date for payment by *Market Participants* as described in clause 3.15.16 (called the *payment date*),

plus

(2) if there is one or more *Market Participants* in default, the aggregate amount which *NEMMCO* is able to obtain from the *credit support* and apply from security deposits provided by the *Market Participants* in default under rule 3.3 on the *payment date* in accordance with the *timetable*,

minus

(3) if there is one or more *Market Participants* in default, the aggregate of amounts payable to *NEMMCO* by those *Market Participants* in respect of that *billing period* in accordance with clause 3.15.16 but not received in accordance with the *timetable* on the latest date for payment as described in clause 3.15.16 (called the *payment date*),

plus

(4) if there is one or more *Market Participants* in default, the aggregate of *energy trading amounts* and *reallocation* amounts payable to *NEMMCO* under clauses 3.15.6 and 3.15.11 by those *Market Participants* in respect of that *billing period* in accordance with clause 3.15.16 but not received in accordance with the *timetable* on the latest date for payment as described in clause 3.15.16 (called the *payment date*),

minus

- (5) *inter-regional* and *intra-regional settlements* surpluses as determined or allocated by *NEMMCO* in accordance with the procedure established under clause 3.6.5.
- (b) The maximum amount which *NEMMCO* is required to pay to *Market Participants* in respect of *spot market transactions* or *reallocation transactions* in respect of a *billing period* is equal to the *maximum total payment* in respect of that *billing period*.
- (c) If the *maximum total payment* in respect of a *billing period* is not sufficient to meet the aggregate of the net amounts payable by *NEMMCO* to each of the *Market Participants* to whom payments are to be made in relation to *spot market transactions* or *reallocation transactions* in respect of the *billing period* ("the *aggregate payment due*"), then the aggregate amount payable by *NEMMCO* to each relevant *Market Participant* for any of these *transactions* in respect of that *billing period* shall be reduced by applying the following formula:

$$AAP = SAP \qquad x \quad \frac{A}{B}$$

where:

AAP is the reduced amount actually payable by *NEMMCO* to the relevant *Market Participant* in respect of the relevant *billing period*;

- SAP is the net amount that would have been payable to the relevant *Market Participant* in respect of *spot market transactions* or *reallocation transactions* in respect of the relevant *billing period* but for the application of this clause 3.15.22;
- A is the *maximum total payment* in respect of the *billing period*; and
- B is the aggregate payment due in respect of the billing period.
- (d) This clause 3.15.22 applies notwithstanding any other provision of this Chapter.

3.15.23 Maximum total payment in respect of a financial year

- (a) If in a *financial year* a *Market Participant* suffers a reduction in payment under clause 3.15.22 the provisions of this clause shall apply to adjust the payments made to each *Market Participant* in the *financial year*.
- (b) The ratio of the overall shortfall to the sum of the *aggregate payments due* for a financial year shall be determined by the following formula:

$$SS = \frac{A_1 + C}{B_1}$$

where:

- SS is the ratio of the overall shortfall to the sum of the *aggregate* payments due for the *financial year*;
- A₁ is the aggregate of the As referred to in clause 3.15.22, being the *maximum total payment* in respect of each *billing period* forming the *financial year*;
- B₁ is the aggregate of the Bs referred to in clause 3.15.22, being the aggregate payment due in respect of each billing period forming the financial year; and
- C is the aggregated late payments and *credit support* receipts in respect of *defaulting Market Participants* in the *financial year* plus interest received on such amounts under clause 3.15.25.
- (c) The shortfall for a *financial year* shall be applied pro rata to each *Market Participant* in the *financial year* by applying the following formula:

$$SS_1 = (SAP_1 \ SS) - AAP_1$$

where:

- SS₁ is the shortfall or surplus payable by or due to the *Market Participant* in respect of the *financial year*;
- SAP₁ is the aggregate of the SAPs referred to in clause 3.15.22 being the net amounts due to the *Market Participant* in respect of each *billing period* forming the *financial year*;
- SS is determined in accordance with clause 3.15.23(b); and

- AAP₁ is the aggregate of the AAPs referred to in clause 3.15.22, being the reduced amounts payable to the *Market Participant* in respect of each *billing period* forming the *financial year*.
- (d) NEMMCO must issue a statement stating the SS₁ amount payable to or receivable by the Market Participant in respect of this clause 3.15.23. If SS₁ is positive, such that an amount is payable by NEMMCO it will credit the sum to the Market Participant's account in the next billing period. If SS₁ is negative, such that an amount is payable by a Market Participant, NEMMCO will at its discretion either debit the sum to the Market Participant in the next billing period or issue an invoice for immediate payment of the amount.

3.15.24 Compensation for reductions under clause 3.15.23

- (a) If:
 - (1) a *Market Participant* suffers a reduction in payment under clause 3.15.23; and
 - (2) an amount is recovered by *NEMMCO* after the end of a *financial year* from the person whose default gave rise (in whole or in part) to the reduction, in respect of the default,

then, subject to clause 3.15.24(c), the *Market Participant* is entitled to be paid by *NEMMCO* out of the amount recovered the amount of the reduction suffered and interest for receiving the amount of the reduction later than it would otherwise have done.

- (b) The amount of the interest payable under clause 3.15.24(a) is to be determined in each case by *NEMMCO*.
- (c) If the amount recovered from the person whose default gave rise to the reduction is not sufficient to pay all *Market Participants* the amounts to which they are entitled under clause 3.15.23 then the amount recovered is to be distributed amongst them pro rata according to the reductions suffered. Such distribution to be made at any time following the end of a *financial year*.

3.15.25 Interest on overdue amounts

- (a) A *Market Participant* or *NEMMCO* must pay interest on any unpaid moneys due and payable by it under this Chapter.
- (b) The rate of interest payable under this clause 3.15.25 is the *bank bill rate* calculated as simple interest on a daily basis from the date payment was due, up to and including the date of payment, with interest compounding monthly on the last *day* of each month whilst the unpaid moneys remain outstanding.

3.16 Participant compensation fund

3.16.1 Establishment of Participant compensation fund

- (a) NEMMCO must continue to maintain, in the books of the corporation, a fund called the *Participant compensation fund* for the purpose of paying compensation to *Scheduled Generators* and *Scheduled Network Service Providers* as determined by the *dispute resolution panel* for *scheduling errors* under this Chapter 3.
- (b) *NEMMCO* must pay to the *Participant compensation fund* that component of *Participant fees* under rule 2.11 attributable to the *Participant compensation fund*.
- (c) The funding requirement for the *Participant compensation fund* for each *financial year* is the lesser of:
 - (1) \$1,000,000; and
 - (2) \$5,000,000 minus the amount which *NEMMCO* reasonably estimates will be the balance of the *Participant compensation fund* at the end of the relevant *financial year*.
- (d) The *Participant compensation fund* is to be maintained by *NEMMCO* and is the property of *NEMMCO*.
- (e) Any interest paid on money held in the *Participant compensation fund* will accrue to and form part of the *Participant compensation fund*.
- (f) NEMMCO must pay from the Participant compensation fund all income tax on interest earned by the Participant compensation fund and must pay from the Participant compensation fund all bank account debit tax, financial institutions duty and bank fees in relation to the Participant compensation fund.
- (g) Upon ceasing to be a *Scheduled Generator*, a *Scheduled Generator* is not entitled to a refund of any contributions made to the *Participant compensation fund*.
- (h) Upon ceasing to be a *Scheduled Network Service Provider*, a *Scheduled Network Service Provider* is not entitled to a refund of any contributions made to the *Participant compensation fund*.

3.16.2 Dispute resolution panel to determine compensation

- (a) Where a *scheduling error* occurs, a *Market Participant* may apply to the *dispute resolution panel* for a determination as to compensation under this clause 3.16.2.
- (b) Where a *scheduling error* occurs, the *dispute resolution panel* may determine that compensation is payable to *Market Participants* and the amount of any such compensation payable from the *Participant compensation fund*.

- (c) A determination by the *dispute resolution panel* as to compensation must be consistent with this clause 3.16.2.
- (d) A Scheduled Generator who receives an instruction in respect of a scheduled generating unit to operate at a lower level than the level at which it would have been instructed to operate had the scheduling error not occurred, will be entitled to receive in compensation an amount determined by the dispute resolution panel.
- (e) A Scheduled Network Service Provider who receives an instruction in respect of its scheduled network services to transfer less power on the scheduled network service than it would have been instructed to transfer had the scheduling error not occurred, will be entitled to receive in compensation an amount determined by the dispute resolution panel.
- (f) A Scheduled Generator who receives a dispatch instruction in respect of a scheduled generating unit to operate at a level consistent with a dispatch offer price (with reference to the relevant regional reference node) which is higher than the dispatch price, due to the operation of clause 3.9.2B, is entitled to receive in compensation an amount determined by the dispute resolution panel.
- (g) A Scheduled Network Service Provider who receives an instruction in respect of its scheduled network services to transfer power on the scheduled network service consistent with a network dispatch offer price but receives less net revenue than would be expected under clause 3.8.6A(f) due to adjustment of the spot price for a trading interval under clause 3.9.2B, is entitled to receive in compensation an amount determined by the dispute resolution panel.
- (h) In determining the level of compensation to which *Market Participants* are entitled in relation to a *scheduling error*, the *dispute resolution panel* must:
 - (1) Where the entitlement to compensation arises under clause 3.16.2(f), determine compensation on the basis of the actual loading level and not the *dispatch instruction* applicable to the relevant *scheduled generating unit* for that *dispatch interval*;
 - (2) Where the entitlement to compensation arises under clause 3.16.2(g), determine compensation on the basis of the actual loading level and not the *dispatch instruction* applicable to the relevant *scheduled network service* for that *dispatch interval*;
 - (3) Use the *spot price* as determined under rule 3.9, including any *spot prices* that have been adjusted in accordance with clause 3.9.2B;
 - (4) Take into account the current balance of the *Participant compensation fund* and the potential for further liabilities to arise during the year;
 - (5) Recognise that the aggregate liability in any year in respect of scheduling errors cannot exceed the balance of the Participant compensation fund that would have been available at the end of that

year if no compensation payments for *scheduling errors* had been made during that year.

- (i) The manner and timing of payments from the *Participant compensation* fund are to be determined by the dispute resolution panel.
- (j) To the maximum extent permitted by law, *NEMMCO* is not liable in respect of a *scheduling error* except out of the *Participant compensation fund* as contemplated in this clause 3.16.2.

3.17 **NEMMCO Software**

3.17.1 Acceptance of software

NEMMCO must not alter, reconfigure, reprogram or otherwise modify or enhance any computer software required under this Chapter 3 for the operation of the *market* unless such changes have been duly authorised by the *AER*.

3.17.2 No liability

To the maximum extent permitted by law, no Contractor, and no employee, officer or agent of *NEMMCO* or a Contractor, is liable (in contract, tort including negligence or otherwise) for any loss or damage suffered or incurred by a *Market Participant* or any other person as a consequence of the use of any computer software to operate the *market*. For the purpose of this clause, "Contractor" means any person or organisation engaged by *NEMMCO* to assist in the development, design, installation, maintenance or upgrading of the computer software used to operate the *market*.

3.18 Settlement Residue Auctions

3.18.1 Settlement residue concepts

- (a) An "auction participation agreement" is an agreement between NEMMCO and an eligible person concerning the participation by the eligible person in auctions.
- (b) A "settlement residue distribution agreement" or "SRD agreement" is an agreement between NEMMCO and an eligible person entered into following an auction under which:
 - (1) NEMMCO agrees to distribute to the *eligible person* a portion of the *settlements residues* allocated to a *directional interconnector* for a period specified in the SRD agreement; and
 - (2) the *eligible person* agrees to pay *NEMMCO* a certain amount for the right referred to in clause 3.18.1(b)(1).
- (c) For the purposes of this rule 3.18:
 - (1) all the *regulated interconnectors* between any 2 adjacent *regions* are deemed to constitute a single *interconnector*; and

- (2) the deemed *interconnector* referred to in clause 3.18.1(c)(1) between any 2 adjacent *regions* consists of 2 *directional interconnectors*, one involving a transfer from *region* A to *region* B, and one involving a transfer from *region* B to *region* A.
- (d) Subject to clause 3.18.4, *NEMMCO* must use the portion of the *settlements* residue allocated to a directional interconnector remaining after applying the relevant jurisdictional derogations under Chapter 9 (as determined by applying the principles referred to in clause 3.6.5) to make payments under *SRD* agreements in relation to that directional interconnector and to recover the auction expense fees.

3.18.2 Auctions and eligible persons

- (a) *NEMMCO* may conduct *auctions* to determine which *eligible persons* will enter into *SRD agreements* with *NEMMCO*.
- (b) *NEMMCO* may only enter into *SRD agreements* with persons (called "*eligible persons*") which satisfy the following criteria:
 - (1) the person is a Market Customer, a Generator or a Trader; and
 - (2) the person satisfies any criteria specified in the *auction rules*, which criteria must comply with clause 3.18.2(g).
- (c) Auctions must be conducted in accordance with the auction rules.
- (d) NEMMCO may, with the approval of the settlement residue committee, suspend, or remove a suspension, on conducting auctions for one or more directional interconnectors for a specified period if NEMMCO believes it is not practicable to conduct those auctions or those auctions are unlikely to lead to the entry into of SRD agreements in relation to all of the settlements residues being auctioned.
- (e) *NEMMCO* may, after complying with the *Rules consultation procedures*, cease conducting *auctions*.
- (f) If *NEMMCO* takes any action under clause 3.18.2(d) or (e), then it must post a notice on its website specifying the action taken as soon as practicable after taking it.
- (g) Any criteria specified in the *auction rules* concerning persons with whom *NEMMCO* may enter into *SRD agreements* must not exclude any persons other than those specified in subparagraphs (1) (6) below and must exclude the persons specified in subparagraphs (1), (2), (5) and (6) below:
 - (1) persons who have not entered into an auction participation agreement;
 - (2) Transmission Network Service Providers;
 - (3) [Deleted]
 - (4) persons:

- (i) who have defaulted on payment obligations under an *auction* participation agreement or a SRD agreement; or
- (ii) in relation to whom a *default event* has occurred;
- (5) any person who *NEMMCO* considers is acting on behalf of or in concert with a person described in clauses 3.18.2(g)(1)-(2);
- (5a) any person who *NEMMCO* considers is acting on behalf of or in concert with a person described in clause 3.18.2(g)(4); or
- (6) any person who would be a "retail client" as defined in section 761G(7) of the Corporations Act 2001 (Cth), if they entered into an SRD agreement with NEMMCO.

(h) [Deleted]

3.18.3 Auction rules

- (a) NEMMCO must develop rules (called "auction rules") which set out:
 - (1) additional criteria which a person must satisfy to be an *eligible person* (which must include, without limitation, criteria requiring the person to enter into an *auction participation agreement* with *NEMMCO* in a form satisfactory to *NEMMCO*);
 - (2) the procedures for conducting *auctions* and the timing of *auctions*;
 - (3) the mechanism for calculating the *auction* clearing price in respect of each *directional interconnector* for each *auction*;
 - (4) the mechanism for calculating *auction expense fees*;
 - (5) the procedures and timetable for billing and settling *auction amounts*; and
 - (6) the standard form of any *auction participation agreement* referred to in clause 3.18.3(a)(1).
- (b) In developing and amending the *auction rules*, *NEMMCO* must give effect to the following principles:
 - (1) [Deleted]
 - (2) to the extent reasonably practicable, an *auction* must be structured in a way that maximises the value of the relevant *settlements residue*;
 - (3) the price for each unit of the *settlements residue* in respect of a *directional interconnector* will be the same for all *SRD agreements* resulting from the same *auction* and will be equal to the *auction* clearing price in respect of the *directional interconnector* for the *auction*; and
 - (4) enhancing competition and efficiency by promoting interstate trade in electricity.

- (c) *NEMMCO* must make the *auction rules* available to *Registered Participants* and to any other person who requests a copy.
- (d) *NEMMCO* may amend the *auction rules* at any time with the approval of the *settlement residue committee*.
- (e) Subject to clause 3.18.3(f), in developing and amending the *auction rules*, *NEMMCO* must comply with the *Rules consultation procedures*.
- (f) *NEMMCO* need not, provided it has consulted to the extent practicable in the circumstances, comply with the *Rules consultation procedures* in relation to a proposed amendment to the *auction rules* if:
 - (1) the amendment has the support of at least three-quarters of the members of the *settlement residue committee*; and
 - (2) *NEMMCO* considers the amendment is urgent.

3.18.4 Proceeds and fees

- (a) *NEMMCO* must distribute:
 - (1) subject to clause 3.6.5(a)(4A) and (4B), proceeds from each *auction* in respect of a *directional interconnector*; and
 - (2) subject to clauses 3.18.4(b) and (c), any portion of the *settlements* residue allocated to the *directional interconnector* which is not the subject of a *SRD agreement*,
 - to the appropriate *Network Service Providers* in accordance with the principles referred to in clause 3.6.5 in relation to the allocation and distribution of *settlements residue* attributable to *regulated interconnectors*.
- (b) The costs and expenses incurred by *NEMMCO* in establishing and administering the arrangements contemplated by this rule 3.18, in conducting *auctions* under this rule 3.18 and in entering into and administering *auction participation agreements* and *SRD agreements* under this rule 3.18 will be recovered from *settlements residue* by way of *auction expense fees*.
- (c) The *auction expense fees* are to be developed by *NEMMCO* in accordance with the *auction rules* and approved by the *settlement residue committee*, and recovered as follows:
 - (1) to the extent the *settlements residue* is distributed to *eligible persons* under clause 3.18.1(d), in accordance with the *auction rules*; and
 - (2) to the extent the *settlements residue* is distributed to *Network Service Providers* under clause 3.18.4(a)(2), as if the *settlements residue* was being distributed to *eligible persons* in accordance with the *auction rules*
- (d) The auction expense fees for an auction are to be published before the auction.

- (e) Eligible persons and NEMMCO must pay auction amounts in accordance with the auction rules, and, for the avoidance of doubt, amounts payable by eligible persons to NEMMCO under SRD agreements will not be regarded as amounts payable under the Rules for the purposes of rule 3.15.
- (f) NEMMCO may nominate an electronic funds transfer facility for the purposes of paying *auction amounts* and, if it does so, *eligible persons*, Network Service Providers and NEMMCO must use that facility for paying and receiving auction amounts.

3.18.5 Settlement residue committee

- (a) NEMMCO must establish a settlement residue committee.
- (b) The functions of the *settlement residue committee* are to:
 - (1) approve any suspension, or removal of a suspension, imposed by *NEMMCO* on the conducting of *auctions*;
 - (2) approve proposed amendments to the *auction rules* developed by *NEMMCO*;
 - (3) monitor, review and report on the *auctions* conducted by *NEMMCO* under this rule 3.18; and
 - (4) approve the costs and expenses incurred by *NEMMCO* in conducting *auctions* under this rule 3.18 and in entering into and administrating *auction participation agreements* and *SRD agreements* under this rule 3.18.
- (c) The settlement residue committee is to consist of:
 - (1) an employee of *NEMMCO* appointed by *NEMMCO*, who will act as chairman of the committee;
 - (2) a person representing *Generators*;
 - (3) a person representing *Market Customers*;
 - (4) a person representing *Transmission Network Service Providers*;
 - (5) a person representing *Traders*;
 - (6) a person appointed jointly by the relevant *Ministers* of the *participating jurisdictions*; and
 - (7) a person appointed by the *AEMC* to represent end use customers of electricity.
- (d) *NEMMCO* may remove the person referred to in clause 3.18.5(c)(1) at any time for any reason.
- (e) The persons referred to in clauses 3.18.5(c)(2), (3), (4) and (5) must be appointed and removed by *NEMMCO* after consultation with the class of *Registered Participants* the person is to represent, and *NEMMCO* 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*.
- (f) The *Ministers* of the *participating jurisdictions* acting jointly may remove the person referred to in clause 3.18.5(c)(6) at any time for any reason.
- (g) The *AEMC* may remove the person referred to in clause 3.18.5(c)(7) at any time for any reason.
- (h) A person holds office as a member of the *settlement residue committee* until that person:
 - (1) resigns from office;
 - (2) if the person is the person referred to in clause 3.18.5(c)(1), is removed from office by *NEMMCO* in accordance with clause 3.18.5(d);
 - (3) if the person is a person referred to in clauses 3.18.5(c)(2), (3), (4) or (5), is removed from office by *NEMMCO* in accordance with clause 3.18.5(e)(2);
 - (4) if the person is the person referred to in clause 3.18.5(c)(6), is removed from office by the *Ministers* of the *participating jurisdictions* in accordance with clause 3.18.5(f); or
 - (5) if the person is the person referred to in clause 3.18.5(c)(7), is removed from office by the *AEMC* in accordance with clause 3.18.5(g),

and such a person is eligible for re-appointment.

(i) A person may resign as a member of the *settlement residue committee* by giving notice in writing to that effect to *NEMMCO*.

3.19 Market Management Systems Access Procedures

- (a) NEMMCO may develop and publish Market Management Systems Access Procedures in consultation with Registered Participants in accordance with the Rules consultation procedures, which procedures will govern how Registered Participants and Metering Providers can use the market management systems.
- (b) *NEMMCO* may amend the *Market Management Systems Access Procedures* from time to time in consultation with *Registered Participants* in accordance with the *Rules consultation procedures*, and any such amendments must be *published* by *NEMMCO*.
- (c) NEMMCO and all Registered Participants and Metering Providers must comply with the Market Management Systems Access Procedures.

- (d) A Registered Participant which complies with the Market Management Systems Access Procedures and promptly pays all relevant Participant fees as and when they fall due has a right to be connected to the market management systems.
- (e) If a Registered Participant fails to comply with the Market Management Systems Access Procedures, NEMMCO must:
 - (1) notify that *Registered Participant* describing the nature of the breach; and
 - (2) at a time following notification of the breach by *NEMMCO* under clause 3.19(e)(1) determined by *NEMMCO* having regard to a balancing of the need to provide a *Registered Participant* with the opportunity to remedy the breach and the nature of the breach, notify the AER that the *Registered Participant* has breached the *Market Management Systems Access Procedures*.

Schedule 3.1 - Registered Bid and Offer Data

The registered bid and offer data are the standard data requirements for verification and compilation of dispatch bids and dispatch offers on the trading day schedule. All Scheduled Generators and Market Participants must notify NEMMCO of their registered bid and offer data in accordance with this schedule 3.1 in respect of each of their scheduled loads and scheduled generating units at least six weeks prior to commencing participation in the market.

Scheduled Generators and Market Participants must review their registered bid and offer data annually in accordance with the timetable advised by NEMMCO and provide details of any changes to NEMMCO.

Registered bid and offer data may be updated by a Scheduled Generator or Market Participant at any time but may be subject to audit at NEMMCO's request.

A copy of all *changes* to the data must be returned to each *Scheduled Generator* and *Market Participant* for verification and resubmission by the *Scheduled Generator* or *Market Participant* as necessary.

Registered bid and offer data may include tolerance levels.

Scheduled Generating Unit Data:

Data	Units of Measurement		
Power station information:			
node number/identifier			
total station registered capacity	MW		
total station <i>sent out</i> capacity at registered capacity	MW		
daily energy constraint, if applicable	MWh per day		
Generating unit information:			
full load	MW (generated and sent out)		
normal or technical minimum load	MW (generated and sent out)		
additional emergency <i>generation</i> above registered capacity	MW		
normal and maximum ramp rates	MW/minute		
response time to full <i>load</i> from cold standby	minutes		
aggregation data			
capability chart			
notice to synchronise	minutes		
minimum shutdown time	minutes		
maximum shutdowns per day			

Scheduled Load Data:

Data	Units of Measurement		
node number/identifier			
normally on or normally off			
maximum load	MW		
daily energy constraint if applicable	MWh per day		
normal and maximum ramp rates	MW/min		
aggregation data			

Scheduled Network Service Data:

Data	Units of Measurement		
node number/identifier for <i>connection points</i> A and B			
Registered <i>power transfer capability</i> to node 1 (may be seasonal etc)	MW		
Registered <i>power transfer capability</i> to node 2 (may be seasonal etc).	MW		
Additional transient <i>power transfer capability</i> in each direction	MW		
Normal and maximum transfer <i>ramp rates</i> (if applicable)	MW/min		
Loss vs flow as piecewise linear relationships for each direction which, taken together, are convex over the entire range of <i>power</i> transfer capabilities in both directions			
Aggregation data			

Dispatch Inflexibility Profile

Data	Units of Measurement
Time for response from receipt of <i>dispatch</i> instruction from zero <i>load</i> , T1 (see clause 3.8.19(e)(1))	minutes

Time after T1 required to reach minimum loading level (see clause 3.8.19(e)(2))	minutes
Time after T2 for which <i>plant</i> must operate at or above the minimum <i>loading level</i> (see clause 3.8.19(e)(3))	minutes
Time required by <i>plant</i> to reduce from its minimum <i>loading level</i> to zero (see clause 3.8.19(e)(4))	minutes
minimum <i>loading level</i> (see clauses 3.8.19(e)(2),(3),(4))	MW

Aggregation Data

Where dispatch bids or dispatch offers are submitted for aggregated generating units, market network services or loads then, unless otherwise exempted by NEMMCO, each Scheduled Generator and Market Participant must provide the information required in accordance with this schedule 3.1 for each generating unit, market network service or load included in those dispatch bids or dispatch offers both separately and in aggregated form.

Schedule 3.2 - [Deleted]

Schedule 3.3 - Principles for Determination of Maximum Credit Limits & Prudential Margins

This schedule sets out the principles to be followed by *NEMMCO* in determining the *maximum credit limit* and *prudential margin* for a *Market Participant*.

S3.3.1 Principles for determining maximum credit limits

- (a) The *maximum credit limit* should be set on the principle of imposing a guarantee of payment being made to *NEMMCO* to a level of a *reasonable* worst case.
- (b) When calculating the *maximum credit limit NEMMCO* should have regard to:
 - (1) impartial objectivity rather than subjectivity, though it is recognised that some key parameters will need to be subjectively estimated from a limited amount of data the estimation should be as impartial as possible;
 - (2) the average level and volatility of the *regional reference price* for the *region* for which the *maximum credit limit* is being calculated, measured over a period of time comparable to the frequency of breaches of the *maximum credit limit*;
 - (3) the pattern of the quantity of electricity recorded in the *metering data* for the *Market Participant*;

- (4) the quantity and pattern of the *prospective reallocation* in the immediate future;
- (5) the correlation between the metered amounts of electricity and the *regional reference price*;
- (6) the length of the *credit period*, which is the number of days from the start of a *billing period* to the end of the *reaction period* taking into account:
 - (i) the length of the *billing period*;
 - (ii) the typical time from the end of the *billing period* to the day on which *settlement* for that *billing period* is due to be paid (the *payment period*);
 - (iii) any current written request from the *Market Participant* to *NEMMCO* for the *maximum credit limit* to be determined on a *payment period* taken, for the purposes of clause 3.3.8 and not otherwise, to be 14 days; and
 - (iv) the time from a *default event* to the suspension or other removal of the *defaulting Market Participant* from the *market*, being a period of up to 7 days (the *reaction period*);
- (7) the statistical distribution of accrued amounts that may be owed to *NEMMCO*; and
- (8) the degree of confidence that the *maximum credit limit* will be large enough to meet large defaults (i.e. the degree of reasonableness in a *reasonable worst case*).
- (c) As far as practicable, this schedule 3.3 must be read and construed as taking into account *market ancillary service transactions* for the calculation of the *maximum credit limit* for the relevant *Market Participant*.

S3.3.2 Principles for determining prudential margins

The value of the *prudential margin* for a *Market Participant* is set on the same principles as the *maximum credit limit* except that:

- (1) if the aggregate of all *trading amounts* for the *Market Participant* is a positive amount the quantity and pattern of those *trading amounts* are not taken into account when determining the *prudential margin*;
- (2) if the aggregate of all *reallocation amounts* for the *Market Participant* is a positive amount the quantity and pattern of those *reallocation amounts* are not taken into account when determining the *prudential margin*; and
- (3) the *prudential margin* is calculated in respect of the *reaction period*.

CHAPTER 8			

8. 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 *market 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 7.1.4(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; or
 - (14) a *transmission services access dispute* to which Part K of Chapter 6A applies.

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 it 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) (modelling): the disclosure, use or reproduction of data held by *NEMMCO* or a *Network Service Provider* for the purpose of modelling the operation of the *power system*, to the extent reasonably necessary to enable a *Connection Applicant* to develop an *application to connect* but does not include information provided in accordance with clauses S5.2.4(a), (b)(5) and (b)(6); or
- (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 [Deleted]

8.7.4 [Deleted]

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 a *Jurisdictional Regulator*, 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;
- (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); and
 - (5) the system restart standard,

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.

- (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 annual reviews described in clause 8.8.3(b) 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*, the *AER* or the *Advocacy Panel*, 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* or the *Advocacy Panel* 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*, the *AER* or the *Advocacy Panel*, 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* or the *Advocacy Panel* 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*.

- (1) Except where the *consulting party* is the *AEMC*, the *AER* or the *Advocacy Panel*, 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* or the *Advocacy Panel* 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 Advocacy Panel

8.10.1 Establishment of the Advocacy Panel

The AEMC must establish an Advocacy Panel. The Advocacy Panel must, in accordance with rule 8.10:

- (1) determine the annual funding requirements for end-user advocacy;
- (2) develop and publish criteria for the allocation of funding for end-user advocacy;
- (3) develop and publish guidelines for applications for funding for end-user advocacy;
- (4) allocate funding to individual projects;
- (5) publish an annual report; and
- (6) ensure appropriate auditing arrangements.

8.10.2 Constitution of the Advocacy Panel

- (a) The Advocacy Panel is to consist of:
 - (1) a person appointed by the *AEMC* as a member who is also appointed to act as the Chairperson; and
 - (2) 4 members appointed by the AEMC.
- (b) In appointing a Chairperson or any other member to the *Advocacy Panel* under clause 8.10.2(a), the *AEMC* must, to the extent practicable:
 - (1) have regard to any nominee recommended by the *Ministers of the* participating jurisdictions and to any guidelines prepared under clause 8.10.3(a); and
 - (2) ensure that the person so appointed is independent of the *AEMC*, the *AER*, *Jurisdictional Regulators*, *NEMMCO* and all *Registered Participants*.

- (c) The Chairperson and other members of the *Advocacy Panel* will be appointed for a period of up to 3 years on terms and conditions as to remuneration and other matters specified in the instrument of appointment.
- (d) If at any time the Chairperson of the *Advocacy Panel* ceases to be independent of the *AEMC*, the *AER*, *Jurisdictional Regulators*, *NEMMCO* and all *Registered Participants*, the *AEMC* must remove that person from the *Advocacy Panel*.
- (e) Subject to clause 8.10.2(f) any person who has previously served as Chairperson or as a member of the *Advocacy Panel* is eligible for reappointment to the *Advocacy Panel* in accordance with this clause 8.10.2.
- (f) The *AEMC* may remove the Chairperson or any other member of the *Advocacy Panel* 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 person ceases to be independent of the *AEMC*, the *AER*, *Jurisdictional Regulators*, *NEMMCO* and all *Registered Participants*; or
 - (5) the person fails to discharge the obligations of that office imposed by the *Rules*, the terms and conditions in the instrument of appointment as referred to in clause 8.10.2(c), or the appointment guidelines developed pursuant to clause 8.10.3.
- (g) The *AEMC* may not exercise its powers under 8.10.2(f)(4) or (5), without prior consultation with the *Ministers of the participating jurisdictions*.
- (h) A person may resign from the *Advocacy Panel* by giving notice in writing to that effect to the Chairperson of the *Advocacy Panel* and to the *AEMC*.

8.10.3 Appointment guidelines

- (a) The *AEMC* must, in consultation with the *Ministers of the participating jurisdictions*, and in accordance with the *Rules consultation procedures*, develop and publish guidelines for the appointment of members of the *Advocacy Panel*.
- (b) The guidelines referred to in 8.10.3(a) are to set out details of:
 - (1) the remuneration of *Advocacy Panel* members;
 - (2) the requirements for independence of members of the *Advocacy Panel*;
 - (3) the requisite skills, knowledge and experience of members of the *Advocacy Panel*; and

- (4) any other matter that the *AEMC* considers contributes to good governance.
- (c) Where the AEMC considers it necessary, the AEMC must review the guidelines and may propose changes to the guidelines following this review.
- (d) Proposed changes must be made to the guidelines in consultation with the *Ministers of the participating jurisdictions*, and in accordance with the *Rules consultation procedures*.
- (e) Clause 8.10.3(d) does not apply to the making of proposed changes that in the *AEMC*'s reasonable opinion are of a minor or administrative nature.

8.10.4 Meetings of the Advocacy Panel

- (a) The *Advocacy Panel* must meet at least quarterly each year and regulate its meetings and conduct its business in accordance with the *Rules* and any guidelines developed and published by the Chairperson of the *Advocacy Panel* for the regulation and conduct of its meetings.
- (b) A quorum for a meeting of the *Advocacy Panel* consists of the Chairperson and 2 other members and the Chairperson has the casting vote in all decisions of the *Advocacy Panel*.
- (c) The Chairperson may determine that a member or members may participate in, and form part of the quorum for, a meeting of the *Advocacy Panel* by telephone, closed circuit television or other means, but only if the member who speaks on any matter at that meeting can be heard by other members.

8.10.5 Funding of the Advocacy Panel

(a) For the purposes of rule 8.10:

Advocacy Panel funding requirements means, for each financial year:

- (1) the funding requirements for end-user advocacy; and
- (2) the estimated expenses of the *Advocacy Panel* in carrying out its functions under the *Rules*.
- (b) The *Advocacy Panel* must determine the proposed *Advocacy Panel* funding requirements in accordance with the *Rules consultation procedures* and submit the proposed funding requirements to the *AEMC* by 12 February each year for approval under this clause 8.10.5.
- (c) The *AEMC* must, subject to this clause 8.10.5, approve the proposed funding requirements referred to in clause 8.10.5(b) by 14 March each year, (the approved *Advocacy Panel* funding requirements).
- (d) If the *AEMC* considers that the proposed *Advocacy Panel* funding requirements are unreasonable, the *AEMC* may request the *Advocacy Panel* to propose revised requirements for re-submission and approval by the *AEMC*.

- (e) If by 31 March each year, the proposed *Advocacy Panel* funding requirements have not been approved by the *AEMC*, then the *AEMC* may substitute an amount that it considers reasonable in all the circumstances as the approved *Advocacy Panel* funding requirements.
- (f) The *Advocacy Panel* must not vary the amount referred to in clause 8.10.5(a)(2) without the prior written consent of the *AEMC*.
- (g) The *AEMC* may only consent to a variation referred to in clause 8.10.5(f) where it is satisfied that exceptional circumstances have resulted in the request by the *Advocacy Panel* for the variation.
- (h) The *AEMC* must provide to the *Advocacy Panel* in respect of each *financial year* the amount that is the approved *Advocacy Panel* funding requirements.
- (i) *NEMMCO* must pay to the *AEMC* such amounts as are necessary to enable the *AEMC* to comply with clause 8.10.5(h) in respect of the approved *Advocacy Panel* funding requirements each *financial year* as advised by the *AEMC* no later than 15 May each year.
- (j) *NEMMCO* may recover the amounts referred to in clause 8.10.5(i) from *Participant fees* and may allocate the amounts to *Market Customers*.

8.10.6 Guidelines for funding applications and funding criteria

- (a) The *Advocacy Panel* must develop and publish guidelines for applications to the *Advocacy Panel* for funding for end-user advocacy in accordance with the *Rules consultation procedures* (the funding application guidelines).
- (b) The *Advocacy Panel* must submit the funding application guidelines to the *AEMC* for approval, and the *AEMC* must approve those guidelines if they:
 - (1) have been developed in accordance with the *Rules consultation* procedures;
 - (2) are consistent with the *Rules* and *NEM objective*; and
 - (3) specify the procedure for making applications.
- (c) The *Advocacy Panel* must determine applications for funding on at least a quarterly basis, having regard to the funding criteria prepared in accordance with clause 8.10.6(d) and (e).
- (d) The *Advocacy Panel* must develop and publish funding criteria for use by the *Advocacy Panel* in allocating funding based on applications for funding for end-user advocacy, in accordance with the *Rules consultation procedures* and submit the proposed funding criteria to the *AEMC* for approval.
- (e) The *AEMC* may approve the funding criteria submitted to it in accordance with clause 8.10.6(d) if it is satisfied that the criteria are, to the extent practicable, consistent with the following principles:
 - (1) there should be diversity in the allocation of funding with respect to the number of end-users represented, the nature of the interests

represented and the issues which are the subject of the application for funding;

- (2) a project proposed in an application for funding should:
 - (i) relate to the development, design or policy behind the national electricity market or the *Rules*; or
 - (ii) relate directly to:
 - (A) the responsibilities of the *AEMC* or *NEMMCO* under the *National Electricity Law* and the *Rules*; or
 - (B) the monitoring, investigation or enforcement responsibilities of the *AER*, or functions of the *AER* relating to the exemption from registration of *Network Service Providers*, under the *National Electricity Law* and the *Rules*; or
 - (iii) have implications for the national electricity market as a whole;
- (3) the applicant for funding must represent the interests of a reasonable number of end-users;
- (4) the applicant for funding must fund a share of the project costs from a source other than funding provided by the *Advocacy Panel*. In considering the contribution made by an applicant the *Advocacy Panel* may consider non-financial contributions, for example staff time, in lieu of a direct pecuniary contribution. An applicant may seek to waive the requirement to fund a share of the project costs but the *Advocacy Panel* has discretion as to whether or not to grant the waiver;
- (5) the applicant for funding must provide a project plan, outlining the purpose of the project, the project category, budget estimates and the amount of funding sought from the *Advocacy Panel*;
- (6) a successful applicant for funding must maintain and make available to the *Advocacy Panel* appropriate records, accounts and reports on the expenditure of funding provided by the *Advocacy Panel* on the project; and
- (7) a successful applicant for funding must within 2 months of the completion of the project or as soon as practicable after receipt of a written request for a report from the *Advocacy Panel* publish a report setting out:
 - (i) the purpose of the project;
 - (ii) the issues considered and outcomes of the project; and
 - (iii) the costs and expenses of the project.

8.10.7 Annual report of the Advocacy Panel

- (a) Not later than 31 March each year the *Advocacy Panel* must prepare and publish an annual report.
- (b) The annual report of the *Advocacy Panel* must:
 - (1) include details of its approved *Advocacy Panel* funding requirements pursuant to clause 8.10.5;
 - (2) summarise the submissions received from *interested parties* regarding the proposed *Advocacy Panel* funding requirements and the *Advocacy Panel's* response to each submission;
 - (3) detail expenditure for the *financial year* and the individual projects to which funding was allocated for that *financial year*;
 - (4) detail the extent to which the allocation of funding in the *financial* year satisfies the principles in clause 8.10.6(e); and
 - (5) include the audited financial statements of the *Advocacy Panel*.
- (c) The *Advocacy Panel* must submit a draft of its annual report under clause 8.10.7(b) to the *AEMC* by 15 March of each year.

8.10.8 Audit

- (a) The *Advocacy Panel* must ensure to the extent practicable that the financial records and accounts of the *Advocacy Panel* are audited by an independent auditor who is appointed by the *Advocacy Panel* with the approval of the *AEMC*.
- (b) The *Advocacy Panel* may require a successful applicant for funding to conduct an audit of the financial records, accounts and expenditure reports prepared and maintained by the applicant.
- (c) The audit referred to in clause 8.10.8(b) must be carried out by an independent auditor, who is appointed by the *Advocacy Panel* with the approval of the *AEMC*, and the *Advocacy Panel* bears the cost of any audit undertaken.
- (d) The AEMC may, when the AEMC considers it appropriate to do so, direct the Advocacy Panel to conduct an audit of all or any particular activities of the Advocacy Panel to determine whether the Advocacy Panel is carrying out those activities effectively, efficiently and in compliance with the Rules.
- (e) The audit referred to in clause 8.10.8(d) must be carried out by an independent auditor, who is appointed by the *AEMC*, and the *Advocacy Panel* bears the cost of any such audit undertaken.

CHAPTER 10			

10. GLOSSARY

AARR

The aggregate annual revenue requirement for prescribed transmission services.

abnormal conditions

A condition described in clause 4.2.3(f).

above-standard system shared transmission service

A shared transmission service that exceeds the requirements referred to in paragraph (a)(1) or (2) of the definition of negotiated transmission service principally as a consequence of investments that have system-wide benefits.

ACCC

Australian Competition and Consumer Commission as established under the Trade Practices Act 1974 (Cth).

acceptable credit criteria

The credit criteria defined in clause 3.3.3.

acceptable credit rating

The credit rating determined by *NEMMCO* under clause 3.3.4.

accepted restriction offer

A restriction offer accepted by NEMMCO in accordance with the restriction offer procedures.

access charge

An amount described in rule 5.4A(f)(4) and rule 5.4A(g)-(j).

access standard

Either an *automatic access standard* or a *negotiated access standard* for a particular technical requirement as recorded in a *connection agreement*.

Accredited Service Provider category

A category of registration of a *Metering Provider* established by *NEMMCO* under S7.4.2(b) as a consequence of requirements of a *participating jurisdiction* to install *metering installations*.

accumulated energy data

The data that results from the measurement of the flow of electricity in a power conductor where the data represents a period in excess of a *trading interval*. The measurement is carried out at a *metering point*.

active energy

A measure of electrical energy flow, being the time integral of the product of *voltage* and the in-phase component of current flow across a *connection point*, expressed in watthour (Wh).

active power

The rate at which *active energy* is transferred.

active power capability

The maximum rate at which *active energy* may be transferred from a *generating unit* to a *connection point* as specified or proposed to be specified in a *connection agreement* (as the case may be).

additional intervention claim

Has the meaning given in clause 3.12.11(e).

adequately damped

In relation to a *control system*, when tested with a step change of a feedback input or corresponding reference, or otherwise observed, any oscillatory response at a *frequency* of:

- (a) 0.05 Hz or less, has a damping ratio of at least 0.4;
- (b) between 0.05 Hz and 0.6 Hz, has a halving time of 5 seconds or less (equivalent to a damping coefficient –0.14 nepers per second or less); and
- (c) 0.6 Hz or more, has a damping ratio of at least 0.05 in relation to a *minimum access standard* and a damping ratio of at least 0.1 otherwise.

ADJR Act

The Administrative Decisions (Judicial Review) Act 1977 (Cth).

adjusted gross energy

The energy adjusted in accordance with clause 3.15.5 (for a transmission network connection point) or clause 3.15.5A (for a virtual transmission node) or clause 3.15.4 (for any other connection point).

administered floor price

A price floor to apply to a *regional reference price*, with the levels of the price floor being administered under clause 3.14.1 and the circumstances under which it can be invoked by *NEMMCO* being determined as set out in clause 3.14.2.

administered price cap

A price cap to apply to a *dispatch price*, *regional reference price* or *ancillary service price*, with the levels of the price cap being set in accordance with clause 3.14.1 and the circumstances under which it can be invoked by *NEMMCO* being determined as set out in clause 3.14.2.

administered price period

A period declared by *NEMMCO*, in accordance with clause 3.14.2, in which an *administered price cap* may be invoked.

Adviser

The Dispute Resolution Adviser specified in clause 8.2.2(a).

Adviser referral notice

A notice referring a dispute to the *Adviser* for the purposes of clause 8.2.5.

Advocacy Panel

The panel established to administer funding for end-user advocacy in the national electricity market in accordance with clause 8.10.1.

AEMC

The Australian Energy Market Commission, which is established under section 5 of the Australian Energy Market Commission Establishment Act 2004 (SA).

AER

The Australian Energy Regulator, which is established by section 44AE of the Trade Practices Act 1974 (Cth).

affected participant's adjustment claim

Has the meaning given in clause 3.12.11(c1)(3).

Affected Participant

In respect of a particular *direction* or *dispatch* under a *reserve contract*, as the case may be, in an *intervention price trading interval*:

- (1) a Scheduled Generator or Scheduled Network Service Provider, which was not the subject of the direction or whose plant was not dispatched under the reserve contract, that had its dispatched quantity affected by that direction or dispatch of plant under that reserve contract; or
- (2) a Scheduled Generator or Scheduled Network Service Provider, which was the subject of the direction or whose plant was dispatched under the reserve contract, that had its dispatched quantity for other generating units or other services which were not the subject of that direction or which were not dispatched under that reserve contract affected by that direction or dispatch of plant under that reserve contract, however, the Scheduled Generating Unit or Scheduled Network Service Provider is only an Affected Participant in respect of those generating units and services which were not the subject of that direction or were not dispatched under that reserve contract; or
- (3) an *eligible person* entitled to receive an amount from *NEMMCO* pursuant to clause 3.18.1(b)(1) where there has been a change in flow of a *directional interconnector*, for which the *eligible person* holds units for the *intervention price trading interval*, as a result of the *direction* or *dispatch* of *plant* under the *reserve contract*.

agency data collection system

The system used by the operator of an *agency metering database* to collect, process and transfer the *metering data* from a *meter* to the *NEMMCO settlements* process.

agency metering database

A *metering database* which is operated under a service level agreement with *NEMMCO*.

aggregate annual revenue requirement

For *prescribed transmission services*, the meaning in clause 6A.22.1 and for any other service, the calculated total annual revenue to be earned by an entity for a defined class or classes of service.

aggregate payment due

The aggregate of the net amounts payable by *NEMMCO* to each of the *Market Participants* to whom payments are to be made in relation to *spot market transactions* or *reallocation transactions* in respect of a *billing period* determined in accordance with clause 3.15.22(c).

agreed capability

In relation to a *connection point*, the capability to receive or send out power for that *connection point* determined in accordance with the relevant *connection agreement*.

Amending Rule

A Rule made by the *AEMC* under section 103 of the *National Electricity Law* on and from the date of commencement of the operation of that Rule, or parts of that Rule.

ancillary service fees

The fees determined by *NEMMCO* under Chapter 2 in relation to *ancillary* services.

ancillary service generating unit

A generating unit which has been classified in accordance with Chapter 2 as an ancillary service generating unit.

ancillary service load

A market load which has been classified in accordance with Chapter 2 as an ancillary service load.

ancillary service price

In respect of a *dispatch interval*, for a *market ancillary service*, the common clearing price for the *market ancillary service* determined in accordance with clause 3.9.

Ancillary Service Provider

A person who engages in the activity of owning, controlling or operating a generating unit or market load classified in accordance with Chapter 2 as an ancillary service generating unit or ancillary service load, as the case may be.

ancillary services

Market ancillary services and non-market ancillary services.

ancillary services agreement

An agreement under which a *Registered Participant* agrees to provide one or more *non-market ancillary services* to *NEMMCO*.

annual building block revenue requirement

The amount representing the revenue requirement of a *Transmission Network* Service Provider for each regulatory year of a regulatory control period calculated in accordance with clause 6A.5.4.

annual national transmission review or ANTS review

The review conducted by *NEMMCO* in accordance with clause 5.6.5.

Annual National Transmission Statement or ANTS

The statement *published* by *NEMMCO* in accordance with clause 5.6.5.

Annual Planning Report

A report prepared by a *Transmission Network Service Provider* under clause 5.6.2A(a).

annual service revenue requirement

Has the meaning set out in clause 6A.22.2.

apparent power

The square root of the sum of the squares of the active power and the reactive power.

applicable regulatory instruments

All laws, regulations, orders, licences, codes, determinations and other regulatory instruments (other than the *Rules*) which apply to *Registered Participants* from time to time, including those applicable in each *participating jurisdiction* as listed below, to the extent that they regulate or contain terms and conditions relating to access to a *network*, *connection* to a *network*, the provision of *network services*, *network service* price or *augmentation* of a *network*.

(1) New South Wales:

- (a) the Electricity Supply Act 1995 ("ES Act");
- (b) all regulations made and licences ("Licences") issued under the ES Act:
- (c) the Independent Pricing and Regulatory Tribunal Act 1992 ("IPART Act");

- (d) all regulations and determinations made under the IPART Act;
- (e) all regulatory instruments applicable under the Licences; and
- (f) the Commercial Arbitration Act 1984.

(2) Victoria:

- (a) the Electricity Industry Act 2000 ("EI Act");
- (b) all regulations made and licences ("Licences") issued under the EI Act:
- (c) the Essential Services Commission Act 2001 ("ESCV Act");
- (d) all regulations and determinations made under the ESCV Act;
- (e) all regulatory instruments applicable under the Licences; and
- (f) the Tariff Order made under section 158A(1) of the Electricity Industry Act 1993 and continued in effect by clause 6(1) of Schedule 4 to the Electricity Industry (Residual Provisions) Act 1993, as amended or varied in accordance with section 14 of the EI Act.

(3) South Australia:

- (a) the Electricity Act 1996;
- (b) all regulations made and licences ("Licences") issued under the Electricity Act;
- (c) the Essential Services Commission Act 2002 ("ESCSA Act");
- (d) all regulations and determinations made under the ESCSA Act;
- (e) all regulatory instruments applicable under the Licences; and
- (f) the Electricity Pricing Order made under section 35B of the Electricity Act.

(4) Australian Capital Territory:

- (a) the Utilities Act 2000;
- (b) all regulations made and licences ("Licences") issued under the Utilities Act;
- (c) the Independent Competition and Regulatory Commission Act 1997 ("ICRC Act");
- (d) all regulations and determinations made under the ICRC Act; and
- (e) all regulatory instruments applicable under the Licences.

(5) Oueensland:

- (a) the Electricity Act 1994;
- (b) all regulations made and authorities and special approvals ("Licences") granted under the Electricity Act;
- (c) the Queensland Competition Authority Act 1997 ("QCA Act");
- (d) all regulations and determinations made under the OCA Act:
- (e) all regulatory instruments applicable under the Licences; and
- (f) the Gladstone Power Station Agreement Act 1993 and associated agreements.

(6) Tasmania:

(a) the Electricity Supply Industry Act 1995;

- (b) all regulations made and licences ("Licences") issued under the Electricity Supply Industry Act;
- (c) all regulatory instruments under the Electricity Supply Industry Act or the Licences (including, without limitation, determinations of the Tasmanian Electricity Regulator under the Electricity Supply Industry (Price Control) Regulations); and
- (d) the Tasmanian Electricity Code issued under section 49A of the Electricity Supply Industry Act.

application to connect

An application made by a *Connection Applicant* in accordance with clause 5.3 for *connection* to a *network* and/or the provision of *network services* or modification of a *connection* to a *network* and/or the provision of *network services*.

approved pass through amount

In respect of a positive change event for a Transmission Network Service Provider:

- (a) the amount which the AER determines should be passed through to Transmission Network Users under clause 6A.7.3(d)(2); or
- (b) the amount which the AER is taken to have determined under clause 6A.7.3(e)(1),

as the case may be.

ASRR

The annual service revenue requirement.

asynchronous generating unit

A generating unit that is not a synchronous generating unit.

attributable connection point cost share

Has the meaning set out in clause 6A.22.4.

attributable cost share

Has the meaning set out in clause 6A.22.3.

auction

A settlement residue auction held under clause 3.18.

auction amounts

All amounts:

- (1) payable to *NEMMCO* or *eligible persons* under *SRD agreements*; or
- (2) distributed to *Network Service Providers* under clause 3.18.4; or
- (3) recovered by *NEMMCO* under clause 3.18.4 or the *auction rules*.

auction expense fees

The costs and expenses incurred by *NEMMCO* referred to in clause 3.18.4(b).

auction participation agreement

Has the meaning given in clause 3.18.1(a).

auction rules

The rules developed by *NEMMCO* under clause 3.18.3, as amended from time to time in accordance with that clause.

augment, augmentation

Works to enlarge a *network* or to increase the capability of a *network* to transmit or distribute *active energy*.

augmentation technical report

A report by the *Inter-regional Planning Committee* of an *augmentation* under clause 5.6.3(j).

Australian Standard (AS)

The most recent edition of a standard publication by Standards Australia (Standards Association of Australia).

Authority

Any government, government department, instrumentality, *Minister*, agency, statutory authority or other body in which a government has a controlling interest, and includes the *AEMC*, *NEMMCO*, the *AER* and the *ACCC* and their successors.

automatic access standard

In relation to a technical requirement of access, a standard of performance, identified in a schedule of Chapter 5 as an automatic access standard for that technical requirement, such that a *plant* that meets that standard would not be denied access because of that technical requirement.

automatic generation control system (AGC)

The system into which the *loading levels* from economic *dispatch* will be entered for *generating units* operating on automatic generation control in accordance with clause 3.8.21(d).

automatic reclose equipment

In relation to a *transmission line* or *distribution line*, the equipment which automatically recloses the relevant line's circuit breaker(s) following their opening as a result of the detection of a fault in the *transmission line* or the *distribution line* (as the case may be).

available capacity

The total MW capacity available for *dispatch* by a *scheduled generating unit* or *scheduled load* (i.e. maximum plant availability) or, in relation to a specified *price band*, the MW capacity within that *price band* available for dispatch (i.e. availability at each price band).

average electrical energy loss

The volume-weighted average of the *electrical energy losses* incurred in each *trading interval* over all *trading intervals* in a defined period of time

average loss factor

A multiplier used to describe the average electrical energy loss for electricity used or transmitted.

avoided Customer TUOS charges

The charges described in rule 5.5(h).

B2B Communications

Communications between *Local Retailers*, *Market Customers* and *Distribution Network Service Providers* relating to an end-user or *supply* to an end-user provided for in the *B2B Procedures*.

B2B Data

Data relating to *B2B Communications*.

B2B Decision

A decision of *NEMMCO* to approve or not approve an *Information Exchange Committee Recommendation*.

B2B Determination Dispute

A dispute in relation to either a B2B Decision or an Information Exchange Committee Recommendation.

B2B e-Hub

An electronic information exchange platform established by *NEMMCO* to facilitate *B2B Communications*.

B2B Objective

The benefits from B2B Communications to Local Retailers, Market Customers and Distribution Network Service Providers as a whole should outweigh the detriments to Local Retailers, Market Customers and Distribution Network Service Providers as a whole.

B2B Principles

The following principles:

- (a) B2B Procedures should provide a uniform approach to B2B Communications in participating jurisdictions in which there are no franchise customers;
- (b) *B2B Procedures* should detail operational and procedural matters and technical requirements that result in efficient, effective and reliable *B2B Communications*:

- (c) B2B Procedures should avoid unreasonable discrimination between Local Retailers, Market Customers and Distribution Network Service Providers; and
- (d) B2B Procedures should protect the confidentiality of commercially sensitive information.

B2B Procedures

Procedures prescribing the content of, the processes for, and the information to be provided to support, *B2B Communications*.

B2B Procedures Change Pack

A document consisting of:

(a)a B2B Proposal;

- (b) a report setting out an overview of the likely impact of the B2B Proposal on NEMMCO, Local Retailers, Market Customers and Distribution Network Service Providers;
- (c) draft *B2B Procedures* (incorporating proposed changes in mark up, where appropriate); and

(d)an issues paper explaining why the B2B Proposal is being presented.

B2B Proposal

A proposal for *B2B Procedures*, or a *change* to the *B2B Procedures*, which is the subject of consultation by the *Information Exchange Committee*.

bank bill rate

On any day, the rate determined by NEMMCO (having regard to such market indicators as NEMMCO in its discretion selects) to be the market rate as at 10.00 am on that day (or if not a business day, on the previous business day) for Australian dollar denominated bank accepted bills of exchange having a tenor of 30 days.

billing period

The period of 7 days commencing at the start of the trading interval ending 12.30 am Sunday.

black start capability

A capability that allows a *generating unit*, following its *disconnection* from the *power system*, to be able to deliver electricity to either:

- (a) its connection point; or
- (b) a suitable point in the *network* from which *supply* can be made available to other *generating units*,

without taking *supply* from any part of the *power system* following *disconnection*.

black system

The absence of *voltage* on all or a significant part of the *transmission system* or within a *region* during a *major supply disruption* affecting a significant number of customers.

breaker fail

In relation to a *protection system*, that part of the *protection system* that protects a *Market Participant's facilities* against the non-operation of a circuit breaker that is required to open.

breaker fail protection system

A protection system that protects a facility against the non-operation of a circuit breaker that is required to open to clear a fault.

busbar

A common connection point in a power station switchyard or a transmission network substation.

business day

A day other than a Saturday, Sunday or a day which is lawfully observed as a national public holiday on the same day in each of the participating jurisdictions.

call amount

The amount determined pursuant to the formula in clause 3.3.11 for the purposes of a *call notice* where the *outstandings* of a *Market Participant* exceed its *trading limit*.

call notice

A notice issued by *NEMMCO* pursuant to clause 3.3.11 where the *outstandings* of a *Market Participant* exceed its *trading limit*.

capacitor bank

Electrical equipment used to generate *reactive power* and therefore support *voltage* levels on *distribution* and *transmission lines* in periods of high *load*.

capital expenditure criteria

Each of the matters listed in clause 6A.6.7(c)(1)-(3).

capital expenditure factors

Each of the factors listed in clause 6A.6.7(e)(1)-(10).

capital expenditure objectives

The objectives set out in clause 6A.6.7(a).

cascading outage

The occurrence of an uncontrollable succession of *outages*, each of which is initiated by conditions (e.g. instability or overloading) arising or made worse as a result of the event preceding it.

categories of prescribed transmission services

For the purposes of pricing for *prescribed transmission services*:

- (a) prescribed entry services;
- (b) prescribed exit services;
- (c) prescribed common transmission services; and
- (d) prescribed TUOS services.

central dispatch

The process managed by *NEMMCO* for the *dispatch* of *scheduled generating* units, *scheduled loads*, *scheduled network services* and *market ancillary services* in accordance with clause 3.8.

change

Includes amendment, alteration, addition or deletion.

check meter

A *meter*, other than a *revenue meter*, used as a source of *metering data* for Type 1 and Type 2 *metering installations* as specified in schedule 7.2.

check metering data

The metering data obtained from a check metering installation.

check metering installation

A metering installation used as the source of metering data for validation in the settlements process.

clause 4.8.9 instruction

Has the meaning given in clause 4.8.9(a1)(2).

COAG

Council of Australian Governments.

commercial arbitrator

A dispute resolution panel (within the meaning of section 58 of the *National Electricity Law*) established pursuant to clause 6A.30.2(b).

commitment

The commencement of the process of starting up and synchronising a generating unit to the power system.

common service

A service that ensures the integrity of a *distribution system* and benefits all *Distribution Customers* and cannot reasonably be allocated on a locational basis.

communication link

All communications equipment, processes and arrangements that lie between the *meter* and the *data logger*, where the *data logger* is external to the device that contains the *measurement elements*, and/or the *data logger* and the telecommunications network.

compensation recovery amount

Has the meaning given in clause 3.15.8(a).

complainant

The party which refers a dispute to the *Adviser* in accordance with clause 8.2.5(a).

confidential information

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

connect, connected, connection

To form a physical link to or through a transmission network or distribution network.

connection agreement

An agreement between a *Network Service Provider* and a *Registered Participant* or other person by which the *Registered Participant* or other person is *connected* to the *Network Service Provider's transmission* or *distribution network* and/or receives *transmission services* or *distribution services*. In some *participating jurisdictions*, the *Registered Participant* or other person may have one *connection agreement* with a *Network Service Provider* for *connection services* and another agreement with a different *Network Service Provider* for *network services* provided by the *transmission network*.

Connection Applicant

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

connection assets

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

connection point

The agreed point of *supply* established between *Network Service Provider*(s) and another *Registered Participant, Non-Registered Customer* or *franchise customer*.

connection service

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

considered project

- (a) In respect of a *transmission network augmentation*, a project that meets the following criteria:
 - (1) the *Network Service Provider* has acquired the necessary land and easements;
 - (2) the *Network Service Provider* has obtained all necessary planning and development approvals;
 - (3) as applicable:
 - (i) the *augmentation* project has passed the *regulatory test*;
 - (ii) in respect of a *new small transmission network asset*, an intention to proceed with the project has been published in the *Network Service Provider's Annual Planning Report*; or
 - (iii) in respect of a *funded augmentation* the arrangements have been made for its funding; and
 - (4) construction has either commenced or the *Network Service Provider* has set a firm date for it to commence.
- (b) In respect of a *distribution network augmentation*, a project that meets the following criteria:
 - (1) the *Network Service Provider* has acquired the necessary land and easements;
 - (2) the *Network Service Provider* has obtained all necessary planning and development approvals; and
 - (3) construction has either commenced or the *Network Service Provider* has set a firm date for it to commence.

constrained off

In respect of a *generating unit*, the state where, due to a *constraint* on a *network*, the output of that *generating unit* is limited below the level to which it would otherwise have been *dispatched* by *NEMMCO* on the basis of its *dispatch offer*.

constrained on

In respect of a *generating unit*, the state where, due to a *constraint* on a *network*, the output of that *generating unit* is limited above the level to which it would otherwise have been *dispatched* by *NEMMCO* on the basis of its *dispatch offer*.

constraint, constrained

A limitation on the capability of a *network, load* or a *generating unit* such that it is unacceptable to either transfer, consume or generate the level of electrical power that would occur if the limitation was removed.

consulting party

The person who is required to comply with the *Rules consultation procedures*.

contestable

- (a) In relation to *transmission services* a service which is permitted by the laws of the relevant *participating jurisdiction* to be provided by more than one *Transmission Network Service Provider* as a contestable service or on a competitive basis.
- (b) In relation to *distribution services*, a service which is permitted by the laws of the relevant *participating jurisdiction* to be provided by more than one *Distribution Network Service Provider* as a contestable service or on a competitive basis.

contingency capacity reserve

Actual *active* and *reactive energy* capacity, *interruptible load* arrangements and other arrangements organised to be available to be utilised on the actual occurrence of one or more *contingency events* to allow the restoration and maintenance of *power system security*.

contingency capacity reserve standards

The standards set out in the *power system security and reliability standards* to be used by *NEMMCO* to determine the levels of *contingency capacity reserves* necessary for *power system security*.

contingency event

An event described in clause 4.2.3(a).

contingent project

In relation to a *revenue determination*, a *proposed contingent project* that is determined by the *AER*, in accordance with clause 6A.8.1(b), to be a *contingent project* for the purposes of that *revenue determination*.

continuous uninterrupted operation

In respect of a *generating system* or operating *generating unit* operating immediately prior to a *power system* disturbance, not *disconnecting* from the *power system* except under its *performance standards* established under clauses S5.2.5.8 and S5.2.5.9 and, after clearance of any electrical fault that caused the disturbance, only substantially varying its *active power* and *reactive power* required by its *performance standards* established under clauses S5.2.5.11, S5.2.5.13 and S5.2.5.14, with all essential auxiliary and *reactive plant* remaining in service, and responding so as to not exacerbate or prolong the disturbance or cause a subsequent disturbance for other *connected plant*.

control centre

The facilities used by NEMMCO for managing power system security and administering the market.

control system

Means of monitoring and controlling the operation of the *power system* or equipment including *generating units connected* to a *transmission* or *distribution network*.

Convener

The *representative* appointed by *NEMMCO* in accordance with clause 5.6.3 to convene the *Inter-regional Planning Committee*.

Co-ordinated Universal Time (UTC)

The time as determined by the International Bureau of Weights and Measures and maintained under section 8AA of the *National Measurement Act*.

Co-ordinating Network Service Provider

A Network Service Provider appointed by multiple Transmission Network Service Providers to allocate AARR in accordance with rule 6A.29.

Cost Allocation Guidelines

The guidelines referred to in clause 6A.19.3.

Cost Allocation Methodology

For a *Transmission Network Service Provider*, the Cost Allocation Methodology approved or taken to be approved by the *AER* for that *Transmission Network Service Provider* under clauses 6A.19.4(c) and (d) as amended from time to time in accordance with clauses 6A.19.4(f) and (g).

Cost Allocation Principles

The principles set out in clause 6A.19.2.

cost pool

A pool used to collect the costs associated with the use of asset categories by a group of *Distribution Network Users* with like *load*, *metering* and *voltage* characteristics for the purpose of preparing *distribution service* prices.

cost reflective network pricing

A cost allocation method which reflects the value of assets used to provide transmission or distribution services to Network Users.

$cost\ reflective\ network\ pricing\ methodology\ or\ CRNP\ methodology\ or\ modified\ CRNP\ methodology$

The cost allocation methodologies described in schedule 6A.3.

CPI

As at a particular time, the Consumer Price Index: All Groups Index Number, weighted average of eight capital cities published by the Australian Bureau of Statistics for the most recent quarter that precedes that particular time and for which the index referred to has been published by the Australian Bureau of Statistics as at that time. If that index ceases to be published or is substantially

changed, *CPI* will be such other index as is determined by the *AER* as a suitable benchmark for recording general movements in prices.

credible contingency event

An event described in clause 4.2.3(b), certain examples of which are set out in schedule 5.1.

credit period

The typical period of days over which *maximum credit limit* is calculated in accordance with schedule 3.3.

credit support

An obligation owed to *NEMMCO* by a third party supporting the obligations of a *Market Participant* and having the characteristics required by clause 3.3.2.

credit support provider

The issuing party that assumes obligations to *NEMMCO* pursuant to a *credit* support.

critical single credible contingency event

An event described in clause 4.2.3(d).

cumulative price threshold

The threshold for imposition of an *administered price cap* as defined in clause 3.14.1.

current rating

The maximum current that may be permitted to flow (under defined conditions) through a *transmission line* or *distribution line* or other item of equipment that forms part of a *power system*.

current transformer (CT)

A *transformer* for use with *meters* and/or protection devices in which the current in the secondary winding is, within prescribed error limits, proportional to and in phase with the current in the primary winding.

Customer

A person who:

- 1. engages in the activity of purchasing electricity *supplied* through a *transmission or distribution system* to a *connection point*; and
- 2. is registered by *NEMMCO* as a *Customer* under Chapter 2.

Customer transmission use of system, Customer transmission use of system service

A service provided to a *Transmission Network User* for use of the *transmission network* for the conveyance of electricity (including where it has been negotiated in accordance with clause 5.4A(f)(3)) that can be reasonably allocated to a *Transmission Network User* on a locational basis, but does not include *Generator transmission use of system services*.

data collection system

All equipment and arrangements that lie between the *metering database* and the point where the *metering data* enters the *telecommunications network*.

data logger

A metering installation database or a device that collects electronic signals from a measurement element and packages it into 30 minute intervals (or sub-multiples). This device may contain data storage capability, be a separate item of equipment, and/or be combined with the energy measuring components within one physical device.

day

Unless otherwise specified, the 24 hour period beginning and ending at midnight Eastern Standard Time (EST).

declared NEM project

A project determined to be a declared NEM project under clause 2.11.1(ba) or 2.11.1(bd), for which there is special treatment in the timing of cost recovery.

decommission, decommit

In respect of a *generating unit*, ceasing to generate and *disconnecting* from a *network*.

default dispatch bid

A dispatch bid made pursuant to clause 3.8.9.

default dispatch offer

A dispatch offer made pursuant to clause 3.8.9.

default event

An event defined as such in clause 3.15.21(a).

default notice

A notice issued by *NEMMCO* pursuant to clause 3.15.21(b)(1).

defaulting Market Participant

A Market Participant in relation to which a default event has occurred.

delayed lower service

The service of providing, in accordance with the *market ancillary service* specification, the capability of controlling the level of generation or load associated with a particular facility in response to a change in the frequency of the power system beyond a threshold or in accordance with electronic signals from NEMMCO in order to lower that frequency to within the normal operating frequency band.

delayed raise service

The service of providing, in accordance with the *market ancillary service* specification, the capability of controlling the level of *generation* or *load* associated with a particular facility in response to a change in the frequency of the power system beyond a threshold or in accordance with electronic signals from NEMMCO in order to raise that frequency to within the normal operating frequency band.

delayed response capacity reserve

That part of the *contingency capacity reserve* capable of realisation within 5 minutes of a major *frequency* decline in the *power system* as described further in the *power system security and reliability standards*.

demand based price

A price expressed in dollars per kilowatt per time period or dollars per kilovolt ampere per time period.

deprival value

A value ascribed to assets which is the lower of economic value or optimised depreciated replacement value.

derogation

Has the meaning given in the National Electricity Law.

de-synchronising/de-synchronisation

The act of *disconnection* of a *generating unit* from the *connection point* with the *power system*, normally under controlled circumstances.

Directed Participant

A Scheduled Generator, Market Generator, Scheduled Network Service Provider or Market Customer the subject of a direction.

direction

Has the meaning given in clause 4.8.9(a1)(1).

directional interconnector

Has the meaning given in clause 3.18.1(c).

Disclosee

In relation to a *Registered Participant* or *NEMMCO*, a person to whom that *Registered Participant* or *NEMMCO* (as the case may be) discloses *confidential information*.

disconnect, disconnected, disconnection

The operation of switching equipment or other action so as to prevent the flow of electricity at a *connection point*.

dispatch

The act of initiating or enabling all or part of the response specified in a dispatch bid, dispatch offer or market ancillary service offer in respect of a scheduled generating unit, a scheduled load, a scheduled network service, an ancillary service generating unit or an ancillary service load in accordance with clause 3.8, or a direction or operation of capacity the subject of a reserve contract as appropriate.

dispatch algorithm

The algorithm used to determine *central dispatch* developed by *NEMMCO* in accordance with clause 3.8.1(d).

dispatch bid

A notice submitted by a *Market Participant* to *NEMMCO* relating to the *dispatch* of a *scheduled load* in accordance with clause 3.8.7.

dispatch inflexibility profile

Data which may be provided to *NEMMCO* by *Market Participants*, in accordance with clause 3.8.19, to specify *dispatch inflexibilities* in respect of *scheduled loads* or *scheduled generating units* which are not *slow start generating units*.

dispatch instruction

An instruction given to a *Registered Participant* under clauses 4.9.2, 4.9.2A, 4.9.3 or 4.9.3A.

dispatch interval

A period defined in clause 3.8.21(a1) in which the *dispatch algorithm* is run in accordance with clause 3.8.21(b).

dispatch offer

A generation dispatch offer or a network dispatch offer.

dispatch offer price

The price submitted by a Scheduled Generator or a Scheduled Network Service Provider for a price band and a trading interval in a dispatch offer.

dispatch optimisation software

The computer program used by *NEMMCO* for computing the *dispatch algorithm*.

dispatch price

The price determined for each *regional reference node* by the *dispatch algorithm* each time it is run by *NEMMCO*.

dispatched generating unit

A *generating unit* which has received instructions from *NEMMCO* in accordance with a *dispatch* schedule.

dispatched generation

The generation which has been dispatched as part of central dispatch.

dispatched Generator

A Generator who has received a dispatch instruction from NEMMCO.

dispatched load

The *load* which has been *dispatched* as part of *central dispatch*.

dispute management system (or "DMS")

The dispute management system which each *Registered Participant* and *NEMMCO* must adopt in accordance with clause 8.2.3.

dispute resolution panel (or "DRP")

A dispute resolution panel established pursuant to clause 8.2.6A.

distribution

Activities pertaining to a *distribution system* including the conveyance of electricity through that *distribution system*.

Distribution Customer

A Customer, Distribution Network Service Provider, Non-Registered Customer or franchise customer having a connection point with a distribution network.

distribution line

A power line, including underground cables, that is part of a *distribution network*.

distribution loss factor

An average loss factor calculated according to clause 3.6.3.

distribution losses

Electrical energy losses incurred in distributing electricity over a distribution network.

distribution network

A network which is not a transmission network.

distribution network connection point

A connection point on a distribution network.

Distribution Network Service Provider

A person who engages in the activity of owning, controlling, or operating a distribution system.

Distribution Network Service Provider Member

A *Member* appointed to the *Information Exchange Committee* in that membership category as set out in the *Information Exchange Committee Election Procedures*.

Distribution Network User

A Distribution Customer or an Embedded Generator.

distribution network user access

The power transfer capability of the distribution network in respect of:

- (a) generating units or a group of generating units; and
- (b) *network elements*,

at a *connection point* which has been negotiated in accordance with rule 5.5.

Distribution Ring-Fencing Guidelines

Has the meaning given in clause 6.4.2(a).

distribution service

The services provided by a distribution system which are associated with the conveyance of electricity through the distribution system. Distribution services include entry services, distribution use of system services and exit services which are provided by part of a distribution system.

distribution system

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

Connection assets on their own do not constitute a distribution system.

Distribution System Operator

A person who is responsible, under the *Rules* or otherwise, for controlling or operating any portion of a *distribution system* (including being responsible for directing its operations during *power system* emergencies) and who is registered by *NEMMCO* as a *Distribution System Operator* under Chapter 2.

distribution use of system, distribution use of system service

A service provided to a *Distribution Network User* for use of the *distribution network* for the conveyance of electricity that can be reasonably allocated on a locational and/or *voltage* basis.

DMS

A dispute management system.

DMS Contact

A person appointed by a *Registered Participant* or *NEMMCO* pursuant to its *DMS* to be the first point of contact for the notification of disputes under clause 8.2.

DMS referral notice

A notice served on a *DMS Contact* pursuant to clause 8.2.4(a).

DRP

A dispute resolution panel.

dynamic performance

The response and behaviour of *networks* and *facilities* which are *connected* to the *networks* when the *satisfactory operating state* of the *power system* is disturbed.

Eastern Standard Time (EST)

The time which is set at 10 hours in advance of *Co-ordinated Universal Time*.

efficiency benefit sharing scheme

A scheme developed and *published* by the *AER* in accordance with rule 6A.5.

efficiency benefit sharing scheme parameters

For an *efficiency benefit sharing scheme*, those parameters that are *published* by the *AER* in respect of that scheme pursuant to clause 6A.6.5(c).

electrical energy loss

Energy loss incurred in the production, transportation and/or use of electricity.

electrical sub-network

A part of the *national grid* determined by *NEMMCO* in accordance with clause 3.11.4B.

electronic communication system

Includes the electronic communication and the *electronic data transfer* system provided to *Registered Participants* by *NEMMCO*.

electronic data transfer

The transfer of data by electronic means from one location to another.

eligible pass through amount

In respect of a *positive change event* for a *Transmission Network Service Provider*, the increase in costs in the provision of *prescribed transmission services* that the *Transmission Network Service Provider* has incurred and is likely to incur until the end of the *regulatory control period* as a result of that *positive change event* (as opposed to the revenue impact of that event).

eligible person

Has the meaning given in clause 3.18.2(b).

embedded generating unit

A generating unit connected within a distribution network and not having direct access to the transmission network.

Embedded Generator

A Generator who owns, operates or controls an embedded generating unit.

enabled

A market ancillary service is enabled when NEMMCO has selected the relevant generating unit or load for the provision of the market ancillary service and has notified the relevant Market Participant accordingly.

enablement limit

In relation to any *market ancillary service offer*, the level of associated *generation* or *load* (in MW) above or below which no response is specified as being available.

enabling price

Has the meaning given in clause 3.8.7A(d).

energise/energisation

The act of operation of switching equipment or the start-up of a *generating unit*, which results in there being a non-zero *voltage* beyond a *connection point* or part of the *transmission* or *distribution network*.

energy

Active energy and/or reactive energy.

energy based price

A price expressed in cents per kilowatt hour of *energy*.

energy constrained scheduled generating unit

A scheduled generating unit in respect of which the amount of electricity it is capable of supplying on a trading day is less than the amount of electricity it would supply on that trading day if it were dispatched to its full nominated availability for the whole trading day.

energy constrained scheduled load

A scheduled load in respect of which the amount of electricity it can take in a trading day, if normally off, or it can off-load, if normally on, is constrained.

energy data

Interval energy data, accumulated energy data, or estimated data.

energy data services

The services that involve:

- (1) collation of energy data from the meter or meter/associated data logger;
- (2) the processing of the *energy data* in the *metering installation* database;
- (3) storage of the *energy data* in the *metering installation* database; and
- (4) the provision of access to the data for those parties that have rights of access to the data.

energy packets

The value of *energy data* which is accumulated for a period of 30 minutes and stored as a separate data record.

energy support arrangement

A contractual arrangement between a *Generator* or *Network Service Provider* on the one hand, and a customer or *participating jurisdiction* on the other, under which *facilities* not subject to an *ancillary services agreement* for the provision of *system restart ancillary services* are used to assist *supply* to a customer during a *major supply disruption* affecting that customer, or customers generally in the *participating jurisdictions*, as the case may be.

entry charge

The charge payable by an *Embedded Generator* to a *Distribution Network Service Provider* for an *entry service* at a *distribution network connection point*.

entry cost

For each distribution network connection point, the amount of the aggregate annual revenue requirement for all individual assets classified as entry service assets which provide entry service for the connection point.

entry service

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

estimated energy data

The data that results from an estimation of the flow of electricity in a power conductor where the data applies to a *trading interval* or a period in excess of a *trading interval*. The estimation is made in relation to a *market load* and would not apply to a *metering point* where *accumulated energy data* or *interval energy data* is not available, or an *unmetered connection point*.

excess generation

Aggregate self dispatch level of self-committed generation which is in excess of the quantity needed to meet the expected power system demand and reserve requirements.

excess generation period

A period made up of one or more dispatch intervals where the sum of the aggregate of generating unit self dispatch levels and the required regulating capability (which forms part of the contingency capacity reserves standard) exceeds the forecast load or actual load during those dispatch intervals.

excitation control system

In relation to a *generating unit*, the automatic *control system* that provides the field excitation for the generator of the *generating unit* (including excitation limiting devices and any power system stabiliser).

excluded distribution services

Distribution services which are subject to a more "light-handed" regulatory approach than that described in clause 6.2.5 with the result that the costs of and revenue for such services are excluded from the revenue cap or price cap which applies to prescribed distribution services.

exit charge

The charge payable by a Distribution Customer to a Distribution Network Service Provider for exit service at a distribution network connection point.

exit cost

For each distribution network connection point, the amount of the aggregate annual revenue requirement for all individual assets classified as exit service assets which provide exit service for the connection point.

exit service

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

extension

An augmentation that requires the connection of a power line or facility outside the present boundaries of the transmission or distribution network owned, controlled or operated by a Network Service Provider.

extreme frequency excursion tolerance limits

In relation to the *frequency* of the *power system*, means the limits so described and specified in the *power system security and reliability standards*.

facilities

A generic term associated with the apparatus, equipment, buildings and necessary associated supporting resources provided at, typically:

- (a) a power station or generating unit;
- (b) a substation or power station switchyard;
- (c) a control centre (being a NEMMCO control centre, or a distribution or transmission network control centre);
- (d) facilities providing an exit service.

fast lower service

The service of providing, in accordance with the requirements of the *market* ancillary service specification, the capability of rapidly controlling the level of generation or load associated with a particular facility in response to the locally sensed frequency of the power system in order to arrest a rise in that frequency.

fast raise service

The service of providing, in accordance with the requirements of the *market* ancillary service specification, the capability of rapidly controlling the level of generation or load associated with a particular facility in response to the locally sensed frequency of the power system in order to arrest a fall in that frequency.

fault clearance time

In respect of a *fault type*, the time within which the *protection system* is designed, operated and maintained to clear a *short circuit fault* of that *fault type* within its protection zone.

fault type

One of the following types of electrical fault:

- (a) three phase to ground fault;
- (b) three phase fault;
- (c) two phase to ground fault;
- (d) phase to phase fault; and
- (e) one phase to ground fault.

final statement

A statement issued by *NEMMCO* under clause 3.15.15 to a *Market Participant*.

financial year

A period commencing on 1 July in one calendar year and terminating on 30 June in the following calendar year.

financially responsible

In relation to any *market connection point*, a term which is used to describe the *Market Participant* which has either:

- 1. classified the *connection point* as one of its *market loads*;
- 2. classified the *generating unit connected* at that *connection point* as a *market generating unit*; or
- 3. classified the *network services* at that *connection point* as a *market network* service

First-Tier Customer

A *Customer* which has classified any *load* as a *first-tier load* in accordance with Chapter 2.

first-tier load

Electricity purchased at a *connection point* directly and in its entirety from the *Local Retailer* and which is classified as a *first-tier load* in accordance with Chapter 2.

franchise customer

A person who does not meet its local jurisdiction requirements to make it eligible to be registered by *NEMMCO* as a *Customer* for a *load*.

frequency

For alternating current electricity, the number of cycles occurring in each second. The term Hertz (Hz) corresponds to cycles per second.

frequency operating standards

The standards which specify the *frequency* levels for the operation of the *power* system set out in the *power system security* and reliability standards.

frequency response mode

The mode of operation of a *generating unit* which allows automatic changes to the generated power when the *frequency* of the *power system* changes.

funded augmentation

A transmission network augmentation for which the Transmission Network Service Provider is not entitled to receive a charge pursuant to Chapter 6.

general purpose

The term applied by the National Measurement Institute to refer to the classification of a *meter*.

generated

In relation to a *generating unit*, the amount of electricity produced by the *generating unit* as measured at its terminals.

generating plant

In relation to a *connection point*, includes all equipment involved in generating electrical *energy*.

generating system

A system comprising one or more *generating units* and includes auxiliary or *reactive plant* that is located on the *Generator's* side of the *connection point* and is necessary for the *generating system* to meet its *performance standards*.

Generating System Design Data Sheet

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

Generating System Model Guidelines

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

Generating System Setting Data Sheet

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

generating unit

The actual generator of electricity and all the related equipment essential to its functioning as a single entity.

generation

The production of electrical power by converting another form of energy in a generating unit.

generation centre

A geographically concentrated area containing a *generating unit* or *generating units* with significant combined generating capability.

generation dispatch offer

A notice submitted by a *Scheduled Generator* to *NEMMCO* relating to the *dispatch* of a *scheduled generating unit* in accordance with clause 3.8.6.

Generator

A person who engages in the activity of owning, controlling or operating a *generating system* that is *connected* to, or who otherwise *supplies* electricity to, a *transmission* or *distribution system* and who is registered by *NEMMCO* as a *Generator* under Chapter 2 and, for the purposes of Chapter 5, the term includes a person who is required to, or intends to register in that capacity.

Generator transmission use of system, Generator transmission use of system service

A service provided to a *Generator* for:

- (a) use of the *transmission network* which has been negotiated in accordance with clause 5.4A(f)(3)(i); or
- (b) use of a *new transmission network investment* asset for the conveyance of electricity that can be reasonably allocated to a *Generator* on a locational basis.

global market ancillary service requirement

Has the meaning given to it by clause 3.8.1(e2).

good electricity industry practice

The exercise of that degree of skill, diligence, prudence and foresight that reasonably would be expected from a significant proportion of operators of facilities forming part of the power system for the generation, transmission or supply of electricity under conditions comparable to those applicable to the relevant facility consistent with applicable regulatory instruments, reliability, safety and environmental protection. The determination of comparable conditions is to take into account factors such as the relative size, duty, age and technological status of the relevant facility and the applicable regulatory instruments.

governor system

The automatic *control system* which regulates the speed of the power turbine of a *generating unit* through the control of the rate of entry into the *generating unit* of the primary *energy* input (for example, steam, gas or water).

hedge contract

A contract between two or more parties affording one or each of them protection against certain financial risks.

high voltage (HV)

A voltage greater than 1 kV.

Independent Member

A *Member* appointed to the *Information Exchange Committee* in that membership category as set out in the *Information Exchange Committee Election Procedures*.

independent person

A person who:

- (a) is not a member, employee or member of staff of the AER or the AEMC;
- (b) is not a director or employee of *NEMMCO*;
- (c) is not a director or employee of, or partner in, a Registered Participant;
- (d) does not have a direct or indirect financial interest (whether as shareholder, partner or other equity participant) in any *Registered Participant* or a *related body corporate* of any *Registered Participant*, other than an interest of less than 0.1% of the net shareholders funds of that entity (as determined at the date the relevant person is appointed to carry out a function under the *Rules*); or
- (e) is not a director or employee of a *related body corporate* of any *Registered Participant*.

independently controllable two-terminal link

A two-terminal link through which the power transfer can be independently controlled within a range determined by the power transfer capability of the two-terminal link and the conditions prevailing in the rest of the power system.

indexed amount

As at any time and in relation to a dollar value that is expressly set out in Part C of Chapter 6A, that dollar value multiplied by CPI_a/CPI_b

where:

CPI_a is the CPI as at that time; and

CPI_b is the Consumer Price Index: All Groups Index Number, weighted average of eight capital cities published by the Australian Bureau of Statistics for the quarter ending 30 June 2006.

inflexible, inflexibility

In respect of a scheduled generating unit, scheduled load or scheduled network service for a trading interval means that the scheduled generating unit, scheduled load or scheduled network service is only able to be dispatched in the trading interval at a fixed loading level specified in accordance with clause 3.8.19(a).

Information Exchange Committee

The committee established under clause 7.2A.2(a).

Information Exchange Committee Annual Report

The annual report prepared by the *Information Exchange Committee* in accordance with the *Information Exchange Committee Operating Manual*.

Information Exchange Committee Election Procedures

The procedures of that title which set out the process for election of *Members*.

Information Exchange Committee Operating Manual

The manual of that title prepared by the *Information Exchange Committee* which sets out the processes pursuant to which the *Information Exchange Committee* operates.

Information Exchange Committee Recommendation

A recommendation made by the *Information Exchange Committee* to *NEMMCO* to make *B2B Procedures* or to *change* the *B2B Procedures*.

Information Exchange Committee Working Groups

The groups established by the *Information Exchange Committee* to assist with the *Information Exchange Committee Works Programme*.

Information Exchange Committee Works Programme

The work programme prepared by the *Information Exchange Committee* in respect of the development, implementation and operation of the *B2B Procedures* and other matters which are incidental to effective and efficient *B2B Communications*.

information guidelines

Guidelines made by the AER for the purpose of guiding a Transmission Network Service Provider in the submission of certified annual statements and other related information in accordance with clause 6A.17.2.

instrument transformer

Either a *current transformer (CT)* or a *voltage transformer (VT)*.

insurance event

An event for which the risk of its occurrence is the subject of insurance taken out by or for a *Transmission Network Service Provider*, for which an allowance is provided in the *total revenue cap* for the *Transmission Network Service Provider* and in respect of which:

- (a) the cost of the premium paid or required to be paid by the *Transmission Network Service Provider* in the *regulatory year* in which the cost of the premium changes is higher or lower than the premium that is provided for in the *maximum allowed revenue* for the provider for that *regulatory year* by an amount of more than 1% of the *maximum allowed revenue* for the provider for that *regulatory year*;
- (b) the risk eventuates and, as a consequence, the *Transmission Network Service Provider* incurs or will incur all or part of a deductible where the amount so incurred or to be so incurred in a *regulatory year* is higher or lower than the allowance for the deductible (if any) that is provided for in the *maximum allowed revenue* for the provider for that *regulatory year* by an amount of more than 1% of the *maximum allowed revenue* for the provider for that *regulatory year*;
- (c) insurance becomes unavailable to the *Transmission Network Service Provider*; or
- (d) insurance becomes available to the *Transmission Network Service Provider* on terms materially different to those existing as at the time the *revenue determination* was made (other than as a result of any act or omission of the provider which is inconsistent with good electricity industry practice).

intending load

A proposed purchase of electricity at a *connection point* (the location of which may be undefined) which is classified as an *intending load* in accordance with Chapter 2.

Intending Participant

A person who is registered by *NEMMCO* as an *Intending Participant* under Chapter 2.

interconnection, interconnector, interconnect, interconnected

A transmission line or group of transmission lines that connects the transmission networks in adjacent regions.

interconnector flow

The quantity of electricity in MW being transmitted by an *interconnector*.

interested party

- 1. In Chapter 5, a person including an end user or its *representative* who, in *NEMMCO*'s opinion, has or identifies itself to *NEMMCO* as having an interest in relation to the *network* planning and development activities covered under clause 5.6 or in the determination of *plant standards* covered under clause 5.3.3(b2).
- 1A. Notwithstanding the definition in 1. above, in clause 5.6.6(j), a person including an end user or its *representative* who, in the *AER*'s opinion, has or identifies itself to the *AER* as having, the potential to suffer a material and

adverse market impact from the *new large transmission network asset* identified in the clause 5.6.6(j) final report.

- 2. In Chapter 6, a person, not being a *Registered Participant* or *NEMMCO*, who:
 - (a) in relation to the *Transmission Ring-Fencing Guidelines*, in the *AER's* opinion has, or who identifies itself to the *AER* as having, an interest in those Guidelines; or
 - (b) in relation to the *Distribution Ring-Fencing Guidelines*, in the relevant *Jurisdictional Regulator's* opinion has, or who identifies itself to the relevant *Jurisdictional Regulator* as having, an interest in those Guidelines.

3. [Deleted]

4. In Chapter 2, a person including an end user or its *representative* who, in *NEMMCO's* opinion, has or identifies itself to *NEMMCO* as having an interest in relation to the structure of *Participant Fees*.

interim statement

Has the meaning given in clause 3.3.11(a)(1).

intermediary

A person who is registered by *NEMMCO* as a *Generator* or a *Network Service Provider* instead of another person who, in the absence of an exemption under clause 2.9.3, would be required to be registered as such under the *Rules*.

intermittent

A description of a *generating unit* whose output is not readily predictable, including, without limitation, solar generators, wave turbine generators, wind turbine generators and hydro-generators without any material storage capability.

inter-network test

A test conducted for the purpose of verifying the magnitude of the *power transfer* capability of more than one *transmission network* in accordance with clause 5.7.7.

inter-network testing constraint

A constraint on a transmission network as contemplated by clause 5.7.7.

inter-regional

Between regions.

inter-regional loss factor

A marginal loss factor determined according to clause 3.6.1.

inter-regional losses

Has the meaning given to it by clause 3.6.1(a).

inter-regional network constraint

A constraint on the transmission and/or distribution networks between regions as specified in clause 3.6.4(a).

Inter-regional Planning Committee

The committee established in accordance with clause 5.6.3.

interruptible load

A *load* which is able to be *disconnected*, either manually or automatically initiated, which is provided for the restoration or control of the *power system frequency* by *NEMMCO* to cater for *contingency events* or shortages of *supply*.

interval energy data

The data that results from the measurement of the flow of electricity in a power conductor where the data is prepared by a *data logger* into intervals which correspond to a *trading interval* or are sub-multiples of a *trading interval*.

intervention price dispatch interval

A dispatch interval declared by NEMMCO to be an intervention price dispatch interval in accordance with clause 3.9.3.

intervention price trading interval

A trading interval in which NEMMCO has declared an intervention price dispatch interval in accordance with clause 3.9.3.

intervention settlement timetable

Has the meaning given in clause 3.12.10(b).

intra-regional

Within a region.

intra-regional loss factor

A marginal loss factor determined according to clause 3.6.2.

intra-regional losses

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

intra-regional network constraint

A constraint on part of the transmission and distribution networks within a region as specified in clause 3.6.4(b).

invoiced amount

The aggregate of the *settlement statements*, *interim*, *preliminary* or *final*, which at the time of issue of a *call notice* are unpaid by the *Market Participant*, notwithstanding that the usual time for issue or payment of those *settlement statements* has not been reached.

involuntary load shedding

Load shedding where the load shed is not an interruptible load or a scheduled load

isolation

Electrical isolation of one part of a communication system from another but where the passage of *electronic data transfer* is not prevented.

Jurisdictional System Security Coordinator

A person appointed by the *Minister* of a *participating jurisdiction* in accordance with section 110 of the *National Electricity Law*.

jurisdictional derogation

Has the meaning given in the *National Electricity Law*. The jurisdictional derogations are included in Chapter 9.

jurisdictional electricity legislation

Has the meaning given to that term in the *National Electricity Law*.

jurisdictional metrology material

Jurisdictional metrology matters that are to be included in the *metrology* procedure for one or more of the participating jurisdictions and which is submitted by the Ministers of the MCE to NEMMCO under clause 7.14.2.

Jurisdictional NMI Standing Data schedule

The schedules described in clause 3.13.12(a), as amended from time to time in accordance with clause 3.13.12(b).

Jurisdictional NMI Standing Data suppliers

Registered Participants which are required by the relevant participating jurisdiction's legislation or licensing requirements to supply NMI Standing Data in respect of connection points in that participating jurisdiction to NEMMCO.

Jurisdictional Regulator

The person authorised by a *participating jurisdiction* to regulate *distribution* service prices in that jurisdiction.

lack of reserve (LOR)

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

last resort planning power

The AEMC's power to direct a Registered Participant under clause 5.6.4(c).

last resort planning power guidelines

The guidelines made by the *AEMC* relating to the exercise of the *last resort* planning power and referred to in clause 5.6.4(o)-(r).

load

A connection point or defined set of connection points at which electrical power is delivered to a person or to another network or the amount of electrical power delivered at a defined instant at a connection point, or aggregated over a defined set of connection points.

load centre

A geographically concentrated area containing *load* or *loads* with a significant combined consumption capability.

load class

A grouping of customers with like *load* characteristics.

load shedding

Reducing or disconnecting *load* from the *power system*.

load shedding procedures

The procedures developed by *NEMMCO* for each *participating jurisdiction* in accordance with clause 4.3.2(h) for the implementation of the *load shedding* priority and *sensitive load* priority advised by that *Jurisdictional System Security Coordinator* under clauses 4.3.2(f)(1) and (2).

loading level

The level of output, consumption or power flow (in MW) of a generating unit, load or scheduled network service.

loading price

The price specified for a *price band* and a *trading interval* in a *dispatch offer*, in accordance with clause 3.8.6, for the *dispatch* of a *scheduled generating unit* at a level above its *self-dispatch level*.

local area/local

The geographical area allocated to a *Network Service Provider* by a *Jurisdictional Regulator*.

local black system procedures

The procedures, described in clause 4.8.12, applicable to a *local area* as approved by *NEMMCO* from time to time.

local market ancillary service requirement

Has the meaning given to it by clause 3.8.1(e2).

Local Network Service Provider

Within a *local area*, a *Network Service Provider* to which that geographical area has been allocated by the *Jurisdictional Regulator*.

Local Retailer

In relation to a *local area*, the *Customer* who is:

- 1. a business unit or *related body corporate* of the relevant *Local Network Service Provider*; or
- 2. responsible under the laws of the relevant *participating jurisdiction* for the *supply* of electricity to *franchise customers* in that *local area*; or
- 3. if neither 1 or 2 is applicable, such other *Customer* as *NEMMCO* may determine.

Local Retailer/Market Customer Member

A *Member* appointed to the *Information Exchange Committee* in that membership category as set out in the *Information Exchange Committee Election Procedures*.

local spot price

A price determined according to clause 3.9.1(c).

loss factor

A multiplier used to describe the *electrical energy loss* for electricity used or transmitted.

low reserve

The conditions described in clause 4.8.4(a).

major supply disruption

The unplanned absence of *voltage* on a part of the *transmission system* affecting one or more *power stations*.

mandatory restrictions

Restrictions imposed by a *participating jurisdiction* by a relevant law, other than the *Rules*, on the use of electricity in a *region*.

mandatory restriction period

The period of *mandatory restrictions*.

mandatory restriction schedule

A schedule prepared in accordance with clause 3.12A.2.

marginal electrical energy loss

The *electrical energy loss* associated with an infinitesimal increment in electricity produced, transported and/or used.

marginal loss factor

A multiplier used to describe the *marginal electrical energy loss* for electricity used or transmitted.

market

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

market ancillary service

A service identified in clause 3.11.2(a).

market ancillary service offer

A notice submitted by an *Ancillary Service Provider* to *NEMMCO* in respect of a *market ancillary service* in accordance with clause 3.8.7A.

market ancillary service specification

Has the meaning given in clause 3.11.2(b).

market ancillary services commencement date

29 September 2001.

market auditor

A person appointed by *NEMMCO* to carry out a *review* under clause 3.13.10(a).

market commencement

The date declared as such by *NEMMCO*, on which trading in the *market* commences.

market connection point

A connection point where any load is classified in accordance with Chapter 2 as a market load or which connects any market generating unit to the national grid, or where the network service connected at that connection point is a market network service.

Market Customer

A *Customer* who has classified any of its *loads* as a *market load* and who is also registered by *NEMMCO* as a *Market Customer* under Chapter 2.

market customer's additional claim

Has the meaning given in clause 3.12.11(c1)(4).

market floor price

A price floor on regional reference prices as described in clause 3.9.6.

market generating unit

A generating unit whose sent out generation is not purchased in its entirety by the Local Retailer or by a Customer located at the same connection point and which has been classified as such in accordance with Chapter 2.

Market Generator

A *Generator* who has classified at least one *generating unit* as a *market generating unit* in accordance with Chapter 2 and who is also registered by *NEMMCO* as a *Market Generator* under Chapter 2.

market information

Information, other than *confidential information*, concerning the operation of the *spot market* or relating to the operation of, inputs to, or outputs from the *central dispatch* process.

market information bulletin board

A facility established by *NEMMCO* on the *electronic communication system* for the posting of information which may then be available to *Registered Participants*.

market load

A *load* at a *connection point* the electricity relating to which is purchased other than from the *Local Retailer* and which is classified by the person *connected* at that *connection point* or, with the consent of that person, by some other person, as a *market load* in accordance with Chapter 2. There can be more than one *market load* at any one *connection point*.

market management systems

NEMMCO's market information systems and associated communications networks used to support the electronic communication by Registered Participants and others connected to or making use of the systems and networks in the operation of the market.

Market Management Systems Access Procedures

The procedures to be followed by *Registered Participants* and *Metering Providers* in connecting to and making use of the *market management systems* from time to time *published* by *NEMMCO* under clause 3.19.

market network service

A *network service* which is classified as a *market network service* in accordance with clause 2.5.2.

Market Network Service Provider

A *Network Service Provider* who has classified any of its *network services* as a *market network service* in accordance with Chapter 2 and who is also registered by *NEMMCO* as a *Market Network Service Provider* under Chapter 2.

market objective

The national electricity market objective set out in section 7 of the *National Electricity Law*.

Market Participant

A person who is registered by *NEMMCO* as a *Market Generator*, *Market Customer* or *Market Network Service Provider* under Chapter 2.

Market Participant registered data

The data kept on the register in accordance with schedule 5.5.

Market Settlement and Transfer Solution Procedures

The procedures from time to time *published* by *NEMMCO* under clause 7.2.8 which include those governing the recording of financial responsibility for *energy* flows at a *connection point*, the transfer of that responsibility between *Market Participants* and the recording of *energy* flows at a *connection point*.

market suspension

Suspension of the *market* by *NEMMCO* in accordance with clause 3.14.3.

material inter-network impact

A material impact on another *Transmission Network Service Provider's network*, which impact may include (without limitation):

- (a) the imposition of *power transfer constraints* within another *Transmission Network Service Provider's network*; or
- <u>4(b)</u> an adverse impact on the quality of *supply* in another *Transmission Network Service Provider's network*.

materially

For the purposes of the application of clause 6A.7.3, an event (other than a network support event) results in a Transmission Network Service Provider incurring materially higher or materially lower costs if the change in costs (as opposed to the revenue impact) that the Transmission Network Service Provider has incurred and is likely to incur in any regulatory year of the regulatory control period, as a result of that event, exceeds 1% of the maximum allowed revenue for the Transmission Network Service Provider for that regulatory year.

maximum allowed revenue

For a *Transmission Network Service Provider* for a *regulatory year* of a *regulatory control period*, the amount calculated as such in accordance with rule 6A.3.

maximum credit limit

In relation to a *Market Participant* a credit limit determined by *NEMMCO* for that *Market Participant* in accordance with clause 3.3.8.

maximum demand

The highest amount of electrical power delivered, or forecast to be delivered, over a defined period (*day*, week, month, season or year) either at a *connection point*, or simultaneously at a defined set of *connection points*.

maximum power input (MPI)

The largest single *supply* input to a particular location or *region*, typically the output of the largest single *generating unit* or group of *generating units* or the highest *power transfer* of a single *transmission line* or *interconnection*.

maximum total payment

The amount determined in accordance with clause 3.15.22.

measurement element

An energy measuring component which converts the flow of electricity in a power conductor into an electronic signal and / or a mechanically recorded electrical measurement.

medium term capacity reserve

At any time, the amount of surplus generating capacity indicated by the relevant *Generators* as being available for a particular period, being more than 7 *days* in the future but not more than 12 weeks, and which is assessed as being in excess of the capacity requirement to meet the forecast *load* demand, taking into account the known or historical levels of demand management.

medium term capacity reserve standard

The level of *medium term capacity reserves* required for a particular period as set out in the *power system security and reliability standards*.

medium-term PASA

The PASA in respect of the period from the 8th day after the current trading day to 24 months after the current trading day in accordance with clause 3.7.2.

Member

A person appointed to the *Information Exchange Committee* pursuant to the *Information Exchange Committee Election Procedures*, and includes all membership categories, unless a contrary intention appears.

meter

A device complying with *Australian Standards* which measures and records the production or consumption of electrical *energy*.

metering

Recording the production or consumption of electrical *energy*.

metering data

The data obtained from a *metering installation*, the processed data or substituted data.

metering database

A database of *metering data* and *settlements ready data* maintained and administered by *NEMMCO* in accordance with clause 7.9.

metering installation

The assembly of components and/or processes that are controlled for the purpose of metrology and which lie between the *metering point(s)* or *unmetered connection point* and the point of connection to the *telecommunications network*, as shown in schedule 7.1.

[Note: The assembly of components may include the combination of several metering points to derive the metering data for a connection point. The metering installation must be classified as a revenue metering installation and/or a check metering installation.]

metering point

The point of physical connection of the device measuring the current in the power conductor.

Metering Provider

A person who meets the requirements listed in schedule 7.4 and has been accredited by and registered by *NEMMCO* as a Metering Provider.

metering register

A register of information associated with a *metering installation* as required by schedule 7.5.

metering system

The collection of all components and arrangements installed or existing between each *metering point* and the *metering database*, as shown in schedule 7.1.

metrology procedure

The procedure developed and published by *NEMMCO* in accordance with rule 7.14.

minimum access standard

In relation to a technical requirement of access, a standard of performance, identified in a schedule of Chapter 5 as a minimum access standard for that technical requirement, such that a *plant* that does not meet that standard will be denied access because of that technical requirement.

minimum technical ancillary service standards

The minimum technical service standards prepared by *NEMMCO* in accordance with clause 3.11.4.

Minister

A Minister that is a "Minister" under the National Electricity Law.

Minister of (a, that, another, or other, etc) participating jurisdiction

Has the same meaning as Minister of a participating jurisdiction has in the *National Electricity Law*.

Ministers of the MCE

Ministers of the participating jurisdictions acting as the MCE where MCE has the same meaning as in the National Electricity Law.

monitoring equipment

The testing instruments and devices used to record the performance of *plant* for comparison with expected performance.

month

Unless otherwise specified, the period beginning at 4.30 am on the relevant commencement date and ending at 4.30 am on the date in the next calendar month corresponding to the commencement date of the period.

nameplate rating

The maximum continuous output or consumption in MW of an item of equipment as specified by the manufacturer, or as subsequently modified.

NATA

National Association of Testing Authorities.

National Electricity Code

Has the same meaning as in the National Electricity Law.

National Electricity Law

The National Electricity Law set out in the schedule to the National Electricity (South Australia) Act 1996 (SA) and applied in each of the *participating jurisdictions*.

National Electricity Market

Has the same meaning as in the *National Electricity Law*.

national grid

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

National Measurement Act

The National Measurement Act 1960 of the Commonwealth as amended from time to time.

national transmission flow path

That portion of a *transmission network* or *transmission networks* used to transport significant amounts of electricity between *generation centres* and *load centres*.

NCAS

A network control ancillary service.

negative change event

For a Transmission Network Service Provider, a pass through event which entails the Transmission Network Service Provider incurring materially lower costs in providing prescribed transmission services than it would have incurred but for that event.

negative network support event

A network support event which entails a Transmission Network Service Provider making lower network support payments in the preceding regulatory year than the

amount of *network support payments* (if any) that is provided for in the *annual building block revenue requirement* for the provider for that *regulatory year*.

negative pass through amount

In respect of a *negative change event* for a *Transmission Network Service Provider*, an amount that is not greater than a *required pass through amount* as determined by the *AER* under clause 6A.7.3(g).

negotiable service

- (a) In relation to transmission services means negotiated transmission services.
- (b) In relation to *distribution services* means:
 - (1) an excluded distribution service:
 - (2) that part of a *prescribed distribution service* which is to be provided to a standard which is higher or lower than any standard:
 - (i) described in schedule 5.1;
 - (ii) outlined in the standards published in accordance with 6.6.5(a)(3); or
 - (iii) required by any regulatory regime administered by the AER or a Jurisdictional Regulator (as appropriate);
 - (3) connection services, use of system services and distribution network user access provided to an Embedded Generator, for which charges are negotiated under rule 5.5; or
 - (4) connection services, use of system services and distribution network user access provided to a Market Network Service Provider, for which charges are negotiated under rule 5.5,

and does not include a contestable service.

negotiated access standard

In relation to a technical requirement of access for a particular *plant*, an agreed standard of performance determined in accordance with clause 5.3.4A and identified as a negotiated access standard for that technical requirement in a *connection agreement*.

negotiated transmission service

Any of the following services:

- (a) a shared transmission service that:
 - (1) exceeds the *network* performance requirements (whether as to quality or quantity) (if any) as that *shared transmission service* is required to meet under any *jurisdictional electricity legislation*; or
 - (2) except to the extent that the *network* performance requirements which that *shared transmission service* is required to meet are prescribed under any *jurisdictional electricity legislation*, exceeds or does not

meet the *network* performance requirements (whether as to quality or quantity) as are set out in schedule 5.1a or 5.1;

- (b) connection services that are provided to serve a Transmission Network User, or group of Transmission Network Users, at a single transmission network connection point, other than connection services that are provided by one Network Service Provider to another Network Service Provider to connect their networks where neither of the Network Service Providers is a Market Network Service Provider; or
- (c) use of system services provided to a Transmission Network User and referred to in rule 5.4A(f)(3) in relation to augmentations or extensions required to be undertaken on a transmission network as described in rule 5.4A,

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

Negotiated Transmission Service Criteria

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

Negotiated Transmission Service Principles

The principles set out in clause 6A.9.1.

negotiated use of system service

A use of system service in respect of which:

- (a) a Connection Applicant may negotiate with a Transmission Network Service Provider;
- (b) an Embedded Generator may negotiate with a Distribution Network Service Provider; or
- (c) a Market Network Service Provider may negotiate with a Distribution Network Service Provider,

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

negotiated use of system charges

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

negotiating framework

For a *Transmission Network Service Provider*, the negotiating framework approved or included by the *AER* for that *Transmission Network Service Provider* in a final decision under clause 6A.14.1(6). The term negotiating framework is also defined in clause 6.6.7 for the purposes of that clause and, when used in that clause, has the meaning given to it for those purposes.

NEM

The National Electricity Market.

NEM objective

The national electricity market objective referred to in section 7 of the National Electricity Law.

NEMMCO

National Electricity Market Management Company Limited A.C.N. 072 010 327.

NEMMCO co-ordinating centre

The control centre from which *NEMMCO* conducts *market* related activities and the coordination of the operation of the *national grid*.

NEMMCO power system security responsibilities

The responsibilities described in clause 4.3.1.

network

The apparatus, equipment, plant and buildings used to convey, and control the conveyance of, electricity to customers (whether wholesale or retail) excluding any *connection assets*. In relation to a *Network Service Provider*, a *network* owned, operated or controlled by that *Network Service Provider*.

network capability

The capability of the *network* or part of the *network* to transfer electricity from one location to another.

network connection

The formation of a physical link between the facilities of two Registered Participants or a Registered Participant and a customer being a connection to a transmission or distribution network via connection assets.

network constraint

A constraint on a transmission network or distribution network.

network control ancillary service

A service identified in clause 3.11.4(a) which provides *NEMMCO* with a capability to control the real or *reactive power flow* into or out of a *transmission network* in order to:

- (a) maintain the *transmission network* within its current, *voltage*, or stability limits following a *credible contingency event*; or
- (b) enhance the value of *spot market* trading in conjunction with the *central dispatch* process.

network coupling point

The point at which *connection assets* join a *distribution network*, used to identify the *distribution service* price payable by a *Customer*, more fully described in schedule 6.3.

network dispatch offer

An notice submitted by a *Scheduled Network Service Provider* to *NEMMCO* relating to the *dispatch* of a *scheduled network service* in accordance with clause 3.8.6A.

network element

A single identifiable major component of a *transmission system* or *distribution* system involving:

- (a) an individual *transmission* or *distribution* circuit or a phase of that circuit; or
- (b) a major item of apparatus or equipment associated with the function or operation of a *transmission line*, *distribution line* or an associated *substation* or *switchyard* which may include *transformers*, circuit breakers, *reactive* plant and monitoring equipment and control equipment.

network loop

A set of *network elements* that are *connected* together in the form of a closed path, that is in such a way that by progressing from each element to the next it is possible to return to the starting point.

network losses

Energy losses incurred in the transfer of electricity over a transmission network or distribution network.

network service

Transmission service or *distribution service* associated with the conveyance, and controlling the conveyance, of electricity through the *network*.

Network Service Provider

A person who engages in the activity of owning, controlling or operating a *transmission or distribution system* and who is registered by *NEMMCO* as a *Network Service Provider* under Chapter 2.

network support event

- (a) If, at the end of a regulatory year of a regulatory control period, the amount of network support payments made by a Transmission Network Service Provider for that previous regulatory year is higher or lower than the amount of network support payments (if any) that is provided for in the annual building block revenue requirement for the Transmission Network Service Provider for that regulatory year, this constitutes a network support event.
- (b) In calculating the amount for the purposes of a *network support event* referred to in paragraph (a), the amount of *network support payments* made by a *Transmission Network Service Provider* must not include an amount of *network support payments* that are a substitute for a *network augmentation*

where an allowance for capital expenditure in relation to that *network* augmentation has been provided for in the *revenue determination*.

network support pass through amount

The amount that should be passed through to *Transmission Network Users* in the regulatory year following the preceding regulatory year, in respect of a network support event for a *Transmission Network Service Provider*.

network support payment

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

- (a) any *Generator* providing *network* support services in accordance with clause 5.6.2; or
- (b) any other person providing a *network* support service that is an alternative to *network augmentation*.

Network User

A Generator, a Transmission Customer, a Distribution Customer or a Market Network Service Provider.

new distribution network investment

Investment in a new large distribution network asset or a new small distribution network asset.

new large distribution network asset

An asset of a Distribution Network Service Provider which is an augmentation and in relation to which the Distribution Network Service Provider has estimated it will be required to invest a total capitalised expenditure in excess of \$10 million, unless the Jurisdictional Regulator for the participating jurisdiction in which the relevant distribution network is located publishes a requirement that a new large distribution network asset is to be distinguished from a new small distribution network asset if it involves investment of a total capitalised expenditure in excess of another amount, or satisfaction of another criterion. Where such a specification has been made, an asset must require total capitalised expenditure in excess of that amount or satisfaction of those other criteria to be a new large distribution network asset.

new large network asset

A new large distribution network asset or a new large transmission network asset.

new large transmission network asset

An asset of a *Transmission Network Service Provider* which is an *augmentation* and in relation to which the *Transmission Network Service Provider* has estimated it will be required to invest a total capitalised expenditure in excess of \$10 million, unless the *AER* publishes a requirement that a *new large transmission network asset* is to be distinguished from a *new small network asset* if it involves investment of a total capitalised expenditure in excess of another amount, or satisfaction of another criterion. Where such a specification has been made, an

asset must require total capitalised expenditure in excess of that amount or satisfaction of those other criteria to be a *new large transmission network asset*.

new network investment

New distribution network investment or new transmission network investment.

new small distribution network asset

An asset of a *Distribution Network Service Provider* which is an *augmentation* and:

- (a) in relation to which the *Distribution Network Service Provider* has estimated it will be required to invest a total capitalised expenditure in excess of \$1 million, unless the *Jurisdictional Regulator* for the *participating jurisdiction* in which the relevant *distribution network* is located publishes a requirement that an asset will be a *new small distribution network asset* if it involves investment of a total capitalised expenditure in excess of another amount, or satisfaction of another criterion. Where such specification has been made, an asset must require total capitalised expenditure in excess of that amount or satisfaction of those other criteria to be a *new small distribution network asset*; and
- (b) is not a new large distribution network asset.

new small network asset

A new small distribution network asset or a new small transmission network asset.

new small transmission network asset

An asset of a *Transmission Network Service Provider* which is an *augmentation* and:

- (a) in relation to which the *Transmission Network Service Provider* has estimated it will be required to invest a total capitalised expenditure in excess of \$1 million, unless the *AER* publishes a requirement that an asset will be a *new small transmission network asset* if it involves investment of a total capitalised expenditure in excess of another amount, or satisfaction of another criterion. Where such a specification has been made, an asset must require total capitalised expenditure in excess of that amount or satisfaction of those other criteria to be a *new small transmission network asset*; and
- (b) is not a new large transmission network asset.

new transmission network investment

Investment in a new large transmission network asset or a new small transmission network asset.

NMAS

A non-market ancillary service.

NMI

A National Metering Identifier as described in clause 7.3.1(d).

NMI Standing Data

The following data in respect of a *connection point*:

- (a) the *NMI* of the *connection point* and the street address of the relevant *connection point* to which that *NMI* is referable;
- (b) the *NMI* checksum for the *connection point*;
- (c) the identity of the *Local Network Service Provider*;
- (d) the code (known as a TNI) identifying the relevant *transmission node* which identifies the *transmission loss factor* and/or *transmission use of system* charge for the *connection point*;
- (e) the relevant *distribution loss factor* applicable to the *connection point*;
- (f) the Network Tariff (identified by a code) applicable in respect of the *connection point*;
- (g) the NMI classification code (as set out in the Market Settlement and Transfer Solution Procedures) of the connection point;
- (h) the read cycle date, or date of next scheduled read or date in a relevant code representing the read cycle date or date of next scheduled read, for that *connection point*;
- (i) the profile type applicable to the *connection point*; and
- (j) such other categories of data as may be referred to in the *Market Settlement* and *Transfer Solution Procedures* as forming *NMI Standing Data*,

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

nomenclature standards

The standards approved by *NEMMCO* in conjunction with the *Network Service Providers* relating to numbering, terminology and abbreviations used for information transfer between *Registered Participants* as provided for in clause 4.12.

nominal voltage

The design *voltage* level, nominated for a particular location on the *power system*, such that power lines and circuits that are electrically connected other than through transformers have the same *nominal voltage* regardless of operating *voltage* and *normal voltage*.

non-credible contingency event

An event described in clause 4.2.3(e).

non-market ancillary service

Network control ancillary services and *system restart ancillary services*.

non-market generating unit

A generating unit whose sent out generation is purchased in its entirety by the Local Retailer or by a Customer located at the same connection point and which has been classified as such in accordance with Chapter 2.

Non-Market Generator

A *Generator* who has classified a *generating unit* as a *non-market generating unit* in accordance with Chapter 2.

Non-Registered Customer

A person who:

- 1. purchases electricity through a *connection point* with the *national grid* other than from the *spot market*; and
- 2. is eligible to be registered by *NEMMCO* as a *Customer* and to classify the *load* described in (1) as a *first-tier load* or a *second-tier load*, but is not so registered.

non-regulated transmission services

A transmission service that is neither a prescribed transmission service nor a negotiated transmission service.

non-scheduled generating unit

A generating unit so classified in accordance with Chapter 2.

non-scheduled generating system

A generating system comprising non-scheduled generating units.

Non-Scheduled Generator

A Generator in respect of which any generating unit is classified as a non-scheduled generating unit in accordance with Chapter 2.

non-scheduled load

A market load which is not a scheduled load.

normal operating frequency band

In relation to the *frequency* of the *power system*, means the range 49.9Hz to 50.1Hz or such other range so specified in the *power system security and reliability standards*.

normal operating frequency excursion band

In relation to the *frequency* of the *power system*, means the range specified as being acceptable for infrequent and momentary excursions of *frequency* outside the *normal operating frequency band*, being the range of 49.75 Hz to 50.25 Hz or such other range so specified in the *power system security and reliability standards*.

normal voltage

In respect of a *connection point*, its *nominal voltage* or such other *voltage* up to 10% higher or lower than *nominal voltage*, as approved by *NEMMCO*, for that *connection point* at the request of the *Network Service Provider* who provides *connection* to the *power system*.

normally off

Describes a *scheduled load* which, unless *dispatched* in accordance with its *dispatch bid*, and in accordance with clause 3.8.7(j), should be considered as being switched off.

normally on

Describes a *scheduled load* which, unless *dispatched* in accordance with its *dispatch bid*, and in accordance with clause 3.8.7(i), should be considered as being switched on.

off-loading price

The price specified for a *price band* and a *trading interval* in a *dispatch offer*, in accordance with clause 3.8.6, for the *off-loading* of a *scheduled generating unit* below its *self-dispatch level*.

off-loading price band

A price band submitted for off-loading below a self-dispatch level for a trading interval in a dispatch offer.

off-loading, off-load

The reduction in electricity output or consumption.

operating expenditure criteria

Each of the matters listed in clause 6A.6.6(c)(1)-(3).

operating expenditure factors

Each of the factors listed in clause 6A.6.6(e)(1)-(10).

operating expenditure objectives

The objectives set out in clause 6A.6.6(a).

operational communication

A communication concerning the arrangements for, or actual operation of, the *power system* in accordance with the *Rules*.

operational frequency tolerance band

The range of *frequency* within which the *power system* is to be operated to cater for the occurrence of a *contingency event* as specified in the *power system security* and reliability standards.

outage

Any full or partial unavailability of equipment or facility.

outstandings

In relation to a *Market Participant*, the dollar amount determined by the formula in clause 3.3.9.

over-recovery amount

Any amount by which the revenue earned from the provision of *prescribed* transmission services in previous financial years exceeds the sum of the AARR in those financial years, grossed up by the application of an annual interest rate approved by the AER for this purpose.

Participant compensation fund

The fund of that name referred to in clause 3.16.

participant derogation

Has the meaning given in the *National Electricity Law*. The participant derogations are included in Chapter 8A.

Participant fees

The fees payable by *Registered Participants* described in clause 2.11.

participating jurisdiction

A jurisdiction that is a "participating jurisdiction" under the *National Electricity Law*.

PASA availability

The physical plant capability of a scheduled generating unit, scheduled load or scheduled network service, including any capability that can be made available within 24 hours.

pass through event

Any of the following events:

- (a) an insurance event;
- (b) a regulatory change event;
- (c) a service standard event;
- (d) a tax change event; or
- (e) a terrorism event.

payment date

The 20th business day after the end of a billing period.

payment period

The typical period between trading and payment defined in schedule 3.3.

peak load

Maximum load.

performance incentive scheme parameters

For a *service target performance incentive scheme*, those parameters that are *published* by the *AER* in respect of that scheme pursuant to clause 6A.7.4(c).

performance standard

A standard of performance that:

- (a) is established as a result of it being:
 - (1) accepted by *NEMMCO* in accordance with rule 4.14(d)(1);
 - (2) taken to be an applicable performance standard in accordance with clause 5.3.4A(i);
 - (3) deemed to apply in accordance with rule 4.14(h); or
 - (4) determined pursuant to rule 4.14(m); or
- (b) is included in the register of *performance standards* established and maintained by *NEMMCO* under rule 4.14(n),

as the case may be.

performance standards commencement date

For:

- (a) Generators, Customers and Network Service Providers who plan, own, operate or control a facility located in a participating jurisdiction (other than Tasmania), the performance standards commencement date is, in relation to that facility, 16 November 2003; and
- (b) Generators, Customers and Network Service Providers who plan, own, operate or control a facility located in Tasmania, the performance standards commencement date is, in relation to that facility, the date that Tasmania becomes a participating jurisdiction.

physical plant capability

The maximum MW output or consumption which an item of electrical equipment is capable of achieving for a given period.

plant

In relation to a *connection point*, includes all equipment involved in generating, utilising or transmitting electrical *energy*.

In relation to *dispatch bids and offers*, controllable generating equipment and controllable *loads*.

In relation to the *statement of opportunities* prepared by *NEMMCO*, individually controllable generating facilities registered or capable of being registered with *NEMMCO*.

plant standard

An Australian or international standard or a part thereof that:

- (a) the *Reliability Panel* determines to be an acceptable alternative to a particular *minimum access standard* or *automatic access standard* for a particular class of *plant*, or
- (b) a schedule in Chapter 5 establishes as an acceptable alternative to a particular *minimum access standard* or *automatic access standard* for a particular class of *plant*.

positive change event

For a *Transmission Network Service Provider*, a pass through event which entails the *Transmission Network Service Provider* incurring materially higher costs in providing prescribed transmission services than it would have incurred but for that event, but does not include a *contingent project* or an associated *trigger event*.

positive network support event

A network support event which entails a Transmission Network Service Provider making higher network support payments in the preceding regulatory year than the amount of network support payments (if any) that is provided for in the annual building block revenue requirement for the provider for that regulatory year.

positive pass through amount

An amount that is not greater than an *eligible pass through amount* that a *Transmission Network Service Provider* proposes in relation to a *positive change* event under clause 6A.7.3(c).

postage stamp basis

A system of charging *Network Users* for *transmission service* or *distribution service* in which the price per unit is the same regardless of how much *energy* is used by the *Network User* or the location in the *transmission network* or *distribution network* of the *Network User*.

post-tax revenue model

The model used to prepare the *Revenue Proposal* in accordance with rule 6A.5.

potential transmission project

New transmission network investment identified by the AEMC which, in the opinion of the AEMC, is likely, if constructed, to relieve forecast constraints in respect of national transmission flow paths between regional reference nodes.

potential value

In relation to a *transaction* for a *Market Participant*, the dollar amount determined by the procedure in clause 3.3.14.

power factor

The ratio of the *active power* to the *apparent power* at a *metering point*.

power station

In relation to a *Generator*, a *facility* in which any of that *Generator's generating* units are located.

power system

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

power system damping

The rate at which disturbances to the satisfactory operating state reduce in magnitude.

power system demand

The total *load* (in MW) supplied by the *power system*.

power system operating procedures

The procedures to be followed by *Registered Participants* in carrying out operations and/or maintenance activities on or in relation to primary and *secondary equipment connected* to or forming part of the *power system* or *connection points*, as described in clause 4.10.1.

power system reserve constraint

A *constraint* in the *central dispatch* due to the need to provide or maintain a specified type and level of *reserve*.

power system security

The safe scheduling, operation and control of the *power system* on a continuous basis in accordance with the principles set out in clause 4.2.6.

power system security and reliability standards

The standards (other than the *system restart standard*) governing *power system security* and *reliability* of the *power system* to be approved by the *Reliability Panel* on the advice of *NEMMCO*, but which may include but are not limited to standards for the *frequency* of the *power system* in operation, *contingency capacity* reserves (including guidelines for assessing requirements), *short term capacity reserves* and *medium term capacity reserves*.

power transfer

The instantaneous rate at which *active energy* is transferred between *connection points*.

power transfer capability

The maximum permitted *power transfer* through a *transmission* or *distribution network* or part thereof.

pre-dispatch

Forecast of *dispatch* performed one *day* before the *trading day* on which *dispatch* is scheduled to occur.

pre-dispatch schedule

A schedule prepared in accordance with clause 3.8.20(a).

preliminary program

The program to be prepared by a *Network Service Provider* showing proposed milestones for *connection* and access activities as specified in clause 5.3.3(b)(6).

preliminary statement

Has the meaning given in clause 3.15.14(a).

prescribed common transmission services

Prescribed transmission services that provide equivalent benefits to all Transmission Customers who have a connection point with the relevant transmission network without any differentiation based on their location within the transmission system.

prescribed distribution services

Distribution services provided by distribution network assets or associated connection assets which are determined by the Jurisdictional Regulator under clause 6.2.4(a) as those which should be subject to economic regulation in accordance with the principles set out in clause 6.2.5.

prescribed entry services

Entry services that are prescribed transmission services by virtue of the operation of clause 11.6.11.

prescribed exit services

Exit services that are prescribed transmission services by virtue of the operation of clause 11.6.11 and exit services provided to Distribution Network Service Providers.

prescribed transmission service

Any of the following services:

- (a) a *shared transmission service* that:
 - (1) does not exceed such *network* performance requirements (whether as to quality or quantity) as that *shared transmission service* is required to meet under any *jurisdictional electricity legislation*;
 - (2) except to the extent that the *network* performance requirements which that *shared transmission service* is required to meet are prescribed under any *jurisdictional electricity legislation*, does not exceed such *network* performance requirements (whether as to quality or quantity) as are set out in schedule 5.1a or 5.1; or
 - (3) is an above-standard system shared transmission service;
- (b) services that are required to be provided by a *Transmission Network Service Provider* under the *Rules*, or in accordance with *jurisdictional electricity legislation*, to the extent such services relate to the provision of the services referred to in paragraph (a), including such of those services as are:
 - (1) required by *NEMMCO* to be provided under the *Rules*; and

- (2) necessary to ensure the integrity of a *transmission network*, including through the maintenance of *power system security* and assisting in the planning of the *power system*; or
- (c) connection services that are provided by a Transmission Network Service Provider to another Network Service Provider to connect their networks where neither of the Network Service Providers is a Market Network Service Provider;

but does not include a negotiated transmission service or a market network service.

prescribed TUOS services or prescribed transmission use of system services;

Prescribed transmission services that:

- (a) provide different benefits to *Transmission Customers* who have a *connection point* with the relevant *transmission network* depending on their location within the *transmission system*; and
- (b) are not prescribed common transmission services, prescribed entry services or prescribed exit services.

price band

A MW quantity specified in a *dispatch bid, dispatch offer* or *market ancillary* service offer as being available for *dispatch* at a specified price.

price cap

In Parts D and E of Chapter 6, the maximum price determined by the *Jurisdictional Regulator* which a *Distribution Network Service Provider* is entitled to charge for certain *distribution services* in any year.

pricing methodology

For a *Transmission Network Service Provider*, means the pricing methodology approved by the *AER* for that *Transmission Network Service Provider* and included in a *transmission determination* as referred to in rule 6A.24.

pricing methodology guidelines

Guidelines made by the AER under rule 6A.25 that contain the matters set out in clause 6A.25.2.

Pricing Principles for Prescribed Transmission Services

The principles set out in rule 6A.23.

pricing zone

A geographic area within which *Network Users* are charged a specific set of distribution service prices.

primary restart service

A system restart ancillary service that meets the technical and availability requirements of a primary restart service specified by NEMMCO under clause 3.11.4A(d).

profile

Energy data or costs for a period longer than a trading interval allocated into trading intervals.

projected assessment of system adequacy process ("PASA")

The medium term and short term processes described in clause 3.7 to be administered by *NEMMCO*.

Proponent

In respect of clause 5.7.7 has the meaning given in clause 5.7.7(a).

proposed contingent capital expenditure

The total forecast capital expenditure for the relevant *proposed contingent project*, as included in the *Revenue Proposal* for that project.

proposed contingent project

A proposal by a *Transmission Network Service Provider* as part of a *Revenue Proposal* for a project to be determined by the *AER* as a *contingent project* for the purposes of a *revenue determination* in accordance with clause 6A.8.1(b).

prospective reallocation

A reallocation transaction that occurs in a trading interval that takes place at a time after the reallocation request is made.

protection system

A system, which includes equipment, used to protect a *Registered Participant's facilities* from damage due to an electrical or mechanical fault or due to certain conditions of the *power system*.

prudential margin

A dollar amount to be determined by *NEMMCO* in accordance with clause 3.3.8.

prudential requirements

The requirements which must be satisfied as a condition of eligibility to remain a *Market Participant* in accordance with clause 3.3.

publish/publication

- (a) In the case of an invitation or notice referred to in clauses 6A.11.3(a)(5), 6A.12.2(a)(3) and (4) or 6A.20(b)(3), publish on the *AER's* website or the *AEMC's* website, as the case requires, and in a newspaper circulating generally throughout Australia.
- (b) In the case of a notice referred to in clauses 6A.12.2(a)(2), 6A.13.3 or 6A.20(e)(2), publish on the *AER's* website or the *AEMC's* website, as the

case requires, in the South Australian Gazette and in a newspaper circulating generally throughout Australia.

- (c) Where referred to in any other provision of Chapter 6A (other than Part I), publish on the *AER*'s website and make a copy available at the offices of the *AER*.
- (d) In any other case, make available to *Registered Participants* electronically.

ramp rate

The rate of change of *active power* supplied from a *generating unit*, supplied to a *load* or transferred by a *scheduled network service*.

rated active power

- (1) In relation to a *generating unit*, the maximum amount of *active power* that the *generating unit* can continuously deliver at the *connection point* when operating at its *nameplate rating*.
- (2) In relation to a *generating system*, the combined maximum amount of *active power* that its in-service *generating units* can deliver at the *connection point*, when its in-service *generating units* are operating at their *nameplate ratings*.

reaction period

The estimated period of time taken to remove defaulting *Market Participants* from the *market* as defined in schedule 3.3.

reactive energy

A measure, in varhour—(varh), of the alternating exchange of stored energy in inductors and capacitors, which is the time-integral of the product of *voltage* and the out-of-phase component of current flow across a *connection point*.

reactive plant

Plant which is normally specifically provided to be capable of providing or absorbing *reactive power* and includes the *plant* identified in clause 4.5.1(g).

reactive power

The rate at which *reactive energy* is transferred.

Reactive power is a necessary component of alternating current electricity which is separate from active power and is predominantly consumed in the creation of magnetic fields in motors and transformers and produced by plant such as:

- (a) alternating current generators;
- (b) capacitors, including the capacitive effect of parallel *transmission* wires; and
- (c) synchronous condensers.

reactive power capability

The maximum rate at which *reactive energy* may be transferred from a *generating unit* to a *connection point* as specified or proposed to be specified in a *connection agreement* (as the case may be).

reactive power reserve

Unutilised sources of *reactive power* arranged to be available to cater for the possibility of the unavailability of another source of *reactive power* or increased requirements for *reactive power*.

reactive power support/reactive support

The provision of *reactive power*.

reactor

A device, similar to a *transformer*, specifically arranged to be *connected* into the *transmission system* during periods of low *load* demand or low *reactive power* demand to counteract the natural capacitive effects of long *transmission lines* in generating excess *reactive power* and so correct any *transmission voltage* effects during these periods.

reallocation

A process under which two *Market Participants* request *NEMMCO* to make matching debits and credits to the position of those *Market Participants* with *NEMMCO*.

reallocation amount

In respect of a *Market Participant*, the positive or negative dollar amount in respect of a *reallocation transaction* being an amount payable to or by the *Market Participant*.

reallocation procedures

The procedures *published* by *NEMMCO* under clause 3.15.11A.

reallocation request

A request to *NEMMCO* for a *reallocation*, pursuant to clause 3.15.11(c).

reallocation transaction

A transaction which occurs when the applicable trading interval specified in a reallocation request occurs and the reallocation request has been registered and not deregistered before the expiration of the trading interval.

Reallocator

A person registered as a Reallocator by *NEMMCO* in accordance with rule 2.5B.

reasonable worst case

A position that, while not being impossible, is to a probability level that the estimate would not be exceeded more than once in 48 months.

rebid

A variation to a bid or offer made in accordance with clause 3.8.22.

reduced payment period request

A written request to *NEMMCO* for the purpose of schedule 3.3, paragraph VI(C).

Referred Affected Participant

An Affected Participant who has a claim referred to an independent expert pursuant to clauses 3.12.11(f) or 3.12.11(g).

Referred Directed Participant

A *Directed Participant* who has a claim referred to an independent expert pursuant to clauses 3.15.7B(c) or 3.15.7B(d).

Referred Market Customer

A *Market Customer* who has a claim referred to an independent expert pursuant to clauses 3.12.11(f) or 3.12.11(g).

region, regional

An area determined by the *AEMC* in accordance with Chapter 2A, being an area served by a particular part of the *transmission network* containing one or more major *load centres* or *generation centres* or both.

region, regional

An area recommended by *NEMMCO* and approved by the AEMC in accordance with clause 3.5, being an area served by a particular part of the *transmission* network containing one or more major load centres or generation centres or both.

regional benefit directions procedures

Has the meaning given in clause 3.15.8(b2).

regional reference node

A location on a *transmission* or *distribution network* to be determined for each *region* by the *AEMC* in accordance with Chapter 2A.

regional reference node

A location on a *transmission* or *distribution network* to be determined for each *region* by *NEMMCO* in accordance with clause 3.5.1.

regional reference price

Spot price at the regional reference node.

regional specific power system operating procedures

The procedures described in clause 4.10.1(a)(3).

Regions Publication

The document *published* by *NEMMCO* under clause 2A.1.3 that provides a list of all *regions*, *regional reference nodes* and the *region* to which each *market connection point* is assigned.

Regions Publication

The document *published* by *NEMMCO* under clause 3.5.5 that provides a list of all *regions*, *regional reference nodes* and the *region* to which each *market connection point* is assigned.

registered bid and offer data

Data submitted by Scheduled Generators and Market Participants to NEMMCO in relation to their scheduled loads, scheduled generating units and scheduled market network services in accordance with schedule 3.1.

Registered Participant

A person who is registered by *NEMMCO* in any one or more of the categories listed in clauses 2.2 to 2.7 (in the case of a person who is registered by *NEMMCO* as a *Trader*, such a person is only a *Registered Participant* for the purposes referred to in clause 2.5A). However, as set out in clause 8.2.1(a1), for the purposes of some provisions of clause 8.2 only, *NEMMCO* and *Connection Applicants* who are not otherwise *Registered Participants* are also deemed to be *Registered Participants*.

Registered Participant Agent

An agent of a Registered Participant appointed under clause 4.11.5.

regulated interconnector

An *interconnector* which is referred to in clause 11.8.2 of the *Rules* and is subject to *transmission service* regulation and pricing arrangements in Chapter 6A.

regulating capability

The capability to perform regulating duty.

regulating capability constraints

Constraints on the formulation of a realisable dispatch or predispatch schedule due to the need to provide for regulating capability.

regulating duty

In relation to a *generating unit*, the duty to have its *generated* output adjusted frequently so that any *power system frequency* variations can be corrected.

regulating lower service

The service of controlling the level of *generation* or *load* associated with a particular *facility*, in accordance with the requirements of the *market ancillary service specification*, in accordance with electronic signals from *NEMMCO* in order to lower the *frequency* of the *power system*.

regulating raise service

The service of controlling the level of *generation* or *load* associated with a particular *facility*, in accordance with the requirements of the *market ancillary service specification*, in accordance with electronic signals from *NEMMCO* in order to raise the *frequency* of the *power system*.

regulation services

The regulating raise service and regulating lower service.

regulatory cap

In Parts D and E of Chapter 6, means a *price cap*, a *revenue cap* or a combination of them.

regulatory change event

A change in a *regulatory obligation* which:

- (a) occurs on or after the commencement of the *revenue determination* for the *regulatory control period*;
- (b) substantially affects the manner in which the *Transmission Network Service Provider* provides *prescribed transmission services*; and
- (c) results in the provider incurring *materially* higher or *materially* lower costs in providing those services, than it would have incurred but for that event,

and a *regulatory change event* does not include an event described in paragraphs (a), (b), (d), (e) or (f) of the definition of *pass through event*.

regulatory control period

- (a) In respect of a *Transmission Network Service Provider*, a period of not less than 5 *regulatory years* in which a *total revenue cap* applies to that provider by virtue of a *revenue determination*.
- (b) In respect of a *Distribution Network Service Provider*, a period in which a *price cap* and/or a *revenue cap* is imposed on that provider by the relevant *Jurisdictional Regulator* under Part B of Chapter 6.

regulatory obligation

Has the meaning given to that term in the *National Electricity Law*.

regulatory test

The test developed and published by the *AER* in accordance with clause 5.6.5A, as in force from time to time, and includes amendments made in accordance with clause 5.6.5A.

regulatory year

Each consecutive period of 12 calendar months in a *regulatory control period*, the first such 12 month period commencing at the beginning of the *regulatory control period* and the final 12 month period ending at the end of the *regulatory control period*.

related body corporate

In relation to a body corporate, a body corporate that is related to the first-mentioned body by virtue of the Corporations Act 2001 (Cth).

relevant tax

Any tax payable by a *Transmission Network Service Provider* other than:

- (a) income tax and capital gains tax;
- (b) stamp duty, financial institutions duty and bank accounts debits tax;
- (c) penalties, charges, fees and interest on late payments, or deficiencies in payments, relating to any tax; or
- (d) any tax that replaces or is the equivalent of or similar to any of the taxes referred to in paragraphs (a) to (b) (including any State equivalent tax).

Relevant Transmission Network Service Provider, Relevant TNSP

In respect of clause 5.7.7 has the meaning given in clause 5.7.7(a).

reliability

The probability of a system, device, *plant* or equipment performing its function adequately for the period of time intended, under the operating conditions encountered.

reliability augmentation

A transmission network augmentation that is necessitated principally by inability to meet the minimum network performance requirements set out in schedule 5.1 or in relevant legislation, regulations or any statutory instrument of a participating jurisdiction.

Reliability Panel

The panel established by the *AEMC* under section 38 of the *National Electricity Law*.

reliability safety net end date

A date which is the earlier of:

- (a) a date determined by the *AEMC* and published in the South Australian Government Gazette, having regard to any recommendation of the *Reliability Panel* under clause 3.12.1(b); or
- (b) 1 July 2008.

reliable

The expression of a recognised degree of confidence in the certainty of an event or action occurring when expected.

reliable operating state

In relation to the *power system*, has the meaning set out in clause 4.2.7.

remote acquisition

The acquisition of interval *metering data* from a *metering installation*, where the acquisition process transmits the *metering data* from the site of the *metering point* to the *metering database*, and does not, at any time, require the presence of a person at, or near, the interval *meter* for the purposes of data collection or data verification (whether this occurs manually as a walk-by reading or through the use of a vehicle as a close proximity drive-by reading), and remote acquisition includes but is not limited to methods that transmit *metering data* via:

- (1) direct dial-up;
- (2) satellite;
- (3) the internet;
- (4) a general packet radio service;
- (5) power line carrier; or
- (6) any other equivalent technology.

remote control equipment

Equipment used to control the operation of elements of a *power station* or *substation* from a *control centre*.

remote monitoring equipment

Equipment installed to enable monitoring of a *facility* from a *control centre*.

representative

In relation to a person, any employee, agent or professional adviser of:

- (a) that person; or
- (b) a related body corporate of that person; or
- (c) a third party contractor to that person.

required pass through amount

In respect of a *negative change event* for a *Transmission Network Service Provider*, the costs in the provision of *prescribed transmission services* that the *Transmission Network Service Provider* has saved and is likely to save until the end of the *regulatory control period* as a result of that *negative change event* (as opposed to the revenue impact of that event).

reserve

Short term capacity reserve and medium term capacity reserve as contracted by NEMMCO under clause 3.12.

reserve contract

A contract between a *Registered Participant* and *NEMMCO* to provide any *reserve* and includes a contract between a *Market Network Service Provider* and *NEMMCO* to facilitate *reserves* in one *region* being made available in another *region*.

response breakpoint

- (a) In relation to a *market ancillary service offer* to raise the *frequency* of the *power system*, the level of associated *generation* or *load* (in MW) above which the amount of response specified in the *offer* reduces with increased *generation* or *load* level; and
- (b) in relation to a *market ancillary service offer* to lower the *frequency* of the *power system*, the level of associated *generation* or *load* (in MW) below which the amount of response specified in the *offer* reduces with decreased *generation* or *load* level.

response capability

- (a) In relation to a *market ancillary service offer* to raise the *frequency* of the *power system*, the amount of the response in (MW) which is specified in the *offer* for every level of associated *generation* or *load* below the associated *response breakpoint*; and
- (b) in relation to a *market ancillary service offer* to lower the *frequency* of the *power system*, the amount of the response in (MW) which is specified in the *offer* for every level of associated *generation* or *load* above the associated *response breakpoint*.

responsible person

The person who has responsibility for the provision of a *metering installation* for a particular *connection point*, being either the *Local Network Service Provider* or the *Market Participant* as described in Chapter 7.

restriction demand reduction

The reduction in a *Market Customer's* demand due to the imposition of *mandatory restrictions* as reasonably determined by an independent expert in accordance with clause 3.12A.7. For the avoidance of doubt, the reduction of a *Market Customer's* demand due to the imposition of *mandatory restrictions* should exclude any reduction in its demand which the *Market Customer* claims was due to the operation of *generation* and as reasonably verified by the independent expert in a similar manner to that used by the independent expert to determine restrictions due to demand management.

restriction offer

An offer by a Scheduled Generator or a Scheduled Network Service Provider to provide capacity to NEMMCO for all or part of a mandatory restriction period made in accordance with the restriction offer procedures.

restriction offer procedures

The procedures developed by *NEMMCO* in accordance with clause 3.12A.1.

restriction shortfall amount

The amount determined in accordance with clause 3.12A.7(b).

retailer of last resort

In relation to a jurisdiction, means a person or persons required under the retailer of last resort arrangements of that jurisdiction to assume the obligations under the *Rules* (including the obligation to pay *trading amounts* and other amounts due under the *Rules*) of a *Market Customer* that has defaulted in the performance of its obligations under the *Rules*.

revenue cap

In Part B of Chapter 6, the *aggregate annual revenue requirement* for a year determined by the *Jurisdictional Regulator* applicable to a *Distribution Network Service Provider*.

revenue determination

A determination referred to in clause 6A.2.2(1) and rule 6A.4 as substituted (if at all) pursuant to clause 6A.7.1 or rule 6A.15 or as amended pursuant to clause 6A.8.2.

revenue meter

The *meter* that is used for obtaining the primary source of *metering data*.

revenue metering data

The metering data obtained from a revenue metering installation.

revenue metering installation

A metering installation used as the primary source of metering data for the settlements process.

revenue metering point

The *metering point* at which the *revenue metering installation* is *connected*.

Revenue Proposal

For a *Transmission Network Service Provider*, a proposal submitted or resubmitted by the *Transmission Network Service Provider* to the *AER* pursuant to clause 6A.10.1(a), clause 6A.11.2 or clause 6A.12.3(a) (as the context requires).

review

An examination of the specified matters conducted to the standard specified for a "review" in Auditing Standard AUS106: "Explanatory Framework for standards on Audit and Audit Related Services" prepared by the Auditing Standards Board, as varied from time to time.

revised statement

A statement issued by *NEMMCO* under clause 3.15.19 following the resolution of a dispute regarding a *final statement*.

RMS phase voltage

The *voltage* of *supply* measured as the average of the root mean square of the *voltages* between each pair of phases.

roll forward model

The model developed and published by the *AER* for the roll forward of the regulatory asset base for *transmission systems* in accordance with clause 6A.6.1.

routine revised statement

A settlement statement issued by NEMMCO under clause 3.15.19(b).

Rule fund

A fund referred to in clause 1.11(a).

Rules

The rules called the National Electricity Rules made under Part 7 of *the National Electricity Law* as amended from time to time in accordance with that Part.

Rules bodies

Any person or body, other than *NEMMCO*, the *AER*, the *AEMC*, the *ACCC* or *Jurisdictional Regulators*, that is appointed or constituted by the *Rules* to perform functions under the *Rules*.

Rules consultation procedures

The procedures for consultation with *Registered Participants* or other persons as set out in clause 8.9.

satisfactory operating state

In relation to the *power system*, has the meaning given in clause 4.2.2.

scheduled generating unit

A generating unit so classified in accordance with Chapter 2.

scheduled generating system

A generating system comprising scheduled generating units.

Scheduled Generator

A *Generator* in respect of which any *generating unit* is classified as a *scheduled generating unit* in accordance with Chapter 2.

scheduled high price

The dollar amount per MWh or MW, as the case may be, determined as such by *NEMMCO* pursuant to clause 3.3.17.

scheduled load

A market load which has been classified by NEMMCO in accordance with Chapter 2 as a scheduled load at the Market Customer's request. Under Chapter 3, a Market Customer may submit dispatch bids in relation to scheduled loads.

scheduled low price

The dollar amount per MWh or MW, as the case may be, determined as such by *NEMMCO* pursuant to clause 3.3.17.

scheduled network service

A *network service* which is classified as a *scheduled network service* in accordance with Chapter 2.

Scheduled Network Service Provider

A Network Service Provider who has classified any of its network services as a scheduled network service.

scheduled plant

In respect of a Registered Participant, a scheduled generating unit, a scheduled network service or a scheduled load classified by or in respect to that Registered Participant in accordance with Chapter 2.

scheduling error

Scheduling error means any of the events described in clause 3.8.24(a).

secondary equipment

Those assets of a *Market Participant*'s *facility* which do not carry the *energy* being traded, but which are required for control, protection or operation of assets which carry such *energy*.

secondary restart service

A system restart ancillary service that meets the technical and availability requirements of a secondary restart service specified by NEMMCO under clause 3.11.4A(d).

Second-Tier Customer

A *Customer* which has classified any *load* as a *second-tier load* in accordance with Chapter 2.

second-tier load

Electricity purchased at a *connection point* in its entirety other than directly from the *Local Retailer* or the *spot market* and which is classified as a *second-tier load* in accordance with Chapter 2.

secure operating state

In relation to the *power system* has the meaning given in clause 4.2.4.

self-commitment, self-commit

Commitment, where the decision to commit a generating unit was made by the relevant Generator without instruction or direction from NEMMCO.

self-decommitment

Decommitment, where the decision to *decommit* a *generating unit* was made by the relevant *Generator* without instruction or direction from *NEMMCO*.

self-dispatch level

The level of *generation* in MW, as specified in a *dispatch offer* for a *generating unit* and a *trading interval*, which is the level at which that *generating unit* must be *dispatched* by *NEMMCO* in that *trading interval* unless otherwise *dispatched* in accordance with clause 3.8 or unless required to operate under a *direction* issued by *NEMMCO* in accordance with clause 4.8.9.

sensitive loads

Loads defined as sensitive for each participating jurisdiction by the Jurisdictional System Security Coordinator for that participating jurisdiction.

sent out generation

In relation to a *generating unit*, the amount of electricity *supplied* to the *transmission* or *distribution network* at its *connection point*.

Service Applicant

A person who is an existing or intending *Registered Participant* or a person who is eligible to become a *Registered Participant*.

service standard event

Any decision made by an *Authority* or any amendment to an applicable law (including, but not limited to, the *National Electricity Law*, the *Rules*, any transmission licence of a *Transmission Network Service Provider* or any applicable *jurisdictional electricity legislation* (as that term is defined in the *National Electricity Law*)) which has the effect of:

- (a) substantially varying the manner in which a *Transmission Network Service Provider* is required to provide any *prescribed transmission services* as at the date of the *revenue determination*;
- (b) imposing, removing or varying minimum service standards on or that apply to a *Transmission Network Service Provider* in respect of *prescribed transmission services* that are different to the minimum standards applicable to the *Transmission Network Service Provider* as at the date of the *revenue determination*; or
- (c) altering the nature or scope of the *prescribed transmission services* provided by a *Transmission Network Service Provider* from those as at the date of the *revenue determination*.

and which results in the *Transmission Network Service Provider* incurring *materially* higher or *materially* lower costs in providing *prescribed transmission services* than it would have incurred but for that event.

service target performance incentive scheme

A scheme developed and *published* by the AER is accordance with clause 6A.7.4.

settlement amount

The amount calculated by *NEMMCO* pursuant to clause 3.15.12.

settlement statement

Includes an interim statement, preliminary statement and final statement.

settlements

The activity of producing bills and credit notes for *Market Participants*.

settlements ready data

The *metering data* that has undergone a validation and substitution process by *NEMMCO* for the purpose of *settlements* and is delivered to the *metering database*.

settlements residue

Any surplus or deficit of funds retained by *NEMMCO* upon completion of *settlements* to all *Market Participants* in respect of a *trading interval*.

settlement residue committee

The committee established by *NEMMCO* in accordance with clause 3.18.5.

settlement residue distribution agreement or SRD agreement

Has the meaning given in clause 3.18.1(b).

shared transmission service

A service provided to a *Transmission Network User* for use of a *transmission network* for the conveyance of electricity (including a service that ensures the integrity of the related *transmission system*).

short circuit fault

A fault having a metallic conducting path between any two or more conductors or between any conductor and ground, including touching conductors and faults through earthing facilities, and excluding faults within equipment at a station.

short term capacity reserve

At any time, the amount of surplus or unused generating capacity indicated by the relevant *Generators* as being available for any half hour period during the next 7 days and which is assessed as being in excess of the capacity requirement to meet the current forecast *load* demand, taking into account the known or historical levels of demand management.

short term capacity reserve standard

The level of *short term capacity reserve* required for a particular period in accordance with the *power system security and reliability standards*.

short term PASA

The *PASA* in respect of the period from 2 *days* after the current *trading day* to the end of the 7th day after the current *trading day* inclusive in respect of each *trading interval* in that period.

short term PASA inputs

The inputs to be prepared by *NEMMCO* in accordance with clause 3.7.3(d).

shunt capacitor

A type of *plant connected* to a *network* to generate *reactive power*.

shunt reactor

A type of *plant connected* to a *network* to absorb *reactive power*.

single contingency

In respect of a *transmission* or *distribution network* and *Network Users*, a sequence of related events which result in the removal from service of one *Network User*, *transmission* or *distribution line*, or *transformer*. The sequence of events may include the application and clearance of a fault of defined severity.

single credible contingency event

An event described in clause 4.2.3(c).

slow lower service

The service of providing, in accordance with the requirements of the *market* ancillary service specification, the capability of controlling the level of generation or load associated with a particular facility in response to the locally sensed frequency of the power system in order to stabilise a rise in that frequency.

slow raise service

The service of providing, in accordance with the requirements of the *market* ancillary service specification, the capability of controlling the level of generation or load associated with a particular facility in response to the locally sensed frequency of the power system in order to stabilise a fall in that frequency.

slow start generating unit

A generating unit described in clause 3.8.17(a).

slow start reserve generating unit

A slow start generating unit providing reserve.

Special Participant

A System Operator or a Distribution System Operator.

special revised statement

A settlement statement issued by NEMMCO under clause 3.15.19(a)(3).

spot market

The spot market established and operated by *NEMMCO* in accordance with clause 3.4.1.

spot market transaction

A transaction as defined pursuant to clause 3.15.6 which occurs in the *spot market*.

spot price

The price for electricity in a *trading interval* at a *regional reference node* or a *connection point* as determined in accordance with clause 3.9.2.

spot price forecast

A forecast of the spot price.

SRAS

A system restart ancillary service.

stand-alone amount

For a category of prescribed transmission services, the costs of a transmission system asset that would have been incurred had that transmission system asset been developed, exclusively to provide that category of prescribed transmission services.

Standards Australia

The Standards Association of Australia and includes its heirs or successors in business.

statement of opportunities

A statement prepared by *NEMMCO* to provide information to assist *Scheduled Generators*, *Transmission Network Service Providers* and *Market Participants* in making an assessment of the future need for electricity generating or demand management capacity or augmentation of the *power system*.

static excitation system

An excitation control system in which the power to the rotor of a synchronous generating unit is transmitted through high power solid-state electronic devices.

static VAR compensator

A device specifically provided on a *network* to provide the ability to generate and absorb *reactive power* and to respond automatically and rapidly to *voltage* fluctuations or *voltage* instability arising from a disturbance or disruption on the *network*.

submission guidelines

The guidelines made by the *AER* in accordance with rule 6A.10 for the purposes of guiding a *Transmission Network Service Provider* in the submission of a *Revenue Proposal* under Part E of Chapter 6A.

substation

A *facility* at which two or more lines are switched for operational purposes. May include one or more *transformers* so that some *connected* lines operate at different nominal *voltages* to others.

supply

The delivery of electricity.

survey period

An agreed sample period used to determine the allocation of costs and prices for use of *transmission network* or *distribution network* assets.

suspended region

A region in which the *spot market* is suspended in accordance with clause 3.14.5(a).

suspension notice

A notice issued by *NEMMCO* to a *defaulting Market Participant* pursuant to clause 3.15.21(c).

switchyard

The *connection point* of a *generating unit* into the *network*, generally involving the ability to *connect* the *generating unit* to one or more outgoing *network* circuits.

Sydney time

Eastern Standard Time or Eastern Daylight Saving Time as applicable in Sydney.

synchronise

The act of synchronising a generating unit or a scheduled network service to the power system.

synchronising, synchronisation

To electrically connect a generating unit or a scheduled network service to the power system.

synchronous condensors

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

synchronous generating unit

The alternating current generators of most thermal and hydro (water) driven power turbines which operate at the equivalent speed of the *frequency* of the *power system* in its *satisfactory operating state*.

synchronous generator voltage control

The automatic *voltage control system* of a *generating unit* of the *synchronous generator* category which changes the output *voltage* of the *generating unit* through the adjustment of the generator rotor current and effectively changes the *reactive power* output from that *generating unit*.

System Operator

A person whom *NEMMCO* has engaged as its agent, or appointed as its delegate, under clause 4.3.3 to carry out some or all of *NEMMCO's* rights, functions and obligations under Chapter 4 of the *Rules* and who is registered by *NEMMCO* as a *System Operator* under Chapter 2.

system restart ancillary service

A service provided by *facilities* with *black start capability* which allows:

- (a) energy to be supplied; and
- (b) a *connection* to be established,

sufficient to restart large *generating units* following a major supply disruption.

system restart plan

The plan described in clause 4.8.12(a).

system restart standard

The standard as determined by the *Reliability Panel* in accordance with clause 8.8.3(a)(1a), for the acquisition of *system restart ancillary services*.

system standard

A standard for the performance of the *power system* as set out in schedule 5.1a.

system-wide benefits

Benefits that extend beyond a *Transmission Network User*, or group of *Transmission Network Users*, at a single *transmission connection point* to other *Transmission Network Users*.

take or pay contract

A contract between a buyer and a seller of an asset-based service under which the buyer undertakes to pay regularly to the seller a fixed or minimum sum regardless of the actual level of consumption of the service by the buyer. The contract has the effect of transferring market risk associated with the assets from the seller (as the owner of the assets) to the buyer.

tap-changing transformer

A *transformer* with the capability to allow internal adjustment of output *voltages* which can be automatically or manually initiated and which is used as a major component in the control of the *voltage* of *transmission* and *distribution networks* in conjunction with the operation of *reactive plant*. The *connection point* of a

generating unit may have an associated tap-changing transformer, usually provided by the Generator.

tax

Any tax, levy, impost, deduction, charge, rate, rebate, duty, fee or withholding which is levied or imposed by an *Authority*.

tax change event

Any of the following:

- (a) a change in (or a change in the application or official interpretation of) a *relevant tax* or the way in or rate at which a *relevant tax* is calculated;
- (b) the removal of a *relevant tax*; or
- (c) the imposition of a relevant tax,

which:

- (d) occurs on or after the commencement of the *revenue determination* for the *regulatory control period*; and
- (e) results in the *Transmission Network Service Provider* incurring *materially* higher or *materially* lower costs in providing *prescribed transmission services* than it would have incurred but for that event.

technical envelope

The limits described in clause 4.2.5.

telecommunications network

A telecommunications network that provides access for public use or an alternate telecommunications network that has been approved by *NEMMCO* for the delivery of *metering data*.

terms and conditions of access

The terms and conditions described in clause 6A.1.2.

terrorism event

An act (including, but not limited to, the use of force or violence or the threat of force or violence) of any person or group of persons (whether acting alone or on behalf of in connection with any organisation or government), which from its nature or context is done for, or in connection with, political, religious, ideological, ethnic or similar purposes or reasons (including the intention to influence or intimidate any government and/or put the public, or any section of the public, in fear) and which results in a *Transmission Network Service Provider* incurring *materially* higher or *materially* lower costs in providing *prescribed transmission services* than it would have incurred but for that act.

test program

In respect of an *inter-network test*, means the program and co-ordination arrangements for the test including, without limitation:

- (1) test procedures;
- (2) the proposed timing of the test;
- (3) operational procedures to manage *power system security* during the test;
- (4) required *power system* conditions for conducting the test;
- (5) test facilitation services including, as necessary, *ancillary services* required to achieve those *power system* conditions;
- (6) criteria for continuing or concluding a test and the decision-making process relevant to the test; and
- (7) contingency arrangements.

tie

Identically priced dispatch bids or dispatch offers.

time

Eastern Standard Time.

time stamp

The means of identifying the *time* and date at which data is transmitted or received.

timetable

The timetable published by *NEMMCO* under clause 3.4.3 for the operation of the *spot market* and the provision of *market* information.

total revenue cap

For a *Transmission Network Service Provider* for a *regulatory control period*, the sum of the *maximum allowed revenues* for that provider for each *regulatory year* of that *regulatory control period* as calculated in accordance with clause 6A.5.3 and set out in a *revenue determination*.

Trader

A person who is registered by *NEMMCO* as a *Trader* under Chapter 2.

trading amount

The positive or negative dollar amount resulting from a *transaction*, determined pursuant to clauses 3.15.6, 3.15.6A or 3.15.11.

trading day

The 24 hour period commencing at 4.00 am and finishing at 4.00 am on the following day.

trading interval

A 30 minute period ending on the hour (EST) or on the half hour and, where identified by a time, means the 30 minute period ending at that time.

trading limit

A dollar amount for a *Market Participant*, determined pursuant to clause 3.3.10.

trading margin

Has the meaning given in clause 3.3.15.

transaction

A spot market transaction, reallocation transaction or any other transaction either in the market or to which NEMMCO is a party.

transformer

A *plant* or device that reduces or increases the *voltage* of alternating current.

transformer tap position

Where a tap changer is fitted to a *transformer*, each tap position represents a change in *voltage* ratio of the *transformer* which can be manually or automatically adjusted to change the *transformer* output *voltage*. The tap position is used as a reference for the output *voltage* of the *transformer*.

transmission

Activities pertaining to a *transmission system* including the conveyance of electricity through that *transmission system*.

transmission consultation procedures

The procedures set out in Part H of Chapter 6A that must be followed by:

- (a) the *AER* in making, developing or amending guidelines, models or schemes or in reviewing methodologies; or
- (b) the *AEMC* in developing or amending guidelines.

Transmission Customer

A Customer, Non-Registered Customer or Distribution Network Service Provider having a connection point with a transmission network.

transmission determination

Has the meaning given in the *National Electricity Law*, and includes a determination by the *AER* as described in rule 6A.2.

transmission element

A single identifiable major component of a transmission system involving:

- (a) an individual transmission circuit or a phase of that circuit;
- (b) a major item of *transmission plant* necessary for the functioning of a particular *transmission* circuit or *connection point* (such as a *transformer* or a circuit breaker).

transmission line

A power line that is part of a *transmission network*.

transmission network

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

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

transmission network connection point

A connection point on a transmission network.

Transmission Network Service Provider

A person who engages in the activity of owning, controlling or operating a *transmission system*.

Transmission Network User

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

transmission network user access

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

- (a) generating units or group of generating units;
- (b) network elements; or
- (c) plant,

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

transmission or distribution system

A transmission system or distribution system that:

- 1. is used to convey, and control the conveyance of, electricity to customers (whether wholesale or retail); and
- 2. is *connected* to another such system.

transmission plant

Apparatus or equipment associated with the function or operation of a transmission line or an associated substation or switchyard, which may include transformers, circuit breakers, reactive plant and monitoring equipment and control equipment.

Transmission Ring-Fencing Guidelines

The Guidelines made under rule 6A.21.

transmission service

The services provided by means of, or in connection with, a transmission system.

transmission services access dispute

A dispute between a *Transmission Network Service Provider* and a *Service Applicant* as to *terms and conditions of access* for the provision of *prescribed transmission services* or for the provision of *negotiated transmission services* as referred to in clause 6A.1.2, that is for determination by a *commercial arbitrator* under Part K of Chapter 6A.

transmission system

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

transmission use of system, transmission use of system service

A Generator transmission use of system service or a Customer transmission use of system service.

trigger event

In relation to a *proposed contingent project* or a *contingent project*, a specific condition or event described in clause 6A.8.1(c), the occurrence of which, during the relevant *regulatory control period*, may result in the amendment of a *revenue determination* under clause 6A.8.2.

two-terminal link

One or more *network elements* that together enable the transfer of *energy* between two, and only two, *connection points*.

type 5 accumulation boundary

The volume of *energy* for a *connection point* above which the *metering data* that is extracted or emanates from a type 5 *metering installation* must be extracted or emanate as *interval energy data* for the purpose of producing *settlements ready data*

[Note: Below the type 5 accumulation boundary, the metering data may be extracted or emanate from the metering installation as accumulated energy data for the purpose of producing settlements ready data, in which case the metering installation must be registered with NEMMCO as a type 6 metering installation. Otherwise the metering data may be extracted or emanate as interval energy data for the purpose of producing settlements ready data in which case the metering installation must be registered with NEMMCO as a type 5 metering installation.]

typical accrual

Has the meaning given in clause 3.3.12(a).

uncompleted transaction

Has the meaning given in clause 3.3.16(b).

unconstrained

Free of *constraint*.

under-recovery amount

Any amount by which the sum of the AARR in previous financial years exceeds the revenue earned from the provision of prescribed transmission services in those previous years, grossed up by the application of an annual interest rate approved by the AER for this purpose.

unmetered connection point

A *connection point* at which a *meter* is not necessary under schedule 7.2.

use of system

Includes transmission use of system and distribution use of system.

use of system services

Transmission use of system service and distribution use of system service.

value of lost load (VoLL)

A price cap on regional reference prices, described in clause 3.9.4.

verifying authorities

Authorities appointed by the National Measurement Institute under the *National Measurement Act*.

violation

In relation to *power system security*, a failure to meet the requirements of Chapter 4 or the *power system security and reliability standards*.

virtual transmission node

A non-physical node used for the purpose of *market settlements*, having a *transmission loss factor* determined in accordance with clause 3.6.2(b)(3).

voltage

The electronic force or electric potential between two points that gives rise to the flow of electricity.

voltage transformer (VT)

A *transformer* for use with *meters* and/or protection devices in which the *voltage* across the secondary terminals is, within prescribed error limits, proportional to and in phase with the *voltage* across the primary terminals.

WACC

Weighted average cost of capital.

weighted average cost of capital

For a Transmission Network Service Provider for a regulatory control period, the return on capital for that Transmission Network Service Provider for that

regulatory control period as calculated in accordance with clauses 6A.6.2(b) to (e), and in any other case an amount determined in a manner consistent with schedule 6.1.

CHAPTER 11		

11. Savings and Transitional Rules

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.

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 Rules consequent on making of the National Electricity Amendment (Advocacy Panel) Rule 2006

11.3.1 Continuation of things done under old clause 8.10

(a) For the purposes of clause 11.3.1:

amending Rule means the National Electricity Amendment (Advocacy Panel) Rule 2006;

commencement date means the date of commencement of the amending Rule:

new clause 8.10 means clause 8.10 after the commencement of the amending Rule;

old clause 8.10 means clause 8.10 before the commencement of the amending Rule.

- (b) On the commencement date:
 - (1) persons appointed under the old clause 8.10 and clauses 24 and 25 of Schedule 2 to the *National Electricity Law* as Acting Chairperson and members of the *Advocacy Panel*, are taken to be the persons appointed to comprise the interim *Advocacy Panel* under the new clause 8.10 until 1 October 2006:
 - any action taken by the interim *Advocacy Panel* referred to in clause 11.3.1(b)(1) for the purpose of preparing the provisional funding requirements for end-user advocacy for the 2006-2007 *financial year*, is deemed to have been taken for the purposes of the new clause 8.10 and continues to have effect for this purpose;
 - (3) an application for funding for end-user advocacy that was determined by the *Advocacy Panel* in accordance with the old clause 8.10 as at the commencement date, continues in effect and is taken to be a determination made by the *Advocacy Panel* under the new clause 8.10;
 - (4) an application for funding for end-user advocacy made to, but not determined by, the *Advocacy Panel* under the old clause 8.10 as at the commencement date, is taken to be an application under the new clause 8.10, and the *Advocacy Panel* must take any action after the commencement date for the purpose of determining that application in accordance with the new clause 8.10;
 - (5) guidelines for making funding applications and funding criteria in force under the old clause 8.10.3, continue to have effect, and are taken to have been issued, for the purposes of the new clause 8.10.6 until 1 March 2007;
 - (6) guidelines for the appointment of members of the *Advocacy Panel* in force under the old clause 8.10.2(e), continue to have effect and are

- taken to have been issued, for the purposes of the new clause 8.10.3 until 1 March 2007; and
- (7) any action taken by *NEMMCO* for the purpose of recovering amounts from *Participant fees* for the 2006-2007 *financial year* in contemplation of the commencement of the amending Rule, is deemed to have been taken for the purposes of the amending Rule.

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.

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.]

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 Transition to new Chapter 6A: existing prescribed transmission services

- (a) 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:
 - (1) to the extent that the value of the asset is included in the regulatory asset base for that *transmission system* under an existing revenue determination in force at that time; or
 - (2) if the price for that service has not been negotiated under a negotiating framework established pursuant to old clause 6.5.9,
 - and, but for this clause, that service would not otherwise be a *prescribed* transmission service.
- (b) Where a service is a *prescribed transmission* service by virtue of the operation of this clause, that service is taken not to be a *negotiated transmission service*.
- (c) For the purposes of this clause 11.6.11, 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*.

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 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:
 - 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 where that change results in SPI PowerNet incurring higher or lower costs in providing prescribed transmission services than it would have incurred but for that event. For these purposes the change in the amount of land tax that is payable by SPI PowerNet must be calculated by applying the relevant land tax rate to the difference between:

- (1) the value of the easements which is used for the purposes of assessing the land tax that is payable; and
- (2) the value of the easements which is assumed for the purposes of the *revenue determination* for the *regulatory control period*,

and an easements tax change event does not include an event described in paragraphs (a), (b) or (c) of the definition of tax change event.

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) VENCorp;
 - (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)), a *pass through event* includes an easements tax change event.

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.

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.

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.

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.

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 \$5.2.4 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 \$5.5.7 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 \$5.2.5.13 of the old Chapter 5 applies as if the Amending Rule had not been made.

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
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

Location	Voltage kV	Connection point ID	TNI code	Region
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 Disconnector 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 recalculation 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* specified under clause 3.5.1 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 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

<u>Amending Rule</u> means the National Electricity Amendment (Process for Region Change) Rule 2007.

commencement date means the day on which the Amending Rule commences operation.

<u>old clause 3.5.5</u> 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.